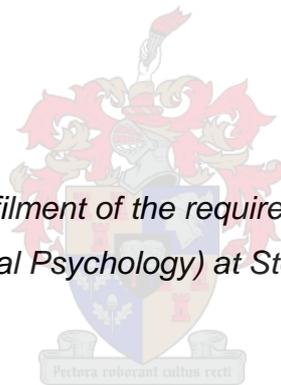


Interpretation of Emojis in Organisational Computer-Mediated Communication (CMC) Contexts

By

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*Thesis presented in partial fulfilment of the requirements for the degree Master of
Commerce (Industrial Psychology) at Stellenbosch University*



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March 2020

DECLARATION

By submitting this thesis electronically, I declare that the entirety of the work contained therein is my own, original work, that I am the sole author thereof (save to the extent explicitly otherwise stated), that reproduction and publication thereof by Stellenbosch University will not infringe any third party rights and that I have not previously in its entirety or in part submitted it for obtaining any qualification.

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ABSTRACT

Globally, due to the impending impact of technology and globalisation, a rapid change is evident within the organisational workforce as organisations are more readily relying on Computer-Mediated Communication as a means of communicating. Alongside the increase in the use of Computer-Mediated Communication, a decrease in the expression of non-verbal cues has also been evident. Accordingly, employees have begun to, not only in informal (interpersonal) communication but also in formal (organisational) communication, make use of, emojis.

Introduced to the global market in 2011 and deemed the communication language of the future, emoji usage has rapidly increased in recent years, with more than 5 billion emojis being used daily on Facebook and there are 3178 emojis available to date. Regardless of the rapid increase in usage, studies have indicated that emoji interpretation differences are present for various variables, including mobile platforms. Due to the upsurge of emoji usage in organisational communication and the pivotal role which effective organisational communication has, the need to identify organisational variables that could contribute to interpretation differences within organisational communication is of utmost importance.

Subsequently, the objectives of the study included determining whether emoji interpretation differences occurred across platforms, age groups, genders, racial groups, industries of work as well as hierarchy levels. The research design included an exploratory research design with the target population including a random sample of employees from diverse backgrounds (age, gender, race, industry of work and hierarchy level) employed at a wide variety of organisations. The sample size included 362 respondents (n=362) and a survey research methodology was used. An electronic survey, developed on Qualtrics, was distributed to participants primarily by means of an anonymous survey link on which participants had to complete demographic information, additional information questions as well as indicate their interpretation of a set of 16 randomly assigned emojis in terms of semantics and sentiment.

The study found, that not only are emoji interpretation differences evident, but emoji interpretation differences occurred for each of the variables examined. Hence, emoji

interpretation differences occurred across platforms, age groups, genders, racial groups, industries of work as well as hierarchy levels. Based on the findings, seeing as interpretation differences could potentially have an adverse impact on communication, resulting in misinterpretation and ultimately, miscommunication, practical recommendations were made. The recommendations outlined effective organisational practices to be implemented in an attempt to address dissimilar emoji interpretations and the appropriate usage thereof within organisational communication.

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CHAPTER 1

INTRODUCTION AND BACKGROUND

Today, with a total number of 3178, and an approximation of 95% of individuals online having used them, emojis are viewed as the Internet's most popular language. Emojis may also be viewed as the only language which will in future, allow individuals to communicate with others globally (Brandwatch, 2018; Emojipedia, 2019; Thornhill, 2019). To fully grasp what emojis entail and where they fit into organisations and the expression of emotions, the broad concept of communication should be explored and examined.

Communication, a topic of much debate in recent years and ranked among the top three most valued skills that employers consider in order to be effective in the workplace, is characterised by a wide variety of definitions and interpretations (Brink & Costigan, 2014; Caputo et al., 2013; Cekerevac, Karovic, Kudumovic, Mihailovic & Ristic, 2012). Distinctions between the terms; communication, social, and interpersonal skills (which are often used interchangeably in literature) are not widely recognised. Undoubtedly, in almost every action which takes place in the working environment, particularly interpersonal and social interactions, some component of communication is involved (Caputo et al., 2013). Even though definitions that relate to communication vary widely, the exchange of information is a general component in all definitions. Subsequently, communication can broadly be referred to as the exchange of information between two or more individuals (Brink & Costigan, 2014; Cekerevac et al., 2012).

To fully comprehend the concept of communication, it is not only necessary to be aware of the different forms of communication but to also understand the overall communication process. In general, two distinct forms of communication are recognised; non-linguistic and linguistic communication. Non-linguistic communication includes the use of body language and comprises of aspects such as proxemics, tacesics, and kinesics. On the other hand, linguistic communication involves the usage of words, voice, and speech (Brink & Costigan, 2014; Cekerevac et al., 2012). Linking to the forms of communication, during the communication process (which entails an *encoding*, *decoding* and *feedback* process) (Brewer et al.,

2014), the different forms may also be communicated in varying ways and overall, communication may be viewed as a vehicle in which emotions are conveyed.

Not only are different forms of communication found, but various types of communication are highlighted, including verbal, non-verbal, formal/organisational and informal/interpersonal. In terms of informal/interpersonal communication, one highly relevant topic includes the concept of social media. Broadly defined, social media refers to computer-based technology which facilitates the creation, sharing and exchange of ideas and information and the development and construction of virtual communities and networks. Social media not only has a significant impact on interpersonal communication, but also organisational communication. By offering organisations the ability to find and engage with customers, increase sales, advertise and promote, assess and measure trends as well as offer customer service, social media is regarded as an indispensable tool for organisations during the 21st century of work (Hendricks, 2013; Investopedia, 2018).

However, for this study, based on the fact that communication is regarded as a fundamental aspect on which organisational performance is built, the focus will be on that of organisational communication (Brink & Costigan, 2014; Cekerevac et al., 2012). When defining organisational communication, this type of communication can be referred to as communication which occurs in the business context and may include communication between business contacts, employees, co-workers and many more (Bradley, 2018). In line with multiple changes and challenges which confront modern-day organisations, including for example the impact of globalisation, it is now, more than ever, necessary to investigate how 21st century geographically dispersed organisations go about managing and maintaining effective and powerful organisational communication.

According to organisational communication literature, during the 21st century specifically, the process of communication has gone beyond plain-speaking, interpretation of words and writing, and has as such, become highly complex and varied (Abdullah & Jibril, 2013). As a result of the rise of broadband technology, globalisation as well as the global shift towards a healthier work-life balance, the number of organisations being geographically dispersed and employees working remotely or on a flexible basis, have increased significantly over the last two

decades. Not only, has the rise of technology resulted in numerous intuitive ways of work, but the instant nature, as well as the sense of having to be connected and multi-tasking, has also contributed toward a greater need for balance and flexibility at work (Regus, 2017; Zalaiskalns, 2017).

With more than 54% of employees having been reported to work outside of their main office for 2.5 days a week or more, 32% of employees have reported that they most often need to work from different locations around the same city and 25% of employees working from other cities (Regus, 2017), the exploration of geographically dispersed organisations and remote/flexible working has become imperative during the 21st century. Based on these findings, it is evident that the face of the global workforce is changing, and with it, are its needs. Consequently, due to the impending impact which technology globalisation has had on organisations, including factors such as employees being more geographically dispersed, as well as the increased need for greater work-life balance, the manner in which individuals communicate within organisations has changed significantly. Evidently, particularly for organisations that operate internationally and who are geographically dispersed as well for flexible/remote workers, alternative methods of communication have emerged. One such method includes Computer-Mediated Communication (CMC) (Abdullah & Jibril, 2013; Bos, Derks & Fischer, 2008).

Globally, millions of individuals are using the linguistic form of communication known as CMC. Due to the arrival of personal computers and internet connections which have become more affordable and of which the utilisation has increased rapidly, the use of CMC has increased significantly (Bai, Dan, Mu & Yang, 2019; Bos et al., 2008; Fussell & Nguyen, 2015; Uysay, 2016). Broadly, CMC can be thought of as a communication method between two or more individuals which occur through an interaction with a computational device (for example a cell phone or computer) across a physical separation (Fussell & Nguyen, 2015; O'Neill, 2010). Contrary to the various benefits of using CMC such as increased immediacy/communication speed, broader networks and increased self-disclosure, one main aspect which may be regarded as a potential negative includes the lack of or absence of non-verbal cues in CMC. Non-verbal cues are defined as facial expressions, gestures, tone of voice and many more which accompany words that are stated (Abdullah & Jibril, 2013; Bos et al., 2008; D'Addario & Walther, 2001; Riordan, 2017). When non-verbal

cues are lacking or are absent, especially in text-based CMC, several negative consequences may result, some of which include conflict escalation, mistrust, misinterpretation as well as miscommunication between employees (Bai et al., 2019; Kreuz & Riordan, 2010).

Linking to the various negative consequences of a lack of or absence of non-verbal cues, especially in that of text-based CMC, it has become apparent that individuals are aware that in computer-mediated environments, the communication of emotions is increasingly more complex (Riordan, 2017). A common assumption and belief amongst individuals are, that face-to-face communication is regarded as more personal and also more effective than compared to the use of CMC when one needs to express or interpret emotional content. This assumption/belief is largely due to the lack of or absence of non-verbal cues in text-based CMC (Bos et al., 2008; Garrison, Remley, Thomas & Wierszewski, 2011; Riordan, 2017). Evidently, even though, effective organisational communication may lead to numerous advantages such as the sharing of information, improved decision making as well as improving relationships between colleagues, customers, and clients, the impact which emotions can play on organisational communication needs to be grasped and understood (Johnson, 2018; Koesten & Miller, 2008; Myers & Sadaghiani, 2010).

Gone are the days of considering organisational communication in isolation (Grandey, 2000). Over the years, the study of communication within organisations has moved from considerations of rational processes and systems, to empirical research and investigations relating to the ways in which emotion as well as affect form an innate part of organisational life and communication (Brief & Weiss, 2002; Considine, Garner & Miller, 2007; Koesten & Miller, 2008). Since 1987, increased attention has been given to the captivating concept of emotions by psychologists worldwide (Ashforth & Humphrey, 1995; Ekman, 2016; Feldman & Morris, 1997). Along with the increased research attention being devoted to emotions and emotional processes, a growing interest has been given to the expression, experience, and management of emotions within the contemporary workforce (Bono & Ilies, 2006). Research findings suggest that emotions form a central and influential component of individuals' personal and professional lives (Ashkanasy & Daus, 2002; Barsade & Gibson, 2007; Judge & Robbins, 2015). Hence, the process and experience of everyday organisational work, including organisational communication,

may be regarded as being saturated with individuals' feelings and emotions (Ashforth & Humphrey, 1995; Barsade & Gibson, 2007).

To obtain a thorough understanding of the complexity of emotion, two closely related terms need to be understood and clarified, namely affect and mood (Brief & Weiss, 2002). The universal term affect is defined as a wide array of feelings that individuals experience which comprise of both moods and emotions (Bagozzi, Gopinath & Nyer, 1999; Barsade & Gibson, 2007; Williams, 2015). Furthermore, mood is defined as feelings that have a deficiency concerning a contextual stimulus and are inclined to be less intense than emotions. In turn, Judge and Robbins (2015) argue that emotions can broadly be defined as emotional states that individuals experience. These emotional states are directed at someone or something, more momentary than moods, and believed, by nature, to be intensive (Ashforth & Humphrey, 1995; Bagozzi et al., 1999; Barsade & Gibson, 2007; Goran & Negoescu, 2015).

Within organisations, affective processes, generally known as emotions, encourage and create work motivation, animate decisions, establish leadership, and prowl behind political behaviour. At any moment in time, while individuals confront work issues that are of importance to them and their organisational performance, strong, affective feelings are present. Likely, it could be said that emotions and affective processes influence all organisational communication and behaviour (Barsade & Gibson, 2007; Lowery & Nadler, 2009). Significant progress has been made to understand individuals' emotions and emotional states within organisations with some of the key topics including Emotional Intelligence (EI), Emotional Labour (EL) and Emotional Contagion (EC).

Broadly, EC is described as the process of sharing or conveying emotions from one individual to another" individual or group of individuals (Barsade & Gibson, 2007; Bull Schaefer & Palanski, 2013; Koesten & Miller, 2008). Linking to the concept of EC, the expression of emotion becomes of significant importance as individuals comprise over the need to share and express their emotions with one another" in a working environment (Lowery & Nadler, 2009). CMC not only lacks/has an absence of non-verbal cues which are regarded as essential features aiding individuals in comprehending the meaning or nature of messages, but CMC also lacks a richness in the communication of emotion. Consequently, it has become imperative to explore

alternative methods to incorporate these cues into everyday communication, including both interpersonal and organisational communication (Abdullah & Jibril, 2013; Author & Byron, 2008; Bos et al., 2008; Carassai, Liu & Niu, 2017; D'Addario & Walther, 2001; Riordan, 2017).

For the main purpose of enriching CMC and social media mediums and compensating for the lack of and/or absence of non-verbal cues in CMC (especially in that of text-based CMC and social media mediums), one highly contemporary method has emerged. This method includes the use of emoticons and emojis (recently, also stickers). Developed by Fahlmann in 1997 in an attempt to realign conversations between employees, emoticons and emojis are defined as graphic representations of facial expressions used to convey emotion and non-verbal cues. Emoticons and emojis have taken the world of communication by storm in recent years by emerging as a true digital 'language' (Bai et al., 2019; Chang et al., 2016; D'Addario & Walther, 2001; Gronning, Kankaanranta & Skovholt, 2014). Not only has the use of emoticons and emojis been highly popular in interpersonal communication, but organisational CMC has also become entrenched with the use thereof by employees using them in email communication, communication over Skype or WhatsApp as well as emoticons and emojis being used in marketing campaigns on Facebook and Twitter (Bai et al., 2019; Chang et al., 2016; Lohmann, Pyka & Zanger, 2017).

However, for this study, an area interest includes examining the influence of emoji interpretations, specifically on that of organisational CMC, based on the potential for misinterpretation and miscommunication (Chang et al., 2016; Lohmann et al., 2017). Research done by Chang and Koda (2004), found that individuals differ in their interpretations of emoticons/emojis when used across different platforms/devices and between different cultures. As varying interpretations of emojis may result in misinterpretation or miscommunication which may contribute to increased potential for conflict, decreased trust, productivity, teamwork and employee morale as well as potential lawsuits, a great need exists to determine whether interpretation differences for emojis do occur in relation to various variables of interest (Griessel, 2018; Hecht, Kluver, Miller, Terveen & Thebault-Spieker, 2017; Lohmann et al., 2017; Segrest, 2017; Weiss, 2015).

Based on the above, a void in current published scientific research has been identified, namely that the interpretation of emojis and the potential negative impact of miscommunication on organisational communication or, more specifically, text-based organisational CMC, is under-investigated. Consequently, for this study, the research initiating question is: *What is the influence of emoji interpretations on organisational text-based Computer-Mediated Communication (CMC)?*

This research question gave way to the following objectives:

- Firstly, to determine whether across platform differences in the interpretation of emojis occur for Apple WhatsApp, Android WhatsApp, Twitter, and Microsoft Office.
- Secondly, to determine whether age group differences in the interpretation of emojis occur.
- Thirdly, to determine whether gender differences in the interpretation of emojis occur.
- Fourthly, to determine whether racial group differences in the interpretation of emojis occur.
- Fifthly, to determine whether industry differences in the interpretation of emojis occur.
- Sixthly, to determine whether hierarchy level differences in the interpretation of emojis occur.

In the ensuing chapter, a literature review will be provided exploring the concept of emojis in order to examine the influence of emoji interpretations on organisational text-based CMC. The main topics will include communication, 21st-century organisational communication (with a specific focus on geographically dispersed organisations and remote/flexible workers), organisational communication and emotion as well as the use of emoticons and emojis as a modern and evolutionary form of communication.

CHAPTER 2

LITERATURE REVIEW

In this chapter, a literature review will be provided. The review will commence with an investigation into the broad concept of communication. The communication process, as well as the various types of communication, will be examined after which, a focus will be placed specifically on that of organisational communication. Following a discussion on organisational communication, 21st-century organisational communication (with a particular focus on geographically dispersed organisations or organisations promoting flexible/remote working) will be explored. Herein, a specific focus will be placed on the topic of Computer-Mediated Communication (CMC) and the potential negative aspect thereof which relates to the absence of non-verbal cues.

Following the examination of CMC, the link between communication and emotion will be explored whereby affect and emotion will be defined and discussed. Whilst linking affect and emotion to organisational settings, the concepts of Emotional Intelligence (EI), Emotional Labour (EL), and Emotional Contagion (EC), as well as the expression of emotion will be investigated. More closely, the conveying of emotions by means of CMC will be examined. Hereafter, the focus will be placed on the use of emoticons and emojis as a means to convey emotions, particularly in that of text-based CMC. The roles and functions of emoticons and emojis will be examined, after which the primary focus of this study will be placed on research relating to emojis potentially being interpreted dissimilarly across platforms and numerous demographic variables including age, gender, race, industry of work and hierarchy levels. In conclusion, hypotheses will be examined relating to the variables studied and a conceptual theoretical figure and empirical model, developed from the literature review, will be outlined. Finally, a conclusion will be provided relating to the potential value of the study at hand.

2.1 Overview of Communication

From communication literature, it is evident that there exists a wide variety of definitions with regard to the term communication (Brink & Costigan, 2014; Cekerevac et al., 2012). One such definition according to Cekerevac et al. (2012) is:

“Communication is a process by which information is exchanged between individuals through a common system of symbols, signs or behaviour” (p. 549). Communication can also be described as any act by which a person gives to or receives information from another individual about that individual’s needs, desires, perceptions, knowledge and/or affective states (Caputo et al., 2013).

As stated by Brink & Costigan (2014), Caputo et al. (2013), and Cekerevac et al. (2012), communication could involve conventional or unconventional signs (such gestures or physically taking someone by the hand and leading them to an item), could be intentional or unintentional, could occur through spoken or other modes, and could take non-linguistic or linguistic forms. Non-linguistic communication involves the use of body language and comprises of proxemics (the application of space), tacesics (contact of the body), and kinesics (body posture, gestures, movement of the body, and facial expressions). Linguistic communication involves the usage of voice, words, and speech. Both oral and written communication is considered a type of linguistic communication (Brink & Costigan, 2014).

To fully comprehend what the term communication encompasses, it is necessary to have an understanding of the overall communication process. Hence, in the section which follows, the communication process will be briefly described according to Brewer et al. (2014) and Cekerevac et al. (2012).

2.1.1 Communication Process

The communication process starts when one party (an individual, group or an entire organisation), referred to as the sender, has an idea or piece of information which they want to transfer/convey to another individual or audience. The main task of the sender is to transform the idea or piece of information into such a form that can be conveyed to the recipient (receiver of the idea or piece of information) and that the recipient will be able to understand the idea or piece of information. This is called the *encoding process* – translating ideas or information into such a form that the recipient can understand and reorganise, for example, spoken or written language (Brewer et al., 2014). Besides speech, coding facial expressions, symbols, body language, cover letters and gestures, intonation and many other resources can be used to express an idea or convey information. An individual encodes an idea or piece of information when choosing words to talk to someone personally, or to write

a letter. The encoding process may be affected by various factors such as, the situation in which the person is, as well as the individual's previous relationship with the person with whom he/she communicates (for example whether the relationship was friendly/hostile) (Brewer et al., 2014; Krauss & Weinheimer, 1966).

Once encoded, the idea or piece of information, further referred to as the message, is ready to be transmitted utilising a *medium* (an image, symbol, word(s) or an activity such as mimic, gestures and intonation). The *medium* will be transmitted over one or several *communication channels* for the message to reach the desired receiver whilst utilising pathways through which the information travels. When the message is received, the *process of de-coding* begins – referring to the process of converting the message back to the sender's original form. This process can involve various sub-processes, which could include interpreting facial expressions and comprehending spoken or written words. The extent to which the receiver has accurately decoded a sender's message will determine whether the ideas understood will be the same as those that the sender intended to transmit (Brewer et al., 2014; Cekerevac et al., 2012).

After the message has finally been decoded, the process of communication can continue should the receiver send a new message to the sender. This phase of the communication process is referred to as *feedback* (which describes the information regarding the influence of messages on receivers). Receiving feedback allows the sender to determine whether their messages have been correctly understood by the receiver. Simultaneously, the feedback may convince the receiver that their opinion matters to the sender and vice versa. Once received, feedback can trigger another idea from the sender and thus initiate another cycle of idea and/or information transmission. Hence, feedback is crucial for the regular communication flow between senders and receivers (Brewer et al., 2014; Cekerevac et al., 2012; Geister, Hertel & Konradt, 2006).

With reference to the overall communication process, three factors need to be highlighted and taken note of. The first, includes the fact that during the communication process, various individuals can participate in the process by means of open communicators, reserved communicators, indirect communicators, and direct communicators (Brewer et al., 2014; McGovern & Spencer-Rodgers, 2002).

The second includes the topic of *communication barriers*. Communication barriers refer to anything which prevents an individual from receiving and/or comprehending the messages others utilise to convey their ideas, information and/or thoughts. Communication barriers may be related to internal barriers such as fatigue, message characteristics such as disorganised messages and/or external barriers such as noise (Brewer et al., 2014; McGovern & Spencer-Rodgers, 2002). In terms of frequency, communication barriers within organisations are regarded as frequent occurrences, with small-sized organisations being no exception. At times, these barriers may be subtle and only mildly disruptive, where at others; they may create a breakdown in a company (Capozzi, 2018). Ultimately, with reference to communication within organisations, communication barriers can have a detrimental effect. These barriers may result in various undesirable consequences such as inaction (not delivering on requested directives), negative work relationships, lack of knowledge and misinterpretation (Capozzi, 2018; Kokemuller, 2018). Consequently, these undesirable consequences may affect the smooth flow of messages, resulting in impacting how successful the communications between individuals are and finally, how effective an organisation operates and functions. To overcome such barriers, communication should be improved by removing any potential communication barriers (Brewer et al., 2014; McGovern & Spencer-Rodgers, 2002).

Lastly, the third factor which should be taken into consideration during the communication process and which relates to that of communication barriers includes *noise factors*. Noise factors falsify and distort the clarity of messages and could occur in any phase of the communication process. An example of noise factors are poorly encoded messages (unclearly written) or poorly decoded (in-comprehensible) which could result in less effective communication (Brewer et al., 2014; McGovern & Spencer-Rodgers, 2002). To improve any type of communication, a better choice of symbols, repetition, emphatic listening, ensuring feedback, reducing/removing communication barriers and noise factors as well as a clearly defined organisational structure can be used (Cekerevac et al., 2012).

After having gained a thorough understanding of what the term communication refers to and entails as well as the communication process and relevant factors, the need manifests to investigate the main types of communication which are highlighted throughout communication literature.

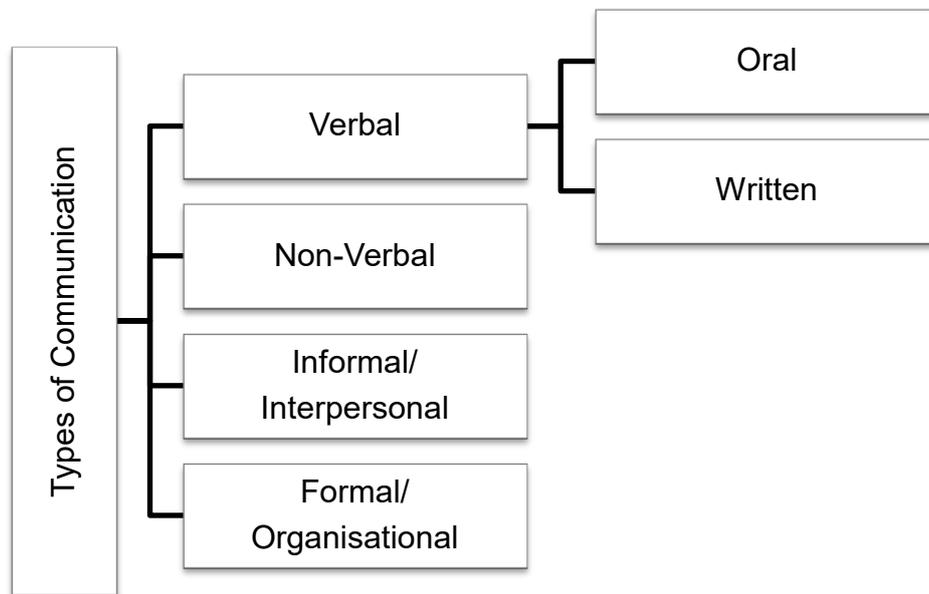


Figure 1. Communication Types

(Shethna, 2017, para. 7)

2.1.2 Types of Communication

Based on Figure 1, it is apparent that communication types are divided into four main types: verbal, non-verbal, formal/business and informal/interpersonal. Based on communication channels, style and purpose, verbal and non-verbal are grouped together and informal/interpersonal and formal/organisational are grouped together. In terms of defining the types of communications, *verbal communication* refers to the use of words in delivering an intended message. Two main forms of verbal communication are apparent, namely oral (referring to the spoken word) and written communication (referring to the written word). On the contrary, *non-verbal communication* encompasses communicating by sending or receiving wordless messages including actions such as observing facial expressions and body posture (Bradley, 2018; Brink & Costigan, 2014; Cekerevac et al., 2012; Shethna, 2017).

According to Bradley (2018), all types of communication, whether verbal, non-verbal, informal/interpersonal or formal/organisational are intended and envisioned for a specific audience - the audience, referring to the individuals with whom one communicates. When distinguishing between informal/interpersonal and formal/organisational communication (also known as and further referred to as organisational communication), the audience becomes of importance. With interpersonal communication, the audience includes family, friends, co-workers as well as clients with whom one has a strong relationship and communicates via different mediums, for example, Facebook and WhatsApp. Hence, interpersonal communication can be regarded as detached and much less formal than that of organisational communication where the audience typically includes communicating with employees, business contacts, customers and the public at large (Bradley, 2018; Brink & Costigan, 2014; Cekerevac et al., 2012).

When further investigating informal/interpersonal communication, a popular topic of discussion includes that of social media. The first recognisable social media site was created in 1997, known as Six Degrees. Ever since, the concept of social media has entrenched individual's lives and more specifically, the way in which they communicate for more than two decades (Hendricks, 2013). In terms of defining social media, broadly, social media refers to a computer-based technology that facilitates the creation, sharing, and exchange of ideas and information and the development and construction of virtual communities and networks. By being internet-based through its design, social media offers users convenient and easy to use electronic communication of personal information and content through a variety of technology-enabled activities which may include photo sharing, blogging, and video sharing (Investopedia, 2018; Tufts, 2018).

According to Statista (2018), since January 2018, 18 million active social media users have been recorded in South Africa. For South Africans, some of the most popular social media sites include Facebook, Pinterest, Twitter, and Instagram. Facebook, according to StatsCounter (2018), has been reported to be the most widely used social media site in South Africa with more than 55.47% of the active social media users making use of Facebook.

Social media offers organisations the ability to find and engage with customers, advertise and promote, increase sales, assess and measure trends as well as offer customer service, regardless of the fact that it originated as a tool which individuals used to communicate and interact with family and friends. Evidently, as a result of having been viewed as more interpersonal of nature, over the years, organisations have come to realise the importance and significant impact thereof and have as a result, also adopted the use thereof within organisational communication (Investopedia, 2018). Evidently, social media may be regarded as an indispensable tool for businesses and their role in assisting business efficiency and success has proven to be highly significant (Hendricks, 2013; Investopedia, 2018).

Consequently, for this research study, the focus will be on organisational communication, including the potential impact of Computer-Mediated Communication (CMC) and social media. The reason being, organisational communication is regarded as a fundamental process under which all facets of organisational operations lie and hence, of vital importance for overall effective organisational functioning and success (Baker, 2013; Brink & Costigan, 2014; Cekerevac et al., 2012).

2.1.2.1 Organisational Communication

Within organisations, communication is not only limited to formal and official communication, but informal organisational communication also occurs. Informal organisational communication typically arises by means of personal contact between individuals, is regarded as spontaneous and revolves around personal relationships built between co-workers and colleagues and subordinates and managers. Within organisations, this form of communication is regarded as being of significant importance for the well-being of relationships between employees. Hence, effective communication strategies and processes not only play a pivotal role in formal organisational communication but also various roles in informal organisational communication (Johnson, 2018).

Amidst the various formal and informal roles of communication within organisations and workgroups, some include: improved decision making, solidifying relationships with customers and clients, information sharing, igniting different departments, influencing employees, providing order and instructions to employees, motivation,

coordination, identification, and communicative interactions within the workplace served to create and uphold work relationships (Johnson, 2018; Myers & Sadaghiani, 2010). These relationships occur between a team and organisational members, as well as between these members and important organisational stakeholders (Brink & Costigan, 2014; Hess & Kramer, 2002; Myers & Sadaghiani, 2010).

According to Myers and Sadaghiani (2010), organisational communication in particular, reveals shared values and reflects common commitments to organisational goals, which enable co-workers to forge and sustain productive relationships within organisations. Communication can also have both direct and indirect effects on organisational performance and teams. Likewise, interactions and relationships that occur in the workplace can be influenced by various individual differences in communication. These individual differences, such as a preference to communicate in a certain way (for example via email), have been found to affect co-worker's productivity alongside satisfaction (Hess & Kramer, 2002; Myers & Sadaghiani, 2010).

Evidently, the impact and significant importance of having sound organisational communication have proven to be a key factor in driving successful organisations. However, in line with various changes and challenges which confront modern-day organisations such as the vast impact of globalisation, it has become necessary to investigate how 21st-century organisations go about in terms of managing and maintaining effective organisational communication.

2.2 21st Century Organisational Communication

Throughout organisational communication literature, it has become apparent that during the 21st century, the process of communication has gone beyond plain-speaking, interpretation of words and writing and has as such, become highly complex and varied - hello to short and instant messages and goodbye to long face-to-face conversations and phone calls (Abdullah & Jibril, 2013).

According to Zalauskalns (2017), IT News Africa (2017) and Regus (2017), due to the rise of broadband technology, globalisation as well as the global shift towards the pursuit of a healthier work-life balance, the number of employees working remotely

and organisations being geographically dispersed has significantly increased over the last two decades. Not only has the rise of technology-enabled various intuitive ways of work, but the speed of reaction required by employees (the instant nature) – as well as the sense of always being connected and having to multi-task has also contributed to a greater need for balance between personal life and work, resulting in a greater need for flexibility at work (Regus, 2017).

Based on a report compiled by Regus (2017) not only are younger generations more demanding and inclined towards flexible working environments, but older generations are also active participants thereof. With more than 54% of workers having been reported to work outside of their main office for 2.5 days a week or more (Regus), the exploration of geographically dispersed organisations and remote/flexible working has become imperative during the 21st century (Zalaskalns, 2017). As outlined by Regus (2017), globally, it has been reported that 32% of employees have reported that they most often need to work from different locations around the same city and 25% of employees work from other cities. Regus (2017) has also identified that over the past two years, global business individuals have reported having seen more freelance workers (29%), consultants (30%) and part-timers (22%) within the working environment.

A key finding in the report compiled by Regus (2017) refers to the fact that the face of the global workforce is changing, and with it, are its needs. Hence, due to the impending impact which technology and globalisation has had on organisations, the ways in which individuals communicate within organisations have changed radically. Factors to consider include, the increasing pace of work, employees being more geographically distributed and organisations having to compete internationally to stay abreast of competition, as well as the increased need for a greater work-life balance. In recent years, particularly within companies operating internationally and being geographically dispersed as well between flexible/remote workers, alternative methods of communication have emerged, and one such method includes the use of CMC (Bos et al., 2008; Abdullah & Jibril, 2013; Regus, 2017).

2.2.1 Computer-Mediated Communication (CMC)

Over the past two decades, in both interpersonal and organisational communication, a significant increase in the use of CMC has been reported (Bai et al., 2019; Bos et

al., 2008; Luor, Lu, Tao & Wu, 2010; Uysay, 2016). According to Norris (2012), CMC can be defined as: “communication that takes place between human beings via the instrumentality of computers” (para. 2). In more latent terms CMC refers to both task-related and interpersonal communication, which takes place through computer-mediated technologies. These computer-mediated technologies include a wide variety of electronic messaging systems and electronic conference systems, which can be accompanied by audio and video links (Bos et al., 2008; Garrison et al., 2011; Luor et al., 2010).

It is stated that CMC can be either synchronous or asynchronous where in the case of synchronous CMC, an individual's messages/contributions are transmitted instantly but in the case of asynchronous CMC, the time a message/contribution is sent and/or received may differ. Examples of synchronous and asynchronous CMC respectively include electronic mail, known as email and instant messaging (IM) and text messaging. Within CMC, the messages are primarily typewritten and consequently, most of these interactions take place over computer or mobile devices (for example email and WhatsApp) (Bos et al., 2008; Garrison et al., 2011; Luor et al., 2010).

To comprehend the reasons behind the rapid increase in usage of CMC in recent years, two topics are of importance. The first includes a discussion relating to the impact of globalisation on organisational communication as, over the past decade and a half, the concepts of CMC and globalisation have become synonymous (Norris, 2012). Due to the upsurge of organisations being geographically dispersed and starting to operate internationally in order to develop international influence, the mediums and methods by which they communicate have adapted accordingly. Seeing as CMC provides the opportunity for employees to connect and interact with individuals from across the globe, this has evidently, become the apparent method of communication for companies who are geographically dispersed and operate internationally (Norris, 2012; Uysay, 2016).

The second topic relates to the Millennial and Generation Z age groups, which refers to the groups of individuals who were born between 1979 and 1994 and 1995 and 2010 respectively (Akahori, Kato & Kato, 2007; Myers & Sadaghiani, 2010; Patel, 2017). Millennials are described as the first generation to be born into households

with computers and who have grown up surrounded by digital media, whereas Generation Z individuals are regarded as digital natives who grew up surrounded by Wi-fi and smartphones. Research indicates that both Millennials and Generation Z individuals are more comfortable with new interactive and networked media, in contrast to other generations such as Generation X, Baby boomers, and older generations (Kuron & Lyons, 2013; Myers & Sadaghiani, 2010).

In terms of media use, Millennials do however differ in that their usage has been reported to be heavy due to the fact they spend more time per week on social media than older generations. The degree of comfort which Millennials and Generation Z individuals have with new media technologies implies that these generations have an affinity for communication and information technologies (CITs) and could bring potential beneficial characteristics to the 21st-century workplace. Based on this belief, in recent years, an increased number of organisations have started to place a focus on building a millennial and Generation Z workforce. Ultimately, relating to the increased usage of CMC, as more Millennials and ultimately Generation Z'ers are entering the workforce, an increased usage of CMC has been noted due to their ease of use and comfort with CMC technologies (Akahori et al., 2007; Kuron & Lyons, 2013; Merrick, 2016; Myers & Sadaghiani, 2010; Patel, 2017).

According to Olaniran (2003) and Carassai et al. (2017), regardless of whether there are more contemporary forms of CMC which interface with graphic, audio, and video data, text-based CMC (i.e. email, WhatsApp, Skype messaging), for the most part, remains the most common and frequently used forms. This conclusion is drawn based on the fact that text-based CMC has a quick response time due to employees frequently checking their mobile phones during the course of the day, as well as the fact that text messages which are delivered to an employee's mobile phone or computer are difficult to ignore and hence more readily addressed.

In exploring text-based CMC further, email, in particular, is regarded as one of the most dominant forms of communication between employees and other groups (for example customers and clients) during office hours locally and abroad. The reason being, this medium makes components of work more efficient (Bos et al., 2008; D'Addario & Walther, 2001; Huang, Yen & Zhang, 2008). It is argued that employees are gradually more probable to make use of, and have a preference to communicate

with customers, co-workers, and other colleagues through the use of email. This preference may be due to some of the advantages of email, such as asynchrony and flexibility. In contrast to other communication mediums, the advantages of email are contributing to the proliferation of organisational communication (Author & Byron, 2008; Huang et al., 2008). As a result, email has shown to have contributed to an increase in information sharing within organisations and enhanced the productivity of employees and/or other groups who are separated by time and place.

Contrary to the advantages provided relating to the use of email as a communication medium, there are, however, also negative aspects of using email which need to be noted. One such negative includes the potential harm that could come to workplace relationships because of the use of email. It has been argued by Currall and Friedman (2003), that the characteristics of email, such as not having face-to-face contact, could be associated with an increase in the probability of conflict escalation among email users. Huang et al. (2008) argues that as the use of email increases, the overall volume of all other forms of communication decline. This decline is mostly due to fewer “greetings” and other informal interactions between co-workers. Additionally, Feldman and Sarbaugh-Thompson (1998) and Huang et al. (2008) argued that as the use of email as communication medium rose, employees reported feeling less connected to their peers and co-workers.

Contributory not only can email negatively influence workplace relationships, but the vast amount of time spent on reading and responding to emails may also influence the overall productivity of an individual (Huang et al., 2008). Another potential negative with regards to email communication and in general in that of CMC relates to the communication of emotion – a topic of specific importance for this research study and one which will be explored in further detail in the sections which follow. For various reasons, emotions are predominantly difficult to correctly and truthfully communicate via email and/or any other text-based forms of CMC. Hence, it may be said that text-based forms of CMC lack a richness regarding the communication of an individual’s emotions (Carassai et al., 2017).

Related to the concerns regarding the lack of richness in conveying/communicating emotion in text-based CMC, throughout literature, multiple research studies are concerned with the overarching potential negative aspect of CMC, and in particular,

text-based CMC, which concerns the lack of or absence of non-verbal cues (Abdullah & Jibril, 2013; Author & Byron, 2008; Bos et al., 2008; D'Addario & Walther, 2001; Riordan, 2017). The section which follows investigates the absence of non-verbal cues as a potential communication barrier in CMC and in particular that of text-based CMC.

2.2.1.1 Absence of Non-verbal Cues

How one communicates – the gestures, vocal tone, the accompanying facial expressions, and many other factors, are often just as important to what one understands and interprets as the words which are communicated and conveyed. As stated by Peter Drucker: “The most important thing in communication is hearing what isn't said” (Barash, Cha, Fink & Park, 2013).

To understand the statements and assumptions made regarding non-verbal cues, one needs to fully comprehend what is meant by non-verbal cues. Broadly, non-verbal cues refer to non-verbal elements that occur during communication. In the case of face-to-face communication, non-verbal cues which may include paralinguistic cues (features that function outside a language system, such as gazing, eye contact, facial expressions, gestures, body language and vocal intonation), and social context could provide reliable indicators of another individual's aptitudes, gender, personality, intentions as well as sexual orientation (Garrison et al., 2011; Kreuz & Riordan, 2010). The provision of valuable information, expression of intimacy and the regulation of interaction between individuals could also be a consequence of such non-verbal behaviour (Bos et al., 2008; Kreuz & Riordan, 2010).

In terms of the arguments relating to the lack of and/or absence of non-verbal cues in CMC, especially in that of text-based CMC, various negative consequences may result such as communication becoming ambiguous between individuals, individual's emotional states being incorrectly estimated, conflict escalation, mistrust, and most importantly the occurrence of miscommunication and misinterpretation between individuals (Bos et al., 2008; Kreuz & Riordan, 2010). In terms of an individual's emotional states and the absence of non-verbal cues, it could be implied that employees' emotional states can be overestimated or even underestimated due to the deficiency of non-verbal cues in CMC, which in turn may lead to inappropriate

reactions. In terms of conflict, the deficiency of non-verbal cues may lead to an increase in the possibility of conflict between employees as confusion and varying interpretations may occur (Bos et al., 2008).

Linking to the various negative consequences of a lack of or absence of non-verbal cues outlined, it has become evident that individuals are aware that in computer-mediated environments, the communication of emotions is increasingly more complex. It has been found, that most individuals prefer and choose to communicate through face-to-face interaction instead of using CMC, for example, email when emotional information needs to be relayed or conveyed (Riordan, 2017). A common assumption and belief amongst individuals are that face-to-face communication is regarded as more personal and also, more effective than the use of CMC when one needs to express or interpret emotional content. This is largely due to the lack of or absence of non-verbal cues in CMC (Bos et al., 2008; Garrison et al., 2011; Riordan, 2017). To fully comprehend the impact which the lack of and/or absence of non-verbal cues can have on the communication of emotion in text-based CMC, the enticing concept of emotion needs to be fruitfully grasped (Bos et al., 2008; Garrison et al., 2011).

2.3 Organisational Communication and Emotion

When considering organisational communication, in recent years, progress has been made toward not only viewing this in isolation but taking into consideration other influential organisational facets (Ashkanasy, Härtel & Zerbe, 2000; Lowery & Nadler, 2009). According to Grandey (2000), during the 1990s, the workplace was viewed as a rational environment where emotions could potentially, but highly unlikely influence sound judgement. Consequently, emotions were not regarded as potential justifications for a phenomenon which occurred within the workplace. This view has, however, progressively changed with researchers increasingly finding further indications of how emotions could potentially contribute toward explaining vital individual and organisational outcomes (Ashkanasy et al., 2000; Lowery & Nadler, 2009).

Evidently, over the years, the study of communication within organisations has also moved from considerations of rational processes and systems, to research and investigations relating to the ways in which emotion as well as affect form an innate

part of organisational life and communication (Brief & Weiss, 2002; Considine et al., 2007; Koesten & Miller, 2008). Below, the overarching concepts of affect and emotion are defined and explored.

2.3.1 Affect and Emotion Defined

In 1884, William James proposed the fundamental question: “What is an emotion?” (Pugh, 2007). This question became the title of a ground-breaking article he wrote in the same year, which focussed on the nature of emotions. To this day, more than 130 years later, psychologists still grapple with this question and a single, clear-cut definition has proven to be elusive (Ashkanasy et al., 2000). Definitional accuracy for emotion terminology is regarded as challenging for two reasons. Firstly, due to emotion being a word elevated from common language – in other words not only used as a scientific term but a term used in everyday language. Secondly, scientists/psychologists who study emotion, approach it from diverse perspectives for example psychologists from cognitive traditions and sociologists from cultural traditions and values (Pugh, 2007; Thoits, 1989).

Linking to the understanding and complexity of defining emotions, two closely related terms need to be understood and clarified, namely affect and mood (Brief & Weiss, 2002; Judge & Robbins, 2015). The universal term affect, which is regarded as an umbrella term, is defined as a wide array of feelings that individuals experience. These feelings include *feeling states* (in-the-moment), short-term affective experiences, as well as *feeling traits* (more stable tendencies to act and feel in a certain way). In particular, feeling states include two established categories: “moods” and emotions (Bagozzi et al., 1999; Barsade & Gibson, 2007; Williams, 2015).

Throughout literature, moods are defined as affective states, which are comparable to the subjective, experiential feeling state of emotions. Moods take the form of a general positive (pleasant) or negative (unpleasant) feeling. Moods are typically longer in duration and less intense than emotions. Unlike emotions, moods have a deficiency regarding a contextual stimulus (Barsade & Gibson, 2007; Brief & Weiss, 2002; Pugh, 2007; Williams, 2015). Moods are perceived as wide-ranging and diffusive whereas emotions are associated with a person, event or object that has been evaluated as noteworthy for an individual (Pugh, 2007). Hence, in brief, emotions in contradiction to moods, are defined as emotional states which

individuals experience and which are directed at someone or something, more momentary than moods, and believed, by nature, to be intensive (Ashforth & Humphrey, 1995; Bagozzi et al., 1999; Barsade & Gibson, 2007; Goran & Negoescu, 2015).

Evidently, it is apparent that various features exist which distinguish emotions from moods, including the intense nature and fleeting characteristics of emotions (Bagozzi et al., 1999; Barsade & Gibson, 2007; Brief & Weiss, 2002; Judge & Robbins, 2015; Williams, 2015). Of these features the most vital is, the way in which emotions develop in individuals (Judge & Robbins, 2015). It is said that emotions have a specific referent. More specifically, individual emotions develop in response to appraisals that individuals make regarding something (an occurrence of an episode or incident) that is of significance to their well-being. Although groupings of events or physical circumstances are often associated with certain emotional responses, it is important to highlight that it is not the physical situations or explicit events that create the emotions (Goran & Negoescu, 2015; Kaag, 2009). Rather, emotions occur through the unique psychological appraisal made by the individual who interprets the various circumstances and events. When exposed to a similar happening or event individuals may vary in terms of their emotional reactions where some may even show no emotional reactions at all versus some showing extensive or moderate emotional reactions (Bagozzi et al., 1999; Goran & Negoescu, 2015).

As a result thereof, that within modern organisational behaviour literature, great attention is paid to affect and emotion within organisations and its impact on organisational success (Ashforth & Humphrey, 1995; Barsade & Gibson, 2007; Ekman, 2016; Feldman & Morris, 1997), it is necessary to further delve into the communication and expression of emotion within organisational communication.

2.3.2 Affect and Emotion in Organisational Communication

Within organisations, affect is not only regarded as permeating organisations due to its presence in interdependent relationships between team members, subordinates, and bosses, but affect is also highly present in group projects, organisational communication, deadlines, and human resource processes which could include selection interviews and performance appraisals (Barsade & Gibson, 2007). Affective processes, generally known as emotions, encourage and create work motivation,

animate decisions, establish leadership, and prowl behind political behaviour. At any moment in time, while individuals confront work issues that are of importance to them and their organisational performance, strong, affective feelings are present. Likely, it could be said that emotions and affective processes influence all organisational communication and behaviour (Barsade & Gibson, 2007; Lowery & Nadler, 2009).

Even though, multiple factors relating to affect and emotion remain difficult to explain, significant progress has been made to understand individuals' affective states within organisations. Specifically in that of organisational communication, (Barsade & Gibson, 2007) vast amounts of research have been performed relating to affect and emotion in the work environment. Some of the most influential topics relate to Emotional Intelligence (EI), Emotional Labour (EL) and Emotional Contagion (EC) (Barsade & Gibson, 2007; Diefendorff, Richard & Yang, 2008; Hui-Hua & Schutte, 2015; Koesten & Miller, 2008).

2.3.2.1 Emotional Intelligence (EI)

In terms of EI, even though it may still be a relatively growing field in behavioural science research, the progress with regards to the development of EI extends over several decades (Lowery & Nadler, 2009; Matthews, Roberts & Zeidner, 2004). Broadly, EI refers to the ability to monitor one's own and others' emotions, to differentiate among emotions and to use the information as a guide to one's actions and thinking (Hui-Hua & Schutte, 2015; Lowery & Nadler, 2009; Penceliah, 2004; Ramo, 2009).

Typically, EI is related to research on intelligence along with the processing of affective information. The idea of emotional competencies gains the most attention in organisational behaviour research whereby these competencies include: the regulation of emotions in the self, emotional self-awareness, social awareness of emotions and empathy, motivational tendencies, regulating emotions in others, and character (Lowery & Nadler, 2009). Several of these anticipated emotional competencies, namely emotion regulation, self-awareness, and social awareness of emotions, can be directly related to the organisational setting and the work environment. Individuals' aptitude to recognise others' emotions and restrain from

negative emotions and outbursts, may play an important role in the evaluation of performance within an organisation (Lowery & Nadler, 2009).

According to Hui-Hua and Schutte (2015), EI comprises of adaptive emotional functioning. The central competencies of EI include understanding, perceiving and effectively managing emotions in the self and others. Hence, EI can be conceptualised as a trait, or more typically a function and underlying ability of individuals. Trait EI is regarded as a reasonably constant characteristic and trait EI competencies may be built on basic personality and temperament characteristics (Hui-Hua & Schutte, 2015; Ramo, 2009).

Within organisations and educational settings, EI is widely applied due to the relation between EI and improved task performance which is related to the personality of an individual (Hui-Hua & Schutte, 2015; Ramo, 2009). The perception exists that high EI may lead to personal and professional success. This perception has led to the generation of interest in EI for, among others, managers, academics, and the general public (Penceliah, 2004). This is due to findings indicating that EI affects almost all activities related to the work environment, including a wide range of work behaviours such as teamwork, employee commitment, innovation, development of talent, customer loyalty as well as the quality of service (Matthews et al., 2004; Penceliah, 2004).

According to Penceliah (2004), there are numerous benefits associated with being emotionally intelligent which include: a balance between one's thoughts and feelings, one can have empathy with the feelings of others and can understand it, one realises that one is responsible for one's own feelings, as well as improved communication skills which give rise to healthier relationships. Thus, EI does not only contribute to improved performance but also to better management of one's own emotions and improved understanding of the emotions of other individuals in the workplace (Hui-Hua & Schutte, 2015; Lowery & Nadler, 2009; Penceliah, 2004).

2.3.2.2 Emotional Labour (EL)

With reference to EL, the year 1983, marks the starting point of EL studies, whereby Arlie Hochschild (2012) (author of "The Managed Heart") drew the necessary attention for the establishment of the well-known construct of emotional labour

(Ashkanasy & Daus, 2002; Diefendorff et al., 2008; Hochschild, 2012). In Hochschild's book, the idea was expressed that employees are frequently required to manage and regulate their emotional expressions and feelings while interacting with clients and customers (Chau, Dahling, Diefendorff & Levy, 2009; Diefendorff et al., 2008). This understanding gave rise to the fundamental concept known as EL within organisational behaviour research studies.

EL, which is an organisation specific type of emotion regulation, can be broadly defined as employees' management of their own public display of emotions. The purpose of employees' regulation of their own emotions, is to comply with the normative "display rules" within an organisation (Barsade & Gibson, 2007; Chau et al., 2009; Feldman & Morris, 1997). These organisational "display rules" or emotion norms can, according to Barsade and Gibson (2007), be utilised as instruments for increasing performance within an organisation. For example, when lawyers make use of an aggressive and angry tone of voice to encourage and ensure compliance in adversaries, it could be regarded as EL (as a type of labour at work) to increase work performance. The "labour", as part of the responsibilities that employees are paid for, is to regulate their emotions according to a situation to produce the applicable emotional state in other individuals.

Through the concept of EL, Hochschild (2012) identified two key approaches through which individuals primarily manage and regulate their emotional displays. These approaches are known as *surface acting* and *deep acting* (Barsade & Gibson, 2007; Chau et al., 2009; Diefendorff et al., 2008). *Surface acting* can be described as the process through which employees exhibit and show their emotions, without necessarily 'feeling' the emotions. Individuals express organisationally desired emotions while repressing undesired emotions. Surface acting can be described according to Diefendorff et al. (2008) as "faking in bad faith". An example of surface acting in this context is: When an airline customer service agent forces themselves to be kind and smile, despite a customer becoming gradually more frantic about luggage that was lost. *Deep acting*, on the other hand, can be described as the process through which employees display and express emotions on which they have actually "worked" on to feel. Individuals change their felt emotion for the emotional expressions, to naturally comply with display requirements. Deep acting can also be described according to Diefendorff et al. (2008) as "Faking in good faith". An

example of deep acting in this context is: An airline customer service agent truly tries to sympathise with a customer and exhibit emotions that are in line with feeling empathy toward the customer (Barsade & Gibson, 2007; Chau et al., 2009).

Overall, EL can take its toll on employees, both psychologically as well as physically, and create challenges and damaging effects for employees. Such challenges or damaging effects may include high absenteeism and turnover. This may be particularly prevalent when employees have to project a particular emotion while experiencing another, referred to as emotional dissonance (Çalışkan, Oben Ürü & Yozgat, 2012; Chau et al., 2009). Feelings that are “bottled-up” or internalised can have a significant effect on employees and may ultimately lead to disrupting diagnoses/problems such as emotional exhaustion and burnout (Ashkanasy & Daus, 2002; Chau et al., 2009; Judge & Robbins, 2015).

Due to this study being primarily concerned with the communication of emotion within organisational communication and as well as based on the proposition of Barsade and Gibson (2007), that affect does not only occur intra-psychically, but also has a strong social component which can influence dyadic and group interactions, the concept of EC is explored.

2.3.2.3 Emotional Contagion (EC) and Expression of Emotion

EC refers to the process of sharing or conveying emotions from one individual to another individual or group of individuals (Barsade & Gibson, 2007; Bull Schaefer & Palanski, 2014; Koesten & Miller, 2008). According to Barsade and Gibson (2007), the process of EC frequently occurs unconsciously, even though it can be consciously induced. EC is regarded as the main mechanism through which emotions are shared between individuals and through which emotions become social, creating collective emotions (Koesten & Miller, 2008).

The process of EC, which is seen as an everyday incessant process, has been described by Barsade and Gibson (2007) as the propensity to mimic the non-verbal behaviour of other individuals. Examples include to “synchronise” vocalisations, facial expressions, postures and movements with other individuals, and in turn, to “converge emotionally”. It has been suggested that the facial feedback hypothesis could possibly be utilised to explain the mimicry of EC. The facial feedback

hypotheses conclude that individuals who model a certain facial expression (for example a smile, which corresponds to emotions), actually begin to experience the same emotions (e.g. happiness). A variety of factors, such as the extent to which individuals are perceived as good receivers and senders of emotion, may be utilised to adjust the EC process (Barsade & Gibson, 2007; Bull Schaefer & Palanski, 2014).

In line with the investigation of EC, the expression of emotions also needs to be examined. According to Lowery and Nadler (2009), employees have a natural need to express emotions and have social needs that must be met. Likewise, Bos et al (2008), argue that individuals have a need to talk about, and reflect on their emotional experiences - referred to as social sharing. Social sharing is regarded as a common manifestation in that individuals have the urge to share an emotional experience by talking about it. This manifestation is provoked as soon as a person experiences an emotion and may include all types of emotions such as happiness and anger, with the exception of shame (Bos et al., 2008).

When taking the concepts of EC and social sharing together, the term emotional communication becomes apparent. Emotional communication, similarly to EC and social sharing, is defined as the recognition, expression, and sharing of emotions and moods between two or more individuals (Author & Byron, 2008; Bos et al., 2008). Due to the belief that both types of emotional communication (implicit and explicit) are necessary to examine the quality of interactions between individuals as well as the emotional content, both implicit and explicit emotional communication are explored.

Implicit emotional communication refers to the emotional style of the message, which can be influenced by the degree of self-disclosure, personal participation, and language use. Explicit emotional communication, however, encompasses references to discrete emotions, through the use of appraisals (this is sad), verbal emotion labels (I am frustrated), expressions and tendencies to act (I would like to run with you) as well as emblems or symbols (☺ to display emotions such as happiness or satisfaction) (Bos et al., 2008).

Henceforth, not only do individuals have a need to express their emotions and communicate these emotions to others via various methods but Pugh (2007), also argued that individuals differ with regards to the quantity and quality of emotions they

experience and express. For instance, the degree to which individuals talk about their emotions may vary based on gender. In this regard, early studies relating to social sharing conducted by Boca, Mesquita, Philippot, and Rimé (1991), have indicated that men are considerably more inclined to share and express their feelings toward women (especially their partners). Women, however, are more inclined to share their emotions with a broader range of individuals (both male and female). A possible explanation for this could be that women frequently occupy specific roles in society, such as a mother or a nurse, which require them to be more emotionally expressive and concerned with their own and others' feeling states. Whereas, this phenomenon is in contrast to what is required of men within the organisational environment (Bos et al., 2008; Heilman, 2012).

Furthermore, findings suggest that women are perceived to be significantly more expressive in their display of emotions than men are. It is said, that women are more expressive in their display of sadness and less expressive of anger. Evidence suggests, however, that the internal experience of emotions is similar for men and women (Bos et al., 2008; Heilman, 2012).

Additionally, cultural norms, defined as the shared, unified and sanctioned systems of beliefs which characterise a cultural group (Hechavarria & Reynolds, 2009) are also of importance in terms of the expression of emotion. It should be noted that cultural norms to some extent prescribe which emotions are adequate and appropriate to display for males and females as well as how these emotions may be displayed. In general, it is culturally accepted that women tend to express and display their emotions more than men. In terms of organisational functioning, cultural norms also play a tremendous part in outlining the appropriate and relevant ways of expressing and conveying emotions (Bos et al., 2008; Heilman, 2012; Lowery & Nadler, 2009).

In summary, CMC has emerged as one of the most commonly used forms of communication in recent years, particularly, within geographically dispersed organisations. As emotions have been shown to have an instrumental impact on organisational communication and functioning, the need also develops to more thoroughly examine the impact which CMC has on the communication and expression of emotions.

2.3.2.4 Conveying of Emotions in Computer-Mediated Communication

As has been highlighted, CMC is not only regarded as lacking a richness in the communication of emotion, but also, more importantly, comprises of a lack of or absence of non-verbal cues (Abdullah & Jibril, 2013; Author & Byron, 2008; Bos et al., 2008; D'Addario & Walther, 2001; Riordan, 2017). Since non-verbal cues, including the expression of emotions, are regarded as essential features which aid individuals in comprehending the meaning or nature of messages, it has become imperative to explore alternative methods to incorporate these cues into everyday communication, including both interpersonal and organisational communication (Carassai et al., 2017).

In line with this reasoning, one contemporary method which has emerged for the main purpose of enriching CMC mediums and compensating for the lack of and/or absence of non-verbal cues in CMC (especially in that of text-based CMC) includes the use of emoticons and emojis (Bos et al., 2008; Chang et al., 2016; Huang et al., 2008; Riordan, 2017). Consequently, the modern and evolutionary topic of emoticons and emojis as a means of compensating for the lack of and/or absence of non-verbal cues in CMC will be explored in the section which follows.

2.4 Emoticons and Emojis

During the early 1980s, Scott Fahlman, a computer scientist at Carnegie Mellon, observed that conversations on electronic message boards between staff members were going awry with, for example, tones being misconstrued and jokes being lost. In an attempt to realign these conversations, Fahlman made the following suggestion: "if you're being humorous or ironic, label your comment with a smiley face made of a colon, dash, and parenthesis" (Steinmetz, 2014, para. 3). Through the years, these smiley faces gained popularity all over the world and were evidently termed emoticons.

The word emoticon also referred to as emoji, is a construction of the words: "emotion" and "icon". The main difference between an emoticon and an emoji relates to the fact that emojis are the more modern versions of emoticons. As highlighted, emoticons are primarily produced by ASCII symbols such as (:)) and the use of punctuation marks. Emojis, on the other hand, are defined as small digital images,

icons, or pictographs (😊) used to express an emotion or idea (Bai et al., 2019; Brody & Caldwell, 2017; Oxford University Press, 2019). The term “pictograph” itself is derived from Japanese and originally meaning e (picture) + mo (write) ji (character). Emojis are not only intended to represent facial expressions but also ideas and concepts such as feelings, the weather, celebrations, animals, and plants as well as food and drinks (Bai et al., 2019; Brody & Caldwell, 2017).

In general, the first set of emojis was released in 1999 and based on a study done by Garcia, Gesselman, and Ta (2019), emojis were introduced to the global market in 2011. During this year, 722 emojis were incorporated into the iPhone keyboard by Apple Inc. As of then, the amount and types of emojis have rapidly increased and consequently worldwide, in nearly all forms of text-based communication, emojis have become commonplace. This includes advertising, smartphone texting as well as social media sharing. It has been found, that on a daily basis, hundreds of millions of individuals interact with emojis whether as recipients, authors or both (Bai et al., 2019; Hecht, Hillberg, Kluver, Levonian & Terveen, 2018).

In terms of social media and CMC, emoticons and emojis are viewed as having made their primary debut in that of social media, with, for example, nearly half of all text relating to Instagram posts containing emoticons or emojis. Some of the most significant reasons why emoticons and emojis may be used in social media include for example, the fact that emojis are an important aspect of visual marketing, they are international, they reach and speak to the millennial generation as well as the fact that they result in content shared being more relatable (Bai et al., 2019; Chang et al., 2016; D’Addario & Walther, 2001; Gadzhibalaev, 2018; Gronning et al., 2014).

From the out spurt of emoticons and emojis in social media, likewise, from here, various CMCs such as WhatsApp and email also started to make use of emoticons and emojis as a way of enhancing communications. For example, emoticons and emojis frequently follow utterances in written CMC and are therefore particularly popular in text-based CMC (Chang et al., 2016; D’Addario & Walther, 2001; Gronning et al., 2014). In recent years, developed from a need for improved expression of meaning, stickers have also come into play. Stickers differ in form and content from emoticons and emojis and aid in assisting users in expressing their

opinions, emotions, and intentions as a means of achieving effective communication (Bai et al., 2019). For this study, however, the focus will be on emojis.

In 1982, during the first years in which emoticons were used, Scott E. Fahlman developed emoticons utilising symbols that were made up of special characters and letters (text-based, with an implied direction from right to left and vice versa) which were usually typed on a keyboard. Examples of these emoticons are outlined in Table 1.

Table 1

Text-based Emoticon Examples

Emoticon	Description
: -)	Happy
: -(Sad
: ~(Cry
: -D	Laughing
: -	Uncertain
; -)	Winking

(Huang et al., 2008, p. 467)

Ever since, the emoticon pool has expanded to hundreds of graphical emoticons, with some being depicted in Table 2 and known as emojis (iOS 11.3 emoji versions displayed). The available pool of emoticons and emojis are constantly being created and improved through users and vendors. Over the past 38 years, emoticons and emojis have gone through a variety of different forms and meanings with a growing number of forms accompanying different types of communication software (Bai et al., 2019; Filik & Thompson, 2016; Garrison et al., 2011; Gronning et al., 2014; Huang et al., 2008).

Table 2

Graphical Emoticon Examples (Emojis)

Emoji	Unicode name
	Slightly Smiling Face
	Relieved Face
	Smiling Face with Heart-Eyes
	Smirking Face
	Grimacing Face
	Winking Face with Tongue
	Squinting Face with Tongue
	Disappointed Face
	Kissing Face with Closed Eyes
	Face with Tears of Joy
	Sleepy Face
	Face with Cold Sweat
	Loudly Crying Face
	Smiling Face with Open Mouth
	Grinning Face
	Winking Face
	Unamused Face
	Pensive Face
	Confounded Face
	Face Throwing a Kiss
	Angry Face

Emoji	Unicode name
	Pouting Face
	Sad but Relieved Face
	Persevering Face
	Worried Face
	Fearful Face
	Face with Open Mouth and Cold Sweat
	Face with Open Mouth Vomiting
	Dizzy Face
	Flushed Face

(Emojipedia, 2019, "Smileys & People")

2.4.1 Roles and Functions of Emoticons and Emojis

Emoticons and emojis (which are regarded as a unique style of non-verbal displays in CMC) can be deliberated as a creative and visually salient manner in which to add expression to an otherwise stringently text-based communication medium (Bos et al., 2008; Bos, Derks & Grumbkow, 2007). Likewise, due to the acceptance and use of emoji having increased significantly globally, within the context of textual communication, the emoji has been identified to be what facial expression, body language as well as intonation are to spoken interaction (Bai et al., 2019; Ares et al., 2018).

According to Filik and Thompson (2016), emoticons and emojis are symbols produced by creatively repurposing and combining existing characters to represent something new and as such signifying something absent in written language, or something more effectively "said" through the use of an emoticon or emoji symbol. The most frequently used emoticons, take the form of expressive faces, such as ":D" (a face with a big smile), ">:((" (a face with a frown and a sad mouth) and could also include symbols such as "<3" (a heart) (Filik & Thompson, 2016). In 2015, Oxford

Dictionaries declared the “face with tears of joy” emoji, to be the “word of the year” (Bai et al., 2019; Chang et al., 2016). Evidently, the more expressive the emoticon or emoji, the more indicative it is of the actual emotion or message which is to be interpreted.

Maiden research such as done by Bos et al. (2008), Gronning et al. (2014), Huang et al. (2008) and Riordan (2017) has suggested, that by utilising emoticons and emojis to communicate, a positive impact is evident in terms of communicating emotion to others. Emoticons and emojis express the warmth of face-to-face communications and deliver the electronic gestures while adding extensiveness to the message at hand. Emoticons and emojis may be utilised to convey facial expressions, bodily gestures as well as voice inflections over CMC mediums such as instant messaging (IM) (Bai et al., 2019; Bos et al., 2008; Gronning et al., 2014; Huang et al., 2008; Riordan, 2017). Likewise, according to Butterworth, Cantu, Fraser, Giuliano, and White (2018), within text-based communication, emojis could provide an emotional context. This emotional context could potentially strengthen the comprehension, impact, and interpretation of a message by emphasizing the envisioned neutrality, positivity or negativity.

According to Bos et al. (2008), Gronning et al. (2014) and Hecht et al. (2017), emoticons and emojis are frequently utilised and aid as symbols for expressing individuals’ feelings (in a similar way as non-verbal behaviour during face-to-face interactions). Emoticons and emojis serve numerous functions: Firstly, they may be utilised to soften one’s negative tone and regulate the interaction through a text message (just as a smile and frown does in daily life). Secondly, emoticons and emojis may be utilised to clarify or emphasise an individual’s feelings. There is, however, one important difference between the utilisation of emoticons and emojis and the concrete non-verbal displays of individuals. In comparison to non-verbal signals that occur during face-to-face interactions, emoticons and emojis may be thought of as more voluntary and deliberate (Garrison et al., 2011). Even though it is plausible that emoticons and emojis may become customary as well as more unconscious over time, to date it is still unclear when emoticons and emojis are utilised, how they are interpreted (and processed), as well as what their consequences are in diverse emotional contexts. As a result, the utilisation of emoticons and emojis does not inevitably specify when an individual experience an

emotion, as it only conveys the cognisant motives and intentions of the individuals utilising the emoticon (Author & Byron, 2008; Bai et al., 2019; Bos et al., 2008; Huang et al., 2008; Garrison et al., 2011).

Related to non-verbal cues used in face-to-face communication, emoticons and emojis also contribute to the accentuation of a tone or meaning throughout interpretation or message creation. Additionally, emoticons and emojis also provide support to communicate a more current mental state or mood of an individual and this contributes to the obtainment of social cues regarding an individual (Bos et al., 2008; Gronning et al., 2014; Riordan, 2017). Thus, similarly to non-verbal displays in face-to-face communication, emoticons and emojis aid in the function of clarifying textual messages. Due to the frequent use of emoticons and emojis in synchronous chat devices (such as IM and email) one can infer that individuals feel the necessity to express some of their emotions with short symbols rather than the use of text (Author & Byron, 2008; Bai et al., 2019; Bos et al., 2008; Hecht et al., 2017; Riordan, 2017).

As these symbols have become of great importance in everyday language and communication, not only do emoticons and emojis serve the various roles/functions as outlined above, but the use thereof has even gone as far as being used as evidence in several court cases (Griessel, 2018; Segrest, 2017; Weiss, 2015). Thus, this enhances the stance of more thoroughly exploring emoticons and emojis, particularly in that of organisational communications.

Following the general overview of emoticons and emojis and the various roles and functions which these symbols have, the sections which follow focus on emoticons and emojis within organisational communication, and in particular in that of CMC.

2.4.2 Emoticons and Emojis in Organisational Computer-Mediated Communication

Contributory to the fact that research illustrates that emoticons and emojis have become commonplace in CMC, it should be noted that this not only includes the use of CMC for interpersonal reasons such as talking to friends or family over WhatsApp. Emoticons and emojis have also found their way into the vocabulary and mediums used in organisational communication (Lohmann et al., 2017; Luor et al., 2010). This

is evident, in that organisations have come to realise the importance of having strong social and interpersonal relationships with customers and clients. As organisational communication has changed significantly in recent years by means of a greater emphasis on the use of CMC and social media, most organisations have adjusted accordingly and are making greater use of CMC and social media mediums within their businesses. In doing so, to accommodate for the lack of or absence of non-verbal cues in CMC, businesses have also come to realise that emoticons and emojis may serve as a just way to convey non-verbal cues to customers and clients to maintain and uphold strong and harmonious social and interpersonal relationships. Examples of where emoticons and emojis are used in a business context include employees who make use of emoticons and emojis when sending emails to one another, marketing campaigns on Twitter or Facebook as well as when communicating with one another over Skype or WhatsApp (Lohmann et al., 2017).

Apart from the various beneficial roles which emoticons and emojis serve as outlined in the *Roles and Functions of Emoticons and Emojis* section, several studies have however found that, even though emojis are labelled with descriptions according to the Unicode standard for indexing characters, in numerous instances, emoticons and emojis are interpreted differently between individuals, creating significant potential for miscommunication (Ai, Huang, Liu, Lu & Mei, 2017; Bai et al., 2019; Carassai et al., 2012; Hecht et al., 2017; Lohmann et al., 2017). The emoji descriptions/labels provided in the Unicode for standard indexing characters are highly brief (for example “😊: Grinning Face”). Thus, even if a description is informative, it may or may not be how individuals interpret the emoji in everyday use and evidently, research has shown that individuals do interpret emoticons and emojis differently (Ai et al., 2017; Bai et al., 2019; Carassai et al., 2012; Hecht et al., 2017; Lohmann et al., 2017).

Despite the ongoing concerns regarding whether emojis are interpreted differently, varying insights are also available in terms of whether emojis can be and should be used in organisational communication based on how ‘professional’ they are (Brooks, 2016; Caramela, 2018). Should the conclusion be drawn that individuals do vary in their interpretations of emojis, an overall conclusion might be drawn that these highly

popular faces, may not be suitable to use within organisational communication based on their lack of professionalism and universality.

Subsequently, the need exists to explore whether emoticons and emojis are however interpreted similarly or dissimilarity in order to draw a conclusion on whether or not it should be used in various organisational communication mediums. For the purpose of this study, great emphasis is placed on this finding, as varying interpretations of emoticons and emojis can have a significant impact (particularly negative) on the overall usage thereof within organisational CMC. Dissimilar interpretations could result in, for example, messages being misinterpreted and ultimately miscommunication occurring and should thereof be examined and explored.

2.4.3 Varying Emoticon and Emoji Interpretations

Within the Social Psychology discipline, a construal is defined as the manner in which an individual interprets communication. Hence, when a message or piece of information is communicated by a speaker, the addressee interprets or construes what they believe the speaker meant. However, in the case of the addressee's interpretation differing from that what the speaker intended, a misconstrued understanding occurs and evidently, miscommunication can occur (Chang et al., 2016).

Linking to a misconstrued understanding in communication, Chang et al. (2016) argues that the variance which has been observed in emoticon and emoji interpretation can potentially be detrimental to the successful use of emoticons and emojis in interpersonal and organisational communication. As strong relationships with customers and clients as well as good interpersonal relationships between peers and co-workers are some of the foundations on which an organisational success is built, successful communication between these individuals is of utmost importance (Lohmann et al., 2017). If inaccurate or differing interpretations of communication through the use of emoticons and emojis occur between these groups of individuals, it could be argued that this could result in not only relationships being negatively influenced but also teamwork, performance, and employee morale declining and an overall breakdown in communication (Hecht et al., 2017; Lohmann et al., 2017; McQuerrey, 2018). An example may include an employee sending a WhatsApp message to another colleague and inserting emojis. For the sender, the

emojis may convey humour, but the receiver may interpret them as being sarcastic. Evidently, the receiver might not want to respond, and the relationship may be affected.

Likewise, according to Jackson and van den Hooff (2012), when information/messages between employees/colleagues are regarded as ambiguous or ill-defined, tension could occur between individuals, potentially leading to incorrect instructions being carried out. Not only can the variance in the interpretation of emoticons and emojis influence numerous factors within an organisation as mentioned, but varying interpretations may potentially hold legal consequences for organisations and ultimately influence the profits and effectiveness of the organisation. This, for example, may occur as a result of the sender being held liable for infringements of another's human rights, sexual harassment or unfair discrimination cases being opened or individuals entering into legally binding agreements. Within South Africa, when the use of an emoticon/emoji constitutes misrepresentation which is fraudulent, wrongful or even negligent and causes harm, a civil action for delictual fault/damages could result (Griessel, 2018; Segrest, 2017; Weiss, 2015).

Overall, miscommunication is argued to have a significant negative impact on organisations and their effective functioning. Accordingly, factors that may lead to miscommunication occurring within an organisation should be effectively dealt with and resolved (Hecht et al., 2017; Jackson & van den Hooff, 2012; Lohmann et al., 2017). Due to there having been reported that more than 6 billion emojis were used daily during the year 2016 and more than 5 billion are being used daily on Facebook (Ares et al., 2018; Bai et al., 2019), accolades such as emojis being viewed as the world's fastest-growing form of communication are justified and consequently, it has become imperative to explore whether misinterpretation could result due to the use thereof. In conclusion, varying interpretations could influence the overall motivation and reasoning for making use of emoticons and emojis to compensate for the lack of or absence of non-verbal cues in CMC (Hecht et al., 2017; Lohmann et al., 2017).

In line with the current research pertaining to the differing interpretations of emoticons and emojis, two variables have been identified which could potentially contribute to and/or result in the misinterpretation of emoticons and emojis and

ultimately lead to miscommunication between individuals. These variables include differing communication platforms and demographics variables (age, gender, racial groups, industry of work, and hierarchy). For each of the two variables, a discussion will follow. Following the discussions, potential research hypotheses will be outlined pertaining to the interpretation of emojis and the impact on organisational communication.

2.4.3.1 Differing Communication Platforms

Found in the Unicode standard for indexing characters, to date, 3178 emojis are available. From these emojis, approximately 1300 include varying skin tone colour emojis (Chang et al., 2016; Emojipedia, 2019; Thornhill, 2019; Unicode, 2019).

In general, the Unicode Consortium provides a global text-encoding standard for emoji characters. For each emoji character, the Unicode standard provides a name and code point (or sequence of code points). However, it is unlikely that individuals recognize emoji characters by these identifiers. Rather, emojis are primarily recognised through their picture graphics. The graphics used for emoji characters, are however not standardised by the Unicode Consortium and the appearance of emojis is rendered by a font (Hecht et al., 2018; Thornhill, 2019). Emoji fonts, which determine how an emoji will appear to users, are largely specific to individual technological platforms and as such, the emoji appearances may vary extensively across platforms and each platform may thus be regarded as having their own unique set of emoji renderings. Hence, for example, the 😂 emoji, described as the “face with tears of joy” may have a different appearance when viewed on an Android device (for example Samsung) than when viewed on an Apple device (for example an iPhone) as illustrated in Table 3. Not only, are emojis vendor-specific, but vendors also update their emoji fonts, resulting in emojis not only being vendor-specific but vendor-version specific (Bai et al., 2019; Chang et al., 2016; Emojipedia, 2019; Hecht et al., 2017).

Table 3

Varying Emoji Renderings

Emoji name	iOS rendering	Android rendering
Face With Tears of Joy		
Smiling Face with Smiling Eyes		
Relieved Face		

(Bai et al., 2019, p. 5; Chang et al., 2016, p. 263)

The Emojipedia website – which serves as an encyclopedia for emoticons and emojis, currently tracks over 50 vendor-version emoji fonts. Thus, any given emoji character may have 50 different renderings (Hecht et al., 2018). Hence, what is sent and interpreted by one individual based on a certain communication platform, may be fairly different from what is viewed and interpreted by another individual on another communication platform (Chang et al., 2016; Emojipedia, 2019). As emojis convey their meaning through their graphic resemblance to physical objects, it became necessary to investigate whether emojis' graphical resemblance displayed on varying platforms are interpreted differently and consequently, result in dissimilar meanings on dissimilar platforms (Chang et al., 2016).

Consequently, during 2016, in a study done by Chang et al. (2016), research was conducted to determine whether emoji renderings or differences in mobile devices used, gave rise to varying interpretations of certain emojis rendered. For example, whether the 😊 emoji rendered on an Apple device (iPhone) was interpreted differently than the same emoji rendered on an Android device 😊 (Samsung) (Emojipedia, 2019). To solicit individuals' interpretations of a sample of the most popular emoji Unicode characters, an online survey was used. To determine and analyse how the relevant emoji renderings differed across platforms, for each of the five major mobile platforms namely Google, Microsoft, Apple, Samsung and LG, the relevant renderings for each of the emojis were included in the survey (Chang et al., 2016).

As communication can take place within a platform or between platforms, the survey and data was also divided into two sections namely within-platform and between-platforms. To analyse the variance in the interpretations, two measurements were used namely, sentiment and semantics. Sentiment refers to how positive/negative/neutral the emoji is, whereas semantics refers to what the emoji means/resembles (Chang et al., 2016).

Overall, Chang et al. (2016) found that significant potential for miscommunication was evident in the use of emojis over different mobile platforms. In particular, between-platform renderings indicated to have the highest potential for a misconstrued meaning and miscommunication. Thus, it was concluded in their study that when emojis were used in communication between different mobile devices, varying interpretations of the emojis occurred and could thus contribute to miscommunication between the relevant parties.

Linking to the findings of the study done by Chang et al. (2016), as the focus for the current research study revolves around identifying whether interpretation differences for emojis exist and the factors which may contribute to and or lead to these differences, text-based communication platforms will be furthered explored. Due to the focus being specifically on that of organisational communication, it is necessary to examine and investigate the impact which such organisational communication platforms may have on the interpretation of emojis as varying interpretations may impact communication and lead to misinterpretation and evidently, miscommunication.

According to Feigenbaum (2018), in order to get business done efficiently as well as cost-effectively, electronic media, a form of CMC, is of critical importance. Three highly efficient and contemporary electronic organisational methods of text-based communication include mobile devices, email as well as social networking media. In terms of the utilisation of mobile devices for organisational communication, even though the usage thereof may be less formal than that other organisational communication methods, an upsurge has been noted in the usage of text messaging and short emails via smartphones (Feigenbaum, 2018). Within South Africa, during the second quarter of 2018, it was found that certain Apple and Samsung devices were regarded as the most popular smartphones for 2018 (DeviceAtlas, 2018).

When communicating via such smartphones, the popular social media app known as WhatsApp (which is a freeware and cross-platform Voice over IP and messaging service) is regarded globally, as a highly effective communication method with more than 1 billion daily active users recorded during 2017 (WhatsApp, 2018).

Regarding the utilisation of emails, even though the usage thereof is viewed as a somewhat older form of electronic communication, email usage remains a staple form of modern-day organisational communication. Globally, one highly popular method of email communication includes the use of Microsoft Outlook which forms part of the Microsoft Office package. Overall, emails are regarded as a highly versatile communication method by providing employees the opportunity to perform many activities some of which include the sharing of documents and information, asking questions and obtaining answers as well as providing a platform from which to deliver marketing information to customers/clients (Feigenbaum, 2018).

When taking into consideration the use of social networking media within organisational communication, a constant increase in the capabilities and uses thereof is notable. With more than 3.196 billion global social media users in 2018 (Hainla, 2018), social media without a doubt presents a new business networking and marketing frontier. Through social media, organisations are provided with unique opportunities to, for example, communicate with customers, promote events as well as hire new candidates. Numerous social networking media are available, with some of the most popular including Facebook, YouTube, Twitter, and Instagram. With Twitter having gone from a social networking phenomenon to an established part of the digital landscape with more than 336 million users recorded during 2018 (Kallas, 2018), organisations are increasingly making use of Twitter as a means to engage with customers and clients, promote their companies as well as provide customer service (Hainla, 2018; Kallas, 2018).

For the purpose of obtaining information which is relevant and appropriate for the current organisational communication landscape, the following text-based communication platforms will be examined during this study: WhatsApp, Twitter as well as Microsoft Outlook.

Take note, for the purpose of this study, only emojis will be used and the grouping of emojis is done based on the groupings provided by Emojipedia. When referring to

WhatsApp, it is important to distinguish between iOS (Apple) and Android (Samsung, Google, LG, Sony Ericsson, HTC, Huawei and Motorola) operating systems, as the rendering of emojis differ when using these platforms. Thus, a distinction will be made by referring to Apple WhatsApp and Android WhatsApp.

In an attempt to explore the impact which, the communication platforms of WhatsApp, Twitter as well as Microsoft Outlook may have on the interpretation of emojis, the following hypothesis has been developed, outlining that individuals may differ in their interpretation of the same emoji used within as well as between platforms:

Hypothesis 1: For the proposed study, it is hypothesised that individuals will differ in their interpretation of the same emoji used across platforms.

2.4.3.2 Demographic Variables in Interpreting Emojis Across Platforms

Based on current published research, a void seems to exist in terms of identifying the potential impact which various demographic variables may have on the interpretation of emojis within organisational communication (Chang et al., 2016). In an attempt to overcome this void, various demographic variables hypothesised to potentially contribute to and or result in varying interpretations of emojis and relevant to organisational communication will be explored and examined. The variables include age, gender, nationality, industry of work and hierarchy level.

2.4.3.2.1 Age

According to research, age can be broadly categorised into five generations namely Traditionalists, Baby Boomers, Generation Xers, potentially one of the most well-known generations, Millennials, as well as Generation Z/Post-Millennials. In terms of providing concrete evidence regarding each of these generations, literature is regarded as inefficient (Krohn, 2004). However, for each of the five generations, a discussion will follow regarding relevant research found. Note, however, the dates provided are approximate as overlapping occurs and various definitions are available for when the generations begin and end.

Traditionalists are defined as individuals born before 1946. These individuals may, according to Krohn (2004) and Myers and Sadaghiani (2010), be regarded as ones who display a highly strict set of values. This characteristic is viewed as likely being

moulded by their parents who lived through the Great Depression (Myers & Sadaghiani, 2010). Within the workplace, Traditionalists are often found, occupying many of the senior and executive positions due to their strict adherence to values and high commitment to morals. Krohn (2004) suggests that emails to Traditionalists should not include the use of emoticons or emojis. The reason being that those who form part of this generation are not as up-to-date with technology and social media as younger generations and may, as a result, have trouble with interpretation and use thereof.

Baby Boomers refer to individuals potentially being born from 1946 – 1964. According to Krohn (2004) and Myers and Sadaghiani (2010), a large number of Baby Boomers have been evident over the years. Based on this large number of Baby Boomers, it has been hypothesised that this generation may have been exposed to intense competition throughout most of their lives. Likewise, it is said that within the working environment, numerous older Baby Boomers are experiencing high career pressures compared to younger workers, especially relating to the electronic communication area. Similarly, to Traditionalists, as these individuals are not as up to date with technology and social media communication and mediums and mostly remember the work environment before the use of technology, it has been suggested that emails, which comprise of the use of emoticons or emojis, should not be sent to Baby Boomers. This conclusion was drawn based on the assumption that individuals' part of this generation may have difficulty interpreting, understanding and using emoticons or emojis (Krohn, 2004; Myers & Sadaghiani, 2010).

Generation Xers refer to individuals possibly born between the years 1965 and 1979. It has been hypothesised that those part of this generation has throughout their lives, been influenced by the cumulative rate of change that took place. In terms of the use of technology, Generation X'ers have grown up within the computer-technology era and therefore, they are regarded as generally being more comfortable with the continuing and hasty changes that take place within the technology and computerised environment (Myers & Sadaghiani, 2010). Regarding the utilisation of emoticons and emojis in workplace emails, Krohn (2004) has suggested, that some of the more common emoticons may be utilised. As these individuals are more up-to-

date with technology and the use of computers, they may have a more sufficient understanding regarding the interpretation/meaning and use thereof.

Following Generation X, Millennials (Generation Y) refer to individuals born between 1980 and 1994 (Myers & Sadaghiani, 2010). Those parts of this generation, have been hypothesised to consist of the ability to learn quickly and easily as well as to multi-task. It has also been said that these individuals easily adapt to change within their personal and work environment, one such change including the emergence of technology and electronic mediums. Literature indicates that these individuals are more comfortable with new and upcoming interactive and networked media than that of older generations (Krohn, 2004). As most of these individuals were raised in households comprising of computers and potentially even mobile phones, as well as the fact that they grew up being more informed and accepted regarding the use of technology and digital media, it has been suggested that when Millennials are involved, workplace emails may contain a generous number of emoticons and or emojis (Krohn, 2004). Consequently, the comfort of Millennials with new media technologies suggests that they may potentially bring beneficial characteristics related to the use of communication and information technologies, such as IM to the modern workplace (Myers).

Finally, Generation Z refers to individuals born between 1995 and 2010 (Patel, 2017). Over the years, most of the attention has been focused on the Millennial generation. When compared to the Millennials, Generation Z and Millennials do have a few commonalities, but there are also various dissimilarities. Some of these include the fact that Generation Z is highly motivated and driven by security and money due to them having been part of the Great Recession whereas Millennials are said to be more motivated by a purpose. Individuals part of Generation Z are also said to be more competitive in nature whereas Millennials are regarded as being more teamwork orientated and collaborative. Even more so than Millennials, individuals' part of Generation Z are true digital natives. Whereas some Millennials still grew up with landlines and dial-up internet, Generation Z individuals grew up in a world enriched with Wi-fi and smartphones. Other dissimilarities between Generation Z and Millennials include the fact that Generation Z seeks independence, they multitask more than Millennials, they are said to be more entrepreneurial, they seek communication face-to-face, and they want to be catered for (Patel, 2017).

Evidently, research suggests that individuals who form part of the Traditionalist and Baby Boomer generations, may not be as up to date with and accepting regarding the use of emoticons and emojis as the Generation X'ers, Millennials, and Generation Z'ers. As Traditionalists and Baby Boomers are not as comfortable and informed regarding emoticons and emojis, it may be hypothesised that not only do these generations differ in their use, but also their interpretation of emoticons and emojis (Myers & Sadaghiani, 2010).

In current published research, a gap, however, seems to exist regarding whether different age groups of working individuals comprise over similar or dissimilar interpretations of emojis. As research regarding the five generations has become relatively outdated in terms of the constant changes in technology as well as prone to be viewed as vague and unsubstantiated arguments, alternative age groupings were developed which are hypothesised to provide a more accurate explanation of the interpretations of emojis between different age groups (Hutchins, 2015). Subsequently, the following research hypothesis was developed, stating that individuals' part of different age groups will differ in their interpretations of the same emojis used:

Hypothesis 2: It is hypothesised that individuals grouped into different age groups, will differ in their interpretation of the same emojis used.

2.4.3.2.2 Gender

When investigating gender differences, it is firstly necessary to distinguish between the two related terms namely gender and sex. Sex, according to Newman (2018) and Staughton (2017), refers to the biological differences between males and females such as an individual's genetic differences. Gender, however, is regarded to be more difficult to define but can refer to one's role in society as either male or female (known as one's gender role), or an individual's gender identity which refers to an individual's concept and/or vision of themselves. Consequently, for the purpose of this study, the term gender will be used to refer to males and females.

According to Ollilainen (2000), in numerous organisational behaviour studies, it has been proposed that gender forms a central element in the analysis of emotions within the workplace. Emotions are argued to play a significant role in maintaining

equality between both males and females in working environments (Bennie & Huang, 2010; Brescoll, 2016; Ollilainen, 2000).

Contributory, it has also been argued that emotions in the workplace constitute a gendering process. In brief, a gendering process can be defined as an imbalance of gender power which leads to dominance between gender groups (Ollilainen, 2000). Dominance most often occurs through males but may, in some instances, also occur through females. Overall, a gendering process occurs when the emotional displays of males and females are methodically categorised in terms of gender and are used to describe as well as substantiate, male dominance within organisations. An example of a gendering process in terms of males includes when men are viewed as the “stronger” and more reliable partner and thus most often achieve higher positions (for example chief executive officer positions) than that of females. On the other hand, an example of a gendering process with regards to females includes when the emotional expressions of females are linked with disorderliness and unreasonableness, their organisational offerings become devalued and ultimately their involvement and contribution become marginalised (Heilman, 2012; Ollilainen, 2000).

Related to the concept of a gendering process, within Western cultures, even though there exists insufficient empirical evidence regarding this belief, females are believed to be more emotional than that of males (Bennie & Huang, 2010; Mirabile et al., 2016). Likewise, according to Butterworth et al. (2018) females, based on expectations and stereotypes about gender communication, are expected to be more understanding, relationship-orientated as well as supportive. However, in an attempt to conform to socially accepted norms with the workplace, both males and females have adapted in order to appear non-emotional by modifying their emotional displays (Brescoll, 2016; Heilman, 2012; Ollilainen, 2000).

Regardless of the fact that over the years, males and females have adapted in order to appear non-emotional, emotions continue to play a significant role in the workplace behaviour of both males and females (Brescoll, 2016; Heilman, 2012; Ollilainen, 2000). As the use of emoticons and emojis in an attempt to convey emotions through the use of CMC have not only become common practise in interpersonal communication but also in organisational communication, the need

develops to also investigate the impact which gender may have on the utilisation and ultimately the interpretation thereof.

According to studies done by Wolf (2000) and Huang et al. (2008), it was hypothesised that both males and females were probable to make use of emoticons on an equal basis. Accordingly, it was found that both genders did display an amplified frequency in the utilisation of emoticons, but Wolf demonstrated and reached the conclusion that females do use emoticons in other ways than males, but that they do not utilise them more (Bai et al., 2019). Contradictory, Butterworth et al. (2018) did, however, report that women use twice as many emojis compared to that of males. Similarly, challenging the conclusions drawn by Wolf, in a study done by Bos et al. (2008), females are said to more frequently display non-verbal behaviour, particularly that of smiling. Evidently, this more frequent display of non-verbal behaviour could potentially be argued to result in more regular use of emoticons and emojis by females.

Over the years, it has been hypothesised that females in general, utilise emoticons primarily to express humour, in contrast to men who largely make use of emoticons to express sarcasm and teasing (Floyd, Fullwood & Orchard, 2013; Wolf, 2000). Based on these hypothesis and assumptions, a conclusion has been drawn in which females are believed to utilise more frequent and higher levels of positive emoticons in comparison to that of males (Brody, Kivran-Swaine & Naaman, 2013; Holtgraves, 2011). Accordingly, not only are there differences in the utilisation of emoticons between males and females, but it may also be hypothesised that the interpretations of emojis may differ between that of males and females. This hypothesis is drawn based on the fact that when males and females utilise emoticons for different reasons, the interpretations of the emoticons and emojis may also differ. For example, when males utilise the 😏 emoji, the interpretation thereof may differ between males and females as males may interpret it more sarcastically or in a teasing manner as opposed to females who may interpret it in a more humorous manner (Bai et al., 2019; Floyd et al., 2013; Wolf, 2000).

Consequently, to investigate whether males and females interpret emojis used similarly or differently, the following research hypothesis has been developed:

Hypothesis 3: It is hypothesised that gender differences will give way to varying interpretations of the same emojis used.

2.4.3.2.3 Racial Groups

In 2004, Koda (2004) conducted an evaluation experiment relating to emotionally expressive characters, namely emoticons and emojis and intercultural communication between Chinese and Japanese participants. In the study, participants had to indicate how they interpreted and understood certain emoticons and emojis. To overcome language barriers during the experiment, a multilingual BBS referred to as TransBBS which incorporates translation services among Chinese, Japanese and English-speaking individuals was used. Overall, the results of the study indicated that some of the emoticons and emojis used in the experiment were interpreted entirely different as well as utilised for dissimilar purposes between Chinese and Japanese participants (Koda, 2004). Likewise, Bai et al. (2019) also stated that the use of emojis is significantly influenced by numerous factors, some of which include living environment, cultural background as well as the language environment of an individual. Contributory, Racoma (2018), also emphasised and highlighted the fact that not all emojis are universally accepted and may thus widely differ in interpretation and use between various cultures. Examples of emojis not universally accepted include the waving hand emoji (👋), the winking face with tongue (😜) as well as the thumbs-up emoji (👍).

Seeing as emoticons and particularly emojis, are nowadays not only widely used in interpersonal communication, but usage within organisational communication is also increasing, the following question arises: Should emoticons and emojis, which is used not only in South African organisational communication, but universally, and may be understood and interpreted differently amongst cultures, still be used within organisational communication?

To investigate this topic, it is firstly necessary to understand what is meant by the term culture. According to Idang (2015), culture is defined as follows: "The totality of the pattern of behaviour of a particular group of people" (p. 99). It includes everything that makes them distinct from any other group of people, for instance, their greeting habits, dressing, social norms and taboos, food, songs and dance patterns, rites of passages from birth through marriage to death, traditional occupations, religions as

well as philosophical beliefs.” Hence, culture is regarded as the non-biological way of life which consists of the general beliefs and customs of a certain group of people (Eilers, 2012; Idang, 2015).

As the measurement of culture is relatively difficult due to a lack of concrete measurement, for the purpose of this study, racial groups will be investigated as a means to determine whether differences in interpretation occur between and across individuals’ part of dissimilar racial groups.

Broadly, race is defined as “a group of people identified as distinct from other groups because of supposed physical or genetic traits shared by the group” (The Free Dictionary, 2019). According to the Pariona (2019), four primary racial groups exist in South Africa. These include Black, Coloured, White and Indian/Asian.

Table 4 provides a description in terms of classification of each of the racial groups:

Table 4

Primary Racial Groups and Descriptions

Primary racial group	Description
Black	“The group itself is made up of many different indigenous African groups.”
Coloured	“The coloured ethnic group consists of people of multi-ethnic descents. Some common ethnicities include black, white, Chinese, and Malay.”
White	“This ethnic group has Dutch, French, German, and English ancestors.”
Indian/Asian	This ethnic group includes Asian ethnic groups such as South Korean, Japanese and Taiwanese as well as Indian descendants.

(Pariona, 2019, para. 2-5)

With South Africa being known as the “Rainbow Nation” based on the country’s cultural and ethnic diversity, taking the racial background of the country into mind becomes of great importance when drawing conclusions regarding the interpretations of emoticons and emojis (Koda, 2014; SAHO, 2017). As the focus of this study not only includes organisations operating in South Africa but rather global

organisations, the need develops to thoroughly investigate whether emojis used as part of organisational communication are understood and interpreted similarly between and across varying racial groups.

Contributory, within the limitations section of their study, Chang et al. (2016), also highlighted that cultural differences, as a demographic variable, might be an interesting avenue for future research. Even though Ares et al. (2018) reported that emojis are understood similarly by individuals in varying cultures and claimed emojis to be “the world’s first truly universal form of communication”, other research studies however, indicate race to impact interpretation and consequently, the need continues to explore the impact of race on the interpretation of emojis. Evidently, the following research hypothesis was developed, outlining that individuals’ part of varying racial groups, may differ in their interpretations of the same emojis used:

Hypothesis 4: It is hypothesised that varying racial groups will differ in their interpretation of the same emojis used.

2.4.3.2.4 Industry of Work

Around the world, various industries of work are available, some of which include the mining industry, the manufacturing industry, the financial industry as well as the health care industry (Desta, 2014). In order for each of the respective industries to be effective, relevant and appropriate methods of communication must be used. As the use of emoticons and emojis have also in recent years become part of organisational communication (Lohmann et al., 2017; Luor et al., 2010), the need develops to investigate the impact thereof on various industries of work.

In recent years, depending on the type of industry, for example, the media and retail industry, an escalation in the popularity and use of emoticons and emojis have been noted. According to Urban (2016), brands are constantly working to ensure an emotional connection emerges with their customers. In order to obtain this emotional connection, various brands such as Pepsi and Dominos have started to make use of emojis, particularly in that of their media campaigns and marketing (Hutchinson, 2015; Urban, 2016).

Overall, there does, however, exist great controversy regarding whether emoticons and emojis are applicable for use within organisational communication based on the

fact that it may not be viewed as professional and might be misinterpreted (Brooke, 2016; Hutchinson, 2015; Urban, 2016). Some industries are however regarded as being more applicable and appropriate for the use of emoticons and emojis, including for example the retail industry (Brooke, 2016; Hutchinson, 2015).

Not only does great controversy exist regarding whether emoticons and emojis should be used in organisational communication within the different industries of work (Brooke, 2016; Hutchinson, 2015; Urban, 2016), but it may also be hypothesised that individuals in different industries vary in their interpretation of emojis. For example, an individual who works in the retail industry may be more cognisant and up to date with emojis and their interpretation of a certain emoji may differ from that of an individual part of the mining industry. Ultimately this may be hypothesised to influence the reasoning regarding the use of emojis as differing interpretations between industry users might lead to miscommunication (Hecht et al., 2017; Lohmann et al., 2017). Subsequently, current published research gave way to the development of the following research hypothesis arguing that individuals' part of differing industries of work will differ in their interpretation of the same emojis used:

Hypothesis 5: It is hypothesised that for varying industries, the interpretation of the same emojis used will differ.

2.4.3.2.5 Hierarchy Level

According to Holtgraves (2011), research suggests that emoticons appear to be portrayed as a clear marker of relationship closeness between individuals. This indicates that depending on one's degree of closeness with another individual and the nature of one's relationship (for example friends, colleagues, manager, and subordinate), the frequency in the use of emoticons will vary. Contributory, based on the study done by Holtgraves (2011), the conclusion was drawn that the use of emoticons occurs more frequently when communicating with significant others (12.6%), compared to friends (6.5%) and or other recipients (3.8%).

In addition, these findings may also be argued and hypothesised be translatable to the business environment by influencing and impacting the relationship between an individual's position in a company and the use of emoticons. Depending on the degree of closeness and the nature of the relationship between individuals in

different positions in a company, the frequency in the use of emoticons may vary. For example, an individual will most probably be more likely to use emoticons when communicating with co-workers who are their friends and are on the same or even lower organisational level, than with their manager who is higher up in the organisational hierarchy (Holtgraves, 2011).

Likewise, not only may it be argued and hypothesised that one's degree of closeness with another individual and the nature of one's relationship impacts the use of emoticons within the business environment (Holtgraves, 2011), but it may also be argued that depending on one's hierarchy level in a company, one's interpretations of emoticons and emojis may differ. For example, when a subordinate includes the 😊 emoji in an email to their manager, the subordinate may intend for the emoji to represent a smiley, but the manager may interpret it as a blushing face and the message may be misinterpreted. To date, a void exists in terms of empirical research relating to differences in the interpretation of emojis depending on one's hierarchical level in a company.

Consequently, the following research hypothesis was developed, arguing that individuals from varying hierarchy levels will differ in their interpretation of the same emojis used. Subsequently, *for this study, to test the following hypothesis, professional/operational/non-management level employees include front line employees, responsible for performing day to day activities and managing the units of operation, professionals, and non-management. Middle-level management refers to managerial professionals and includes senior managers, managers, and assistant managers. Top-level management is involved in the planning of the business and overseeing the performance. This includes individuals such as vice presidents, presidents, general managers, managing directors and CEOs* (Hanly, 2018).

Hypothesis 6: It is hypothesised that for varying hierarchy levels, the interpretations of the same emojis used will differ.

2.5 Conceptual Theoretical Framework

From the above literature, Figure 2 illustrates the conceptual theoretical framework which has been developed outlining the potential relationships between the aforementioned discussed constructs and variables.

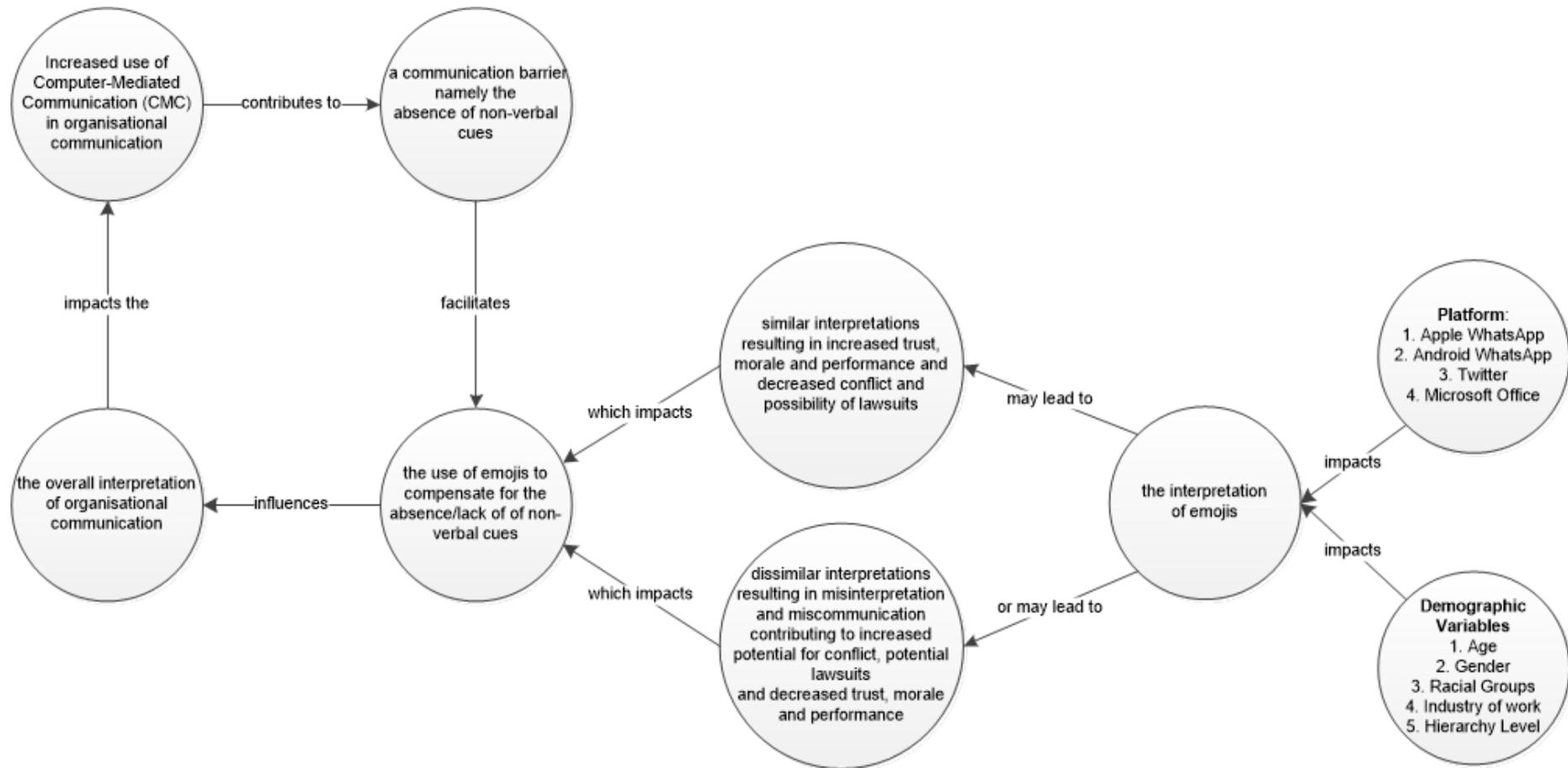


Figure 2. Conceptual Theoretical Framework

2.5.1 Empirical Model

For the purpose of this study, Figure 3 illustrates the empirical model outlining the variables which will be studied in order to examine the influence of emoji interpretations on organisational text-based CMC based on the potential for misinterpretation and miscommunication.

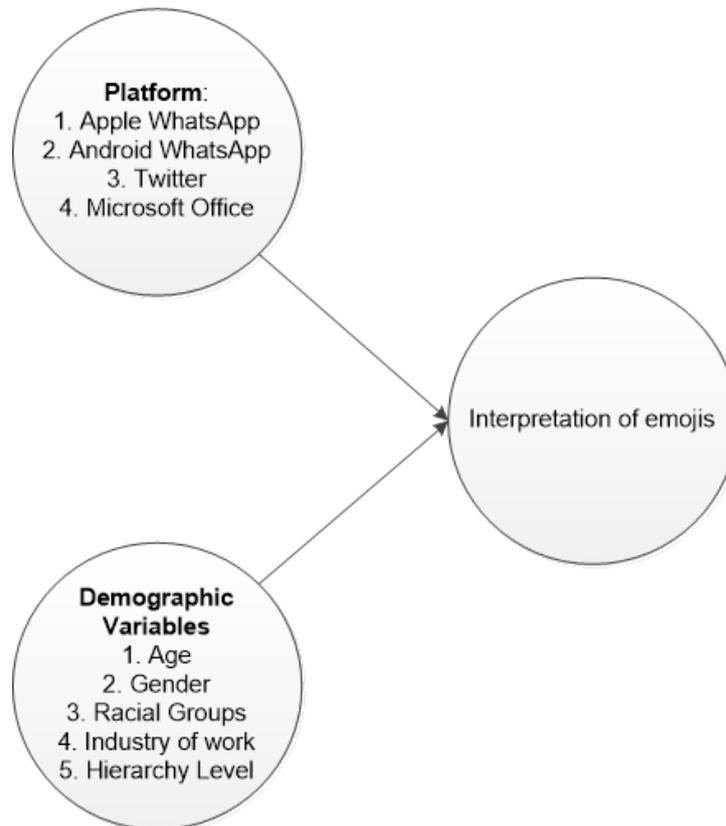


Figure 3. Empirical Model for the Interpretation of Emojis

2.5.1.1 Value of Research

Seeing as communication, even though it has been widely studied over the years, is still regarded as a pivotal component to the success and effectiveness of an organisation (Hess & Kramer, 2002; Myers & Sadaghiani, 2010), identifying variables which may influence effective communication, particularly in that of organisational structures is of critical importance. By establishing whether emojis, which are regarded as the communication language of the future and more often also used in organisational settings, are interpreted differently across various platforms and demographic variables, can be of significant worth to organisations. Such information

could aid organisations in identifying potential communication barriers that could influence sound organisational communication.

With reference to the Industrial Psychology field, in particular, this study could provide valuable insight and knowledge regarding variables that may impact effective organisational CMC. Such insight and knowledge could contribute to Industrial Psychologists more effectively assisting organisations in implementing practises and strategies to overcome CMC barriers faced due to emoji interpretation differences.

2.6 Chapter Two Summary

The above review of literature began with an investigation into the broad concept of communication. The communication process, as well as the various types of communication, was examined after which, a focus was placed specifically on that of organisational communication. Following a discussion on organisational communication, 21st-century organisational communication within geographically dispersed organisations was studied. Herein, a specific focus was placed on the topic of Computer-Mediated Communication (CMC) and the potential negative aspect thereof which relates to the absence of non-verbal cues.

Following the examination of CMC, the link between communication and emotion was explored whereby affect and emotion was defined and discussed. Whilst linking affect and emotion to organisational settings, the concepts of Emotional Intelligence (EI), Emotional Labour (EL), and Emotional Contagion (EC), as well as the expression of emotion was examined. More closely, the conveying of emotions by means of CMC was studied. Hereafter, the focus was placed on the use of emoticons and emojis as a means to convey emotions, particularly in that of text-based CMC. The roles and functions of emoticons and emojis were then examined, after which the primary focus of this study was placed on research relating to emojis potentially being interpreted dissimilarly across platforms and numerous demographic variables including age, gender, race, industry of work and hierarchy levels. In conclusion, hypotheses were examined, relating to the variables studied. A conceptual theoretical figure, as well as an empirical model, developed from the literature, was reviewed and a final conclusion was drawn outlining the potential value contribution of the study at hand.

The ensuing chapter examines the research methodology used for the study. More specifically, the chapter will start off with a review of the identified research problem, objectives and hypotheses outlined in Chapter Two. Hereafter, the research design and methodology will be discussed, including topics such as sample design and research participants, sampling and data collection procedures. Missing values will also be discussed, after which the relevant measuring instruments and data analysis procedures used will be examined and outlined.

CHAPTER 3

RESEARCH METHODOLOGY

The ensuing chapter outlines the research methodology used for the research study.

3.1 Introduction

The study was guided by the aim of exploring the influence of emoji interpretations on organisational text-based CMC. Based on the research problem, to provide an answer, research objectives and hypotheses were developed in order to guide the study. To systematically provide answers to the research objectives posed, a suitable research design was required.

Building on the insights gained through the literature review in chapter two, in this chapter, a discussion will follow outlining the research methodology applied in this study. In essence, chapter three, therefore, contains a review of the research initiating question, research objectives and hypotheses posited. The applied research design is outlined and a detailed description of the sample design and research participants, sampling and sample size, data collection procedures, measuring instruments for each of the variables as well as the data analysis procedures utilised is provided.

3.2 Review of Research Problem, Objectives and Hypotheses

Based on the literature review provided in Chapter Two, the following constitutes the research initiating question (RIQ):

What is the influence of emoji interpretations on organisational text-based Computer-Mediated Communication (CMC)?

Following the RIQ, Table 5 outlines the six research objectives and their accompanying research hypotheses which have been developed in an attempt to address the research question posited.

Table 5

Research Objectives and Hypotheses

Research objective	Research hypothesis
Objective 1:	Hypothesis 1:
To determine whether across platform differences in the interpretation of emojis occur for Microsoft Office, Apple WhatsApp, Twitter, and Android WhatsApp.	It is hypothesised that individuals will not differ in their interpretation of the same emoji used across platforms.
Objective 2:	Hypothesis 2:
To determine whether age group differences in the interpretation of emojis occur.	It is hypothesised that individuals grouped into different age groups, will not differ in their interpretation of the same emojis used.
Objective 3:	Hypothesis 3:
To determine whether gender differences in the interpretation of emojis occur for males and females.	It is hypothesised that gender differences will not give way to varying interpretations of the same emojis used.
Objective 4:	Hypothesis 4:
To determine whether racial group differences in the interpretation of emojis occur.	It is hypothesised that varying racial groups will not differ in their interpretation of the same emojis used.
Objective 5:	Hypothesis 5:
To determine whether industry differences in the interpretation of emojis occur.	It is hypothesised that varying industries will not differ in the interpretation of the same emojis used.
Objective 6:	Hypothesis 6:
To determine whether hierarchy level differences in the interpretation of emojis occur.	It is hypothesised that varying hierarchy levels will not differ in the interpretations of the same emojis used.

3.3 Research Design

When choosing a research design, the choice is governed by the identified research problem and the research objectives of a given study. According to Kerlinger and

Lee (2000) and Chahal, Chahal, Chahal & Chowdhary (2013), a research design can broadly be defined as the structure, plan, and strategy of investigations considered to obtain answers to research questions and for the overarching purpose of control over variance. Likewise, Babbie and Mouton (2001, p. 74), defines a research design as: “The plan or structured framework of how the researcher intends to conduct the research process in order to solve the research problem”. Ultimately, the research design can be defined as the “master plan” or blueprint with regards to how the researcher intends to conduct the research (Babin, Carr, Griffin & Zikmund, 2013; Chahal). Overall, the purpose of a chosen research design includes ensuring that accurate and applicable empirical evidence is obtained which can be interpreted to determine whether the research hypotheses identified, can confidently be accepted or rejected (Babbie & Mouton, 2001; Kerlinger & Lee, 2000).

For this study, an exploratory research design was used. Exploratory research merely intends to explore the research questions posed. This type of design is generally used in situations where a research question/topic has not been explored in-depth, and high levels of ignorance and/or uncertainty surrounding the subject/topic remain (Research Methodology, 2018). As the investigation of the interpretation of emojis is a relatively new area of research and a wide variety of empirical research has not been done relating to this topic, specifically within the South Africa workforce, an exploratory research design was deemed appropriate.

With reference to the type of research used, two main types of research are available, namely secondary and primary research. According to Babin et al. (2013, p. 160), secondary research can be defined as “Data that have previously been collected, for some purpose other than the one at hand.” Primary research, however, is defined as data that is collected and accumulated for the sole purpose of the study at hand. Primary research consists of a large number of activities that may be utilised to obtain data, including surveys and personal interviews. According to Babin et al. (2013), there are two types of primary research generally known as, qualitative and quantitative research. Qualitative research can broadly be defined as a type of research that deals with objectives through the process of utilising techniques that permit the researcher to provide elaborate interpretations of phenomena – without depending on numerical measurement. The focus of qualitative research is on discovering new insights and true inner meanings (Babin & Zikmund, 2010). In

contrast, quantitative research can broadly be defined as research which deals with objectives through the process of empirical assessments, which comprise of numerical analysis and measurement (Babin et al., 2013).

In conclusion, for this study qualitative and quantitative exploratory research was obtained. By using survey research, primary data will be obtained. Through the collection of primary data, the researcher may potentially be more induced to make confident and sound arguments and conclusions based on numerical measurement and analysis (Babin et al., 2013). As this study is still in the development phases, providing concrete evidence for hypotheses drawn will contribute to the validity of the study as well as its popularity.

3.4 Research Methodology and Data Collection

The most suitable research methodology to answer the RIQ previously outlined is derived based on the research hypotheses outlined in Chapter Two. In terms of the research methodology used for the study, according to Babbie (1990), survey research should be used for descriptive, explanatory as well as exploratory purposes. The reason being, survey research allows for generalisation from a sample to a broader population from which inferences can be made regarding various attitudes, characteristics, and behaviours of the respective population. Broadly, survey research entails the administration of surveys to a sample of respondents who form part of a larger population for the purpose of discovering the relative distribution, incidence, and interrelations of various psychological and sociological variables (Kerlinger & Lee, 2000). Evidently, survey research was used and further elaboration will be provided in section 3.4.3.

3.4.1 Sample Design and Research Participants

According to Babin et al. (2013), a sample is defined as: "A subset, or some part, of a larger population" and sampling as: "Any procedure which draws conclusions based on measurements of a portion of the population" (p. 66, 385). In general, the goal of sampling includes obtaining a representative indication of a sample's attitudes and opinions, which is reflective of the total population and concerns the phenomenon being studied (Kerlinger & Lee, 2000; Mouton, 2001; Newman, 1997). According to Burns and Grove (2007), the population is defined as the complete set

of individuals (or elements) who meet the sampling criteria. The population is sometimes also referred to as the target population. For this study, the target population is defined in the ensuing section.

3.4.1.1 Research Participants and Sample Frame

As the main objective for this study included exploring the influence of emoji interpretations on organisational text-based CMC, the research participants (target population) included a random sample employed individuals from diverse backgrounds (age, gender, racial group etc.) employed at a wide variety of organisations, some of whom are geographically dispersed and encourage flexible and/or remote working. The reason for including geographically dispersed organisations relates to the assumption that employees employed at such organisations are viewed to more readily rely on CMC for effective communication and may, therefore, have more insight into the use and interpretation of emojis.

As such, in terms of the sampling frame, as defined by Babin et al. (2013) and Babin & Zikmund (2010), a sampling frame includes a list of elements/individuals which may be utilised to draw a sample from. For this study, the sampling frame was not entirely set, as the majority of participants included employed individuals who were asked to participate on a random basis via social media, personal email distributions and acquaintances that assisted with the distribution of the survey.

A number of organisations (primarily geographically dispersed organisations) were, however, also approached through their respective Human Resource (HR) departments and asked to participate. The list of geographically dispersed organisations was based on the convenience and accessibility to the researcher. Once approached, the HR departments were informed of the objectives of the study and asked for their participation. In an attempt to overcome the obstacle of employees deleting emails from unknown individuals and also providing the respective collaborating organisations with reassurance and data privacy to comply with the General Data Protection Regulations (GDPR) and the Protection of Personal Information (POPI) Act, the HR departments were asked to send out the survey on behalf of the researcher to their respective employees. Hence, for these organisations, the sampling frame was determined by the respective HR departments. One organisation volunteered to partake and as stated, for this

organisation, the HR department governed who partook in the study by distributing the survey on behalf of the researcher by means of an email invitation.

3.4.2 Sampling and Sample Size

According to Babbie and Mouton (2001), the primary purpose of sampling is: “To select a set of elements from a population in such a way that descriptions of those elements (statistics) accurately portray the parameters of the total population from which the elements (FSU’s) are selected” (p. 175).

Due to the nature and context of this study, three sampling techniques were used. The first included the non-probability sampling method known as *convenience sampling*. *Convenience sampling* can be described as the sampling procedure which includes obtaining elements (units) or individuals that are most conveniently available (Babin et al., 2013). This sampling method was used due to the fact that the organisations that were approached to participate were selected based on convenience and accessibility to the researcher and therefor also the respondents from each of the respective companies. As the field of CMC, and in particular the use of emojis as a means of expressing emotion, is a relatively new area of interest in social psychology research, *convenience sampling* was deemed sufficient in order to obtain large amounts of data with regards to the variables of interest. Social media, including LinkedIn, Twitter, Instagram, and Facebook were also used as a form of *convenience sampling* in order to obtain a relevant sample size. Contributory, the researcher and research supervisor also made use of personal distribution, also a form of *convenience sampling*, to distribute the survey to family, friends, and colleagues for participation, completion and distribution.

The second sample technique used, included *Snowball sampling*. Also a non-probability sampling method, *snowball sampling* refers to a sampling method where based on referrals from initial subjects/participants, additional subjects/participants are obtained. Hence, participants help recruit additional participants by distributing the research (survey) (Babin et al., 2013). This sampling method was used due to the sample consisting of employed individuals and employed participants could easily distribute the survey to employed family, friends and colleagues. Also, due to social media being used extensively in the distribution of the survey, participants' distribution was also simplified as they could easily 'share' and forward the survey.

The third sampling technique used specifically for the purpose of measuring and testing the platform variable included the probability sampling method, known as *stratified sampling*. *Stratified sampling* involves the method in which the population is divided into strata, such as male and female, from which simple random subsamples which are more or less equal are drawn (Babbie & Mouton, 2001; Babin et al., 2013). Stratified sampling was used based on the argument to keep the survey as concise and powerful as possible to ensure the participation of respondents and thereby limiting the number of emojis illustrated per platform to four emojis.

3.4.2.1 Sample Size

According to Struwig and Stead (2001), for sample size, results obtained from the statistical analysis will have more statistical power if a bigger sample size is used. Yet, the bigger the sampling size, the higher the administrative burden as well as the cost for the researcher. Generally, samples of two hundred are considered to provide an accurate representation of the population.

Due to the fact that the study was an exploratory study and given the relatively new area of research, a sample size of approximately four-hundred respondents ($n=400$) was regarded as appropriate and sufficient (Barlett, Higgins & Kotrlik, 2001; Janse van Vuuren, 2016; Struwig & Stead, 2001). The reason being, the fact that a larger sample will provide more data and potentially assist the researcher in making sound contributions through data analysis (Reid & Reid, 2005). Another reason to consider was the fact that individuals may not be as willing to partake in the research study due to various reasons, one of which includes time constraints. For studies that impose time constraints, it is deemed best to have a relatively large sample (Reid & Reid, 2005; Struwig & Stead, 2001). Consequently, for this study, a relatively large sample was regarded as satisfactory and an outline will be provided on the specifics of the sample size in section 3.4.3.

3.4.3 Data Collection Procedure – Survey Research

For this study, to obtain an answer to the various research questions and research hypotheses posed, a survey research methodology was used which included the distribution of a self-developed electronic survey. Through survey research, primary

data was collected by means of a standardised survey which allows for numerical manipulation (Babbie & Mouton, 2001).

Surveys can take numerous forms, some of which include face-to-face, email, telephone as well as self-administrated surveys. For the purpose of this study, a self-administrated survey (a survey in which respondents independently complete the survey) was used. As technology has progressed, the newest innovations in self-administered surveys include the use of computers. Respondents receive the computerised self-administered survey/questionnaire (CSAQ) via email and accordingly runs the software which asks the outlined questions and accepts (saves) the respondent's answers. Following the completion of the CSAQ, the respondent returns the data file to the researcher (Babbie & Mouton, 2001; Babin et al., 2013).

Hence, an electronic approach was followed whereby the research survey was distributed by means of an anonymous survey link which was published on various social media sites including Facebook, Twitter, LinkedIn and Instagram on a daily basis. Employed individuals were asked to participate and to also 'share' and forward the link to employed family, friends and co-workers. The survey was also distributed by the researcher and research supervisor via personal emails sent to acquaintances. Finally, in terms of the organisation who volunteered to participate, an email template was provided to the respective HR Department outlining the objectives of the study, the incentive to participate as well as the link to the online survey posted on the Qualtrics Web Server.

The portal on which the survey was developed included Qualtrics. Qualtrics is an innovative and modern tool, providing improved functionality as well as relevant and appropriate methods for the measurement and analysis of data. Overall, the survey comprised of five sections and took on average, approximately 10-15 minutes to complete. Below a description of each section is provided.

3.4.3.1 Section One – Informed Consent Form

The first section provided respondents with information relating to the ethical considerations of the study and included the Informed Consent Form. Information such as the purpose of the research study, procedures for participating, compensation for participation, potential risks and discomforts, potential benefits to

participants and/or society, anonymity, security and confidentiality, participation and withdrawal information, contact details of researchers, information relating to the rights of participants was provided as well as four informed consent questions were provided.

For more information on the Informed Consent Form, refer to Addendum A which provides an example of the survey used containing the Informed Consent Form. The approval notice from the REC Humanities is provided in Addendum Q.

3.4.3.2 Section Two – Demographic Information

In the second section, respondents were asked to provide demographic information including their gender, age, race, country of residence, industry of work and hierarchy level.

3.4.3.3 Section Three – Additional Information

The third section comprised of additional information questions. These questions related to topics such as respondents' mobile device software, the use of emojis in informal and formal settings as well as misinterpretation of emojis.

3.4.3.4 Section Four – Emoji Interpretations

The fourth section comprised of a predefined sample of emojis, each rendered for several platforms and for which the respondents had to indicate their interpretation of the emojis by means of both semantics and sentiment.

3.4.3.4.1 Emoji Unicode Character Sample Used

The emoji sample was determined based on the premise to use the 16 most popular anthropomorphic emoji Unicode characters based on current data provided by emoji tracker (2019) retrieved on the 16th of July 2019 and a study done by Brandwatches (2018). Relating to the restriction to only anthropomorphic emoji, the conclusion was drawn based on the fact that these emojis are highly common (well known) and are used to express emotion. Consequently, it was hypothesised that misconstrued meanings is more likely to occur among them than between those characterised as “things” such as a flower (🌹) or animal (🐿) (Chang et al., 2016; Emojipedia, 2019).

3.4.3.4.2 Platform Selection

As the aim of the study included exploring the interpretation of emojis across various variables including platforms, an individual's interpretations of multiple platform emoji renderings were solicited. Due to the study exploring the influence of emoji interpretations on organisational communication, as previously stated, a specific focus was placed on text-based communication platforms. Evidently, the platforms used included WhatsApp (Apple and Android), Twitter as well as Microsoft Office. For more information on the selection of the platforms, refer to section 2.4.3.1 in the Literature Review. In conclusion, renderings for each of the four platforms were used for each of the emojis in the sample. For each of the emojis rendered, the images/graphics were obtained from Emojipedia. Table 6 outlines the emojis rendered and included in the sample from each of the four platforms.

Table 6

Emojis Rendered per Platform

Unicode	Name	Apple WhatsApp (iOS 13.1)	Android WhatsApp (WhatsApp 2.19.244)	Twitter (Twemoji 12.1.3)	Microsoft Office (10 May 2019 update)
U+1F622	Crying Face				
U+1F618	Face Blowing a Kiss				
U+1F602	Face With Tears of Joy				
U+1F633	Flushed Face				
U+1F62C	Grimacing Face				
U+1F62D	Loudly Crying Face				
U+1F614	Pensive Face				
U+1F60C	Relieved Face				
U+1F60D	Smiling Face With Heart-Eyes				

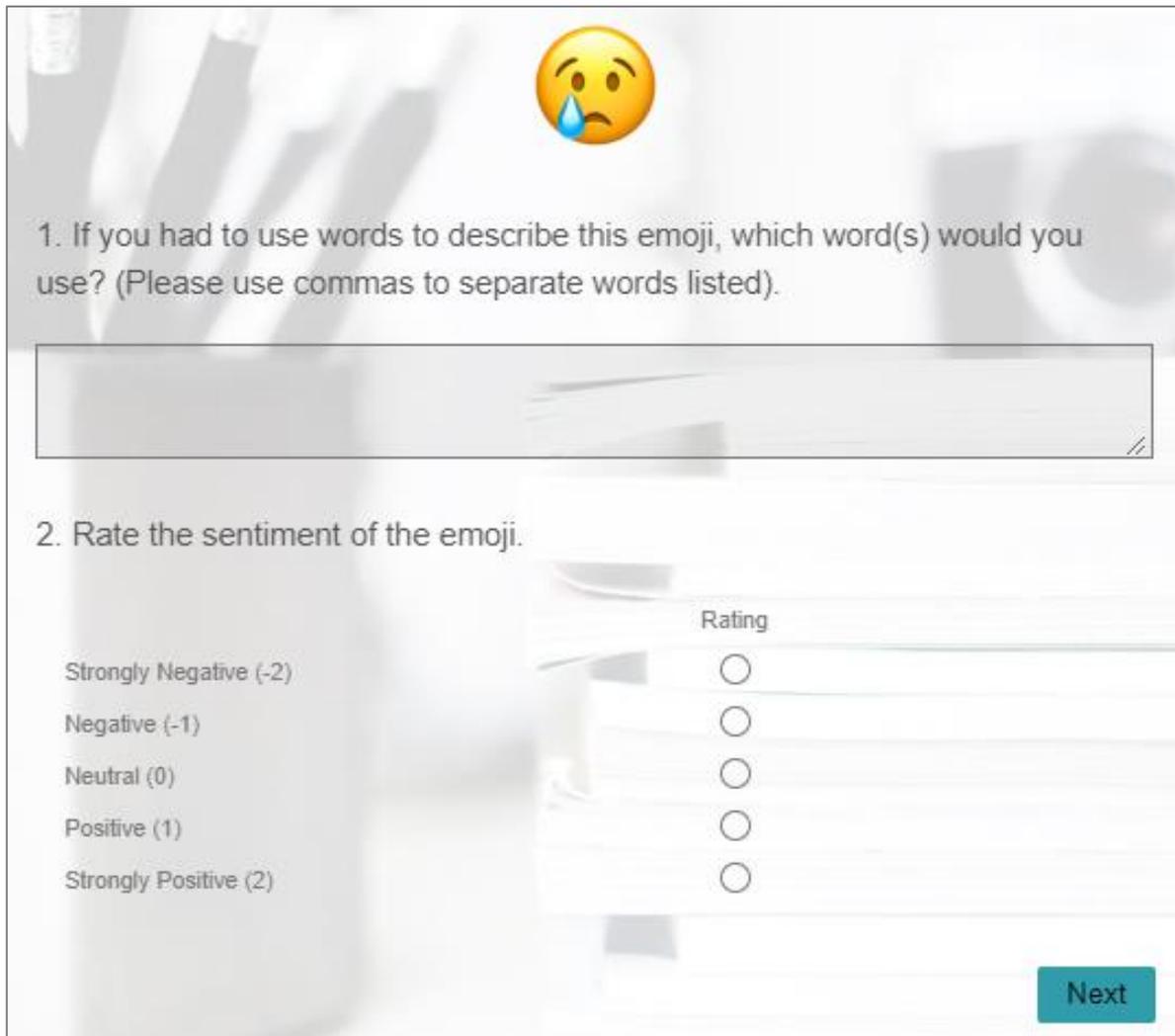
Unicode	Name	Apple WhatsApp (iOS 13.1)	Android WhatsApp (WhatsApp 2.19.244)	Twitter (Twemoji 12.1.3)	Microsoft Office (10 May 2019 update)
U+1F605	Grinning Face With Sweat				
U+1F60A	Smiling Face with Smiling Eyes				
U+1F60F	Smirking Face				
U+1F612	Unamused Face				
U+1F629	Weary Face				
U+263A	Smiling Face				
U+1F609	Winking Face				

(Emojipedia, 2019, "Smileys & People")

3.4.3.4.3 Emoji Interpretation Question Design

With four platform renderings of 16 emoji Unicode characters, results were gathered for a total number of 64 emoji renderings. For each respondent, the survey was developed to randomly assign four emojis from each platform thus resulting in each respondent receiving 16 randomly allocated renderings from the 64 total. An example question, namely the Apple red heart emoji (❤️, Unicode U+2764) was provided at the beginning of the survey, resulting in 17 emojis that needed to be interpreted.

For each emoji, respondents had to interpret the emoji based on semantics and sentiment where question one measured the semantic interpretation and question two measuring the sentiment interpretation. Below, Figure 4 provides a survey example of the emoji interpretation questions based on semantics and sentiment.



The image shows a survey question interface. At the top, there is a background image of a hand holding a pen. In the center, there is a yellow emoji with a sad face and a single blue tear. Below the emoji, the text reads: "1. If you had to use words to describe this emoji, which word(s) would you use? (Please use commas to separate words listed)." Underneath this text is a large, empty rectangular text input field. Below the input field, the text reads: "2. Rate the sentiment of the emoji." To the left of a rating scale, there are five options: "Strongly Negative (-2)", "Negative (-1)", "Neutral (0)", "Positive (1)", and "Strongly Positive (2)". To the right of these options is a vertical column of five radio buttons, with the word "Rating" centered above them. At the bottom right of the form, there is a teal button with the word "Next" in white text.

Figure 4. Survey Question Example - Emoji Interpretation

3.4.3.5 Section Five – Lucky Draw Entry

The last section provided participants the opportunity to enter a lucky draw upon submission of the survey. To enter, participants needed to provide their email address on a secondary survey, accessed via a link provided to stand a chance to win a R1 000.00 voucher at an online store of their choice. The winner was randomly chosen and contacted on the 1st of December 2019 via the email address provided.

3.4.4 Data Collection Responses

Overall, complete data collection took place over a period of approximately five weeks, whereby respondents submitted their electronic responses directly to the survey data repository. The data gathering process yielded a total number of 362 responses (n=362), of which 34 (9%) were partially completed. Based on Struwig

and Stead (2001), the total number of responses was regarded as sufficient in order to derive credible results. Chapter Four provides a breakdown of the sample demographics and results obtained.

Before commencing with the formal gathering of data, a pilot study was however administered. A pilot study, according to Babin et al. (2013), is defined as a research project that is small of nature, through which respondents that are similar to those to be utilised in the actual study (representative) are used to collect preliminary data. For the purpose of this study, random respondents were chosen to partake in the pilot study. The overall purpose of the pilot study was to ensure that the survey was designed correctly (reliable and valid) and that it obtained the appropriate responses. Employed individuals, as well as academic professionals within the Industrial Psychology Department of Stellenbosch University, were included in the pilot study for the purpose of verifying the appropriateness and design of the survey. Feedback obtained from the pilot study was reviewed and the necessary changes were made before commencing with the formal gathering of data.

3.5 Missing Values

During quantitative analyses, a common problem that occurs is that of missing values. Missing values result from a respondent or respondents not being able or willing to respond to or complete items (questions) in a survey. In an attempt to overcome the problem of missing values, all items included in the survey were made mandatory to complete. For items where respondents could potentially struggle to provide an answer or could not answer, such as the mobile device software question, a 'Not applicable (N/A)' option was provided.

3.6 Measuring Instruments

For this study, both qualitative and quantitative data was collected through the use of a survey (refer to Addendum A). As previously stated, the survey comprised of three sections which was to be analysed namely; Demographic Information, Additional Information, and Emoji Interpretations. For each of the survey sections, a discussion will follow based on the relevant measuring instruments used.

3.6.1 Demographic Information

Due to the fact that response differences between groups may potentially provide detailed insight into an identified research problem, demographic variables (biographical information) in a diagnostic study are of great importance. Evidently, the second section of the survey consisted of items that attempted to obtain information regarding the demographic profile of the respondent in order to identify whether differences in emoji interpretations for varying demographic groups appear. The demographic variables included: gender, age, race, country of residence, industry of work, and hierarchy level.

3.6.2 Additional Information

In an attempt to obtain additional exploratory information, the third section in the survey consisted of additional information questions. The questions related to topics such as the respondents' mobile device software, the respondents' use of emojis in informal and formal settings as well as misinterpretation of emojis.

3.6.3 Emoji Interpretations

Due to the interpretation of emojis forming the foundation of this study, the fourth section of the survey included questions relating to the interpretation of 16 of the most popular anthropomorphic emojis rendered across various platforms. As mentioned, through the use of two measurements namely, semantics and sentiment, the respondents' answers to the interpretation of emojis shown were measured. Broadly, semantics refers to what the emoji means/resembles whereas sentiment refers to how positive/negative/neutral an emoji is (Chang et al., 2016). To measure semantics, the following question was used: *"If you had to use words to describe this emoji, which word(s) would you use?"* To measure sentiment, the following question was used: *"Rate the sentiment of the emoji."*

3.7 Data Analysis Procedures

To derive meaning from the participant's responses obtained by means of the recommended survey methodology, the data collected needed to be analysed. Thus, the purpose of the subsequent section includes providing a discussion regarding the statistical data analysis techniques used for the present study.

Throughout literature, multiple statistical data analysis techniques are available. However, to determine whether a specific technique is relevant and appropriate for a study largely depends on the aim and objectives of the pertinent study (Kerlinger & Lee, 2000). For the present study, the main aim included exploring the influence of emoji interpretations on organisational text-based CMC. To address this research question, the objectives of the study included determining whether emojis are interpreted dissimilarly across platforms, age groups, genders, racial groups, industries of work and hierarchy levels both in terms of semantics and sentiment.

Evidently, the empirical model depicted in Figure 5 outlines the variables which were tested and analysed. In each of the following sub-sections, the various statistical analysis techniques used are briefly discussed.

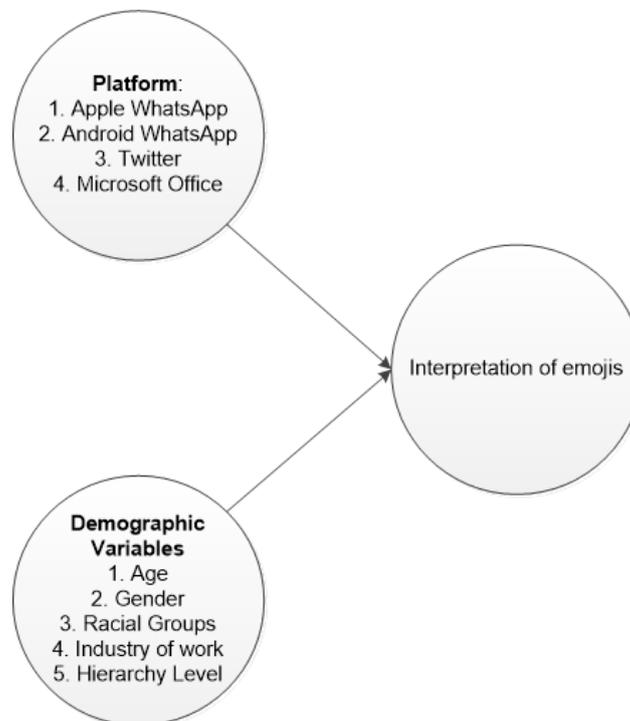


Figure 5. Empirical Data Analysis Model

For this study, seeing as the interpretation of emojis was analysed by means of investigating both the semantics and sentiment of each emoji, semantics, and sentiment may be viewed as forming the basis for data analysis. Due to the semantic and sentiment analyses differing in the statistical analysis techniques used, separate sections will following outlining the techniques used for this study.

3.7.1 Semantic Statistical Data Analysis Technique

To analyse the semantics of the emojis (which refers to what an emoji means and/or resembles to an individual) (Chang et al., 2016), the data had to be “cleaned”. Hence, the first step included the removal of delimiters. Delimiters refer to punctuation marks (.?!/;). In order for Statistica, the data analysis program used, to be able to separate the different responses, all invalid delimiters, except for commas (,) had to be removed.

Following the removal of the delimiters, the second step entailed the researcher reviewing the list of responses obtained and allocating descriptive labels to the responses based on the stem words provided by the respondents as well as synonyms. Given that a program was not used to allocate the labels, the researcher’s judgement had to be used. Refer to Addendum B for an outline of the complete list of descriptive labels. Following this exercise, the list of responses was reduced to a total number of 683 descriptive labels. In order to ensure that the data was valid and reliable to use, the list was then further decreased to 78 labels by only including the labels for which 20 or more responses were obtained. Refer to Addendum C for an outline of the descriptive labels used. The complete process, referred to the coding process of the semantic labels.

Following the review of the labels, the statistical data analysis technique which was used to analyse the semantics of each of the emojis included Correspondence Analysis (CA). CA broadly refers to a multivariate graphical technique, designed to investigate and explore relationships among various categorical variables (Bandeem-Roche et al., 2009). Consequently, CA was used to investigate the relations between emojis and descriptive labels associated with emojis. From the CA’s, standardized residuals were investigated by performing a hierarchical cluster analysis with Ward’s clustering in order to identify groupings of emojis with similar labels as well as identify the descriptive label with the strongest association to each of the emojis, per variable.

3.7.2 Sentiment Statistical Data Analysis Techniques

With sentiment referring to the how positive, negative, or neutral an emoji is (Chang et al., 2016), a five-point ordinal scale ranging from Strongly Positive (+2) to Strongly

Negative (-2) was used in order to investigate the sentiment scores of each of the emojis. To analyse the data obtained, analysis of the sentiment scores was done using mixed model Analysis of Variance (ANOVA). According to Pallant (2016), analysis of variance entails comparing the mean scores of more than two groups. During analysis of variance, the variance, or more specifically, the variability in scores between and within different groups are determined.

For this study, during the mixed model ANOVA, the respondents were treated as random effects, and the emojis, platforms and demographic variables were treated as fixed effects. To determine whether interaction effects were evident, the Satterthwaite degrees of freedom tables outlining the respective p-values were examined. Based on whether or not interaction effects were evident, Post-hoc tests were required to determine where the specific differences lie. Evidently, the relevant Post-hoc tests were performed whereby the Fisher Least Significant Difference (LSD) was used and analysed.

3.8 Chapter Three Summary

In this chapter, the research initiating question, research objectives and hypotheses posited in Chapter Two were reviewed. The research design and research methodology for the present study was outlined and discussed. Contributory, the sample design, and research participants, data collection procedures, missing values as well as measuring instruments and data analysis procedures used for each of the variables were also reported on. The subsequent chapter will provide an outline of the results and findings of the study.

CHAPTER 4

RESULTS AND FINDINGS

4.1 Introduction

The previous chapter focused on the research methodology, measuring instruments and statistical data analysis techniques used. In this chapter, based on the research objectives and hypotheses outlined in Chapter Three, the results and findings of the statistical data analyses are reported and discussed.

4.2 Demographic Variable Profiles

For the statistical analysis purposes, outlined in sections 4.4 and 4.5, the age groupings presented in the survey were combined into four main groups guided by the age generations of Generation Z, the Millennials, Generation X and the Baby Boomers. Thus, the statistical analysis age groups included: < 25, 25 – 39, 40 – 54 and > 55. Evidently, the target population for the study included employed individuals both in South Africa and abroad. From the 362 responses obtained (n=362), 358 indicated their age group whereby 11% indicated to be under 25 years of age, 53% between 25 – 39, 27% between 40 – 54 and 9% 55 and older. Based on the demographics, the age group of 25 – 39 was the largest and the overall sample had an average age of 36.3994 (SD = 11.4772; min = 23.0; max = 63.0).

In terms of gender, 73% of the respondents identified as female and 27% male. For race, 5% of the respondents reported as African, 8% Coloured, 3% Indian, 82% White and 3% selected the “Other” category. For statistical analysis purposes, the Indian race category was not included as it comprised of too few respondents. Likewise, the “Other” race category was also not included due to the limited number of respondents as well as the fact that the responses provided could not be used to draw conclusions. Hence, for this study, only the African, Coloured and White racial categories were used for further analyses.

From the data, it was evident that the majority of respondents included South Africans as 90% (320) reported residing in South Africa. Both United Arab Emirates and the Netherlands were found to be second highest with 2% (8) reported for the country of residence. Some of the other countries selected included Australia,

Botswana, Bulgaria, France, Germany, Hong Kong, India, Pakistan, UK, United States of America as well as New Zealand.

With reference to the respondents' industries of work, 8% selected Accounting and Legal, 8% Business Services, 1% Construction, 18% Education, 8% Finance, 2% Food, 9% Health care, 1% Hospitality, 9% Information Technology, 3% Manufacturing, 1% Media, 1% Mining, 1% Retail, 6% Sales and overall, 22% selected the "Other" category. Some of the industries listed under the "Other" category included Consulting, Conservation, and Telecommunications. As with the age groupings, for statistical analysis purposes, the industries of work were combined into three main sectors: Primary, Secondary and Tertiary. The Primary sector is primarily concerned with the extraction of raw materials. The secondary sector is concerned with the producing of finished goods, whereas the tertiary sector is concerned with the offering of intangible goods and services (Kenessey, 1987).

Hence, for this study, Table 7 summarises the industries of work provided, grouped according to the relevant sectors. For statistical analysis, only the secondary and tertiary sectors were used seeing as the primary sector only consisted of mining with a limited number of respondents. The "Other" category was also excluded from statistical analysis due to the majority of the responses obtained not being relevant as they did not specify industries of work, but rather job titles.

Table 7

Industries of Work Grouped by Sector

Sector	Industry of work
Primary	Mining
Secondary	Construction
	Food
	Manufacturing

Sector	Industry of work
Tertiary	Accounting & Legal
	Business Services
	Education
	Finance
	Health care
	Hospitality
	Information Technology
	Media
	Retail
	Sales

In terms of hierarchy level, 56% of respondents reported falling under the Professional/Operational/Non-Management Level, 29% Middle-Level Management, 8% Top Level Management and 6% in the “Other” category. As with Race and Industry of work, the “Other” category was also excluded from statistical analyses for the Hierarchy level due to the invalid and limited number of responses. Table 8, provides a summary of the demographic profile data of the respondents as outlined.

Table 8

Demographic Profile Data of Respondents

Variable	Category	Frequency	%
Age	< 25	39	11%
	25 - 39	189	53%
	40 - 54	96	27%
	55 >	34	9%
Gender	Female	263	73%
	Male	95	27%
	Other	0	0%

Variable	Category	Frequency	%
Racial Groups	African	17	5%
	Coloured	30	8%
	Indian	9	3%
	White	293	82%
	Other	9	3%
Industry of Work			
Primary	Mining	5	1%
Secondary	Construction	3	1%
	Food	6	2%
	Manufacturing	12	3%
Tertiary	Accounting & Legal	30	8%
	Business Services	28	8%
	Education	65	18%
	Finance	30	8%
	Health care	33	9%
	Hospitality	5	1%
	Information Technology	31	9%
	Media	5	1%
	Retail	3	1%
	Sales	23	6%
Other		78	22%
Hierarchy Level	Professional/Operational/Non- Management	199	56%
	Middle Level Management	103	29%
	Top Level Management	29	8%
	Other	23	6%

4.3 Additional Information

From the additional information obtained, 69% of respondents reported using an Android mobile device while 31% reported using an Apple (iOS) device and less than 1% selected the “Other” category. When asked whether the respondents made use of emojis during informal communication, 98% selected Yes and 2% No. Overall,

69% reported to use emojis most often with Friends during informal communication and 29% with Family and only 2% selected the “Other” category. In terms of platforms and informal communication, 98% reported using emojis mostly on WhatsApp during informal communication. Both Microsoft Office and the “Other” category obtained only 1% of responses whilst Twitter obtained less than 1%.

When asked whether respondents made use of emojis during formal communication, 51% selected “No” and 49% selected “Yes”. Overall, 87% of respondents reported using emojis most often with Colleagues during formal communication. 6% selected Clients, 4% Manager and 3% the “Other” category. With reference to the platforms and formal communication, 64% reported using emojis mostly on WhatsApp during formal communication. Microsoft Office and the “Other” category respectively obtained 29% and 7%, whilst Twitter obtained 0%.

Based on the question relating to whether the respondents have ever had a situation in which an emoji was misinterpreted or understood differently by someone else, 70% of respondents indicated “No” and 30% indicated “Yes”. Should respondents have selected “Yes”, a prompt would have appeared asking them to provide an example. Below, some respondent examples are provided:

“The two hands that look like praying hands was used in a message with a rather sad context, yet people in the office asked “why were some people using the high-five symbol?”

“Sent an emoji thinking it looks happy the other person interpreted it as a look of disgust”

“My mother sent me an emoji for a serious situation while I interpret that emoji as being light-hearted”

Table 9 provides a summary of the respondent’s additional information obtained.

Table 9

Additional Information obtained of Respondents

Variable	Category	Frequency	%
Mobile Device	Android	242	69%
	iOS	110	31%
	Not Applicable	0	0%
	Other	1	<1%
Do you make use of emojis during informal communication (E.g. communicating with family members)?	Yes	346	98%
	No	7	2%
Variable	Category	Frequency	%
If used in an informal context, with whom do you MOST often use emojis (E.g. friends)?	Family	100	29%
	Friends	238	69%
	Other	7	2%
On which of the following platforms do you MOST often make use of emojis when communicating informally?	Microsoft	2	1%
	Office	2	1%
	Twitter	1	<1%
	WhatsApp	338	98%
	Other	4	1%
Do you make use of emojis during formal communication (E.g. communicating with colleagues/clients/managers)?	Yes	174	49%
	No	178	51%
If used in a formal context, with whom do you MOST often use emojis (E.g. clients)?	Clients	10	6%
	Colleagues	152	87%
	Manager	7	4%
	Other	5	3%
On which of the following platforms do you MOST often make use of emojis when communicating formally?	Microsoft	51	29%
	Office	51	29%
	Twitter	0	0%
	WhatsApp	111	64%
	Other	12	7%

Variable	Category	Frequency	%
Have you ever had a situation in which an emoji was misinterpreted or understood differently by someone else?	Yes	106	30%
	No	246	70%

The sections which follow outline the results and findings obtained for the semantic and sentiment analyses. For these discussions, Table 10 can be explored as it outlines the emojis rendered per platform and the number linked to each emoji.

Take note, the semantic and sentiment analyses entail exploring interpretations, thus there being no right or wrong answers. Consequently, none of the variable groups included ought to be exposed to inferiority or discrimination based on the results and findings obtained. Also, for illustration purposes during the analysis discussions, the Apple WhatsApp emojis were used to strengthen and enhance the results outlined.

Table 10

Emojis Rendered per Platform

Number	Microsoft Office	Apple WhatsApp	Twitter	Android WhatsApp
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

Number	Microsoft Office	Apple WhatsApp	Twitter	Android WhatsApp
11				
12				
13				
14				
15				
16				

(Emojipedia, 2019, "Smileys & People")

4.4 Semantic Analysis

For each of the research hypotheses posited, the semantic analyses follow, outlining the results obtained for each of the respective variables of interest.

4.4.1 Semantic Analysis for Emojis

The semantic analysis process was initiated by first exploring the semantic analysis of the 16 emojis in isolation. Thus, it was determined which descriptive labels were associated with which of the 16 emojis regardless of any variables. Figure 6 outlines the CA for the 16 emojis and evidently, the descriptive labels associated with each emoji.

The main aim of the CA includes identifying where the labels are plotted relative to one another. In order to interpret the figure, the descriptive labels plotted closely to an emoji were interpreted as being stronger associated with the relevant emoji than in comparison to labels plotted far away from the emoji. Hence, the closer the descriptive was to the emoji, the stronger the association was interpreted and vice versa.

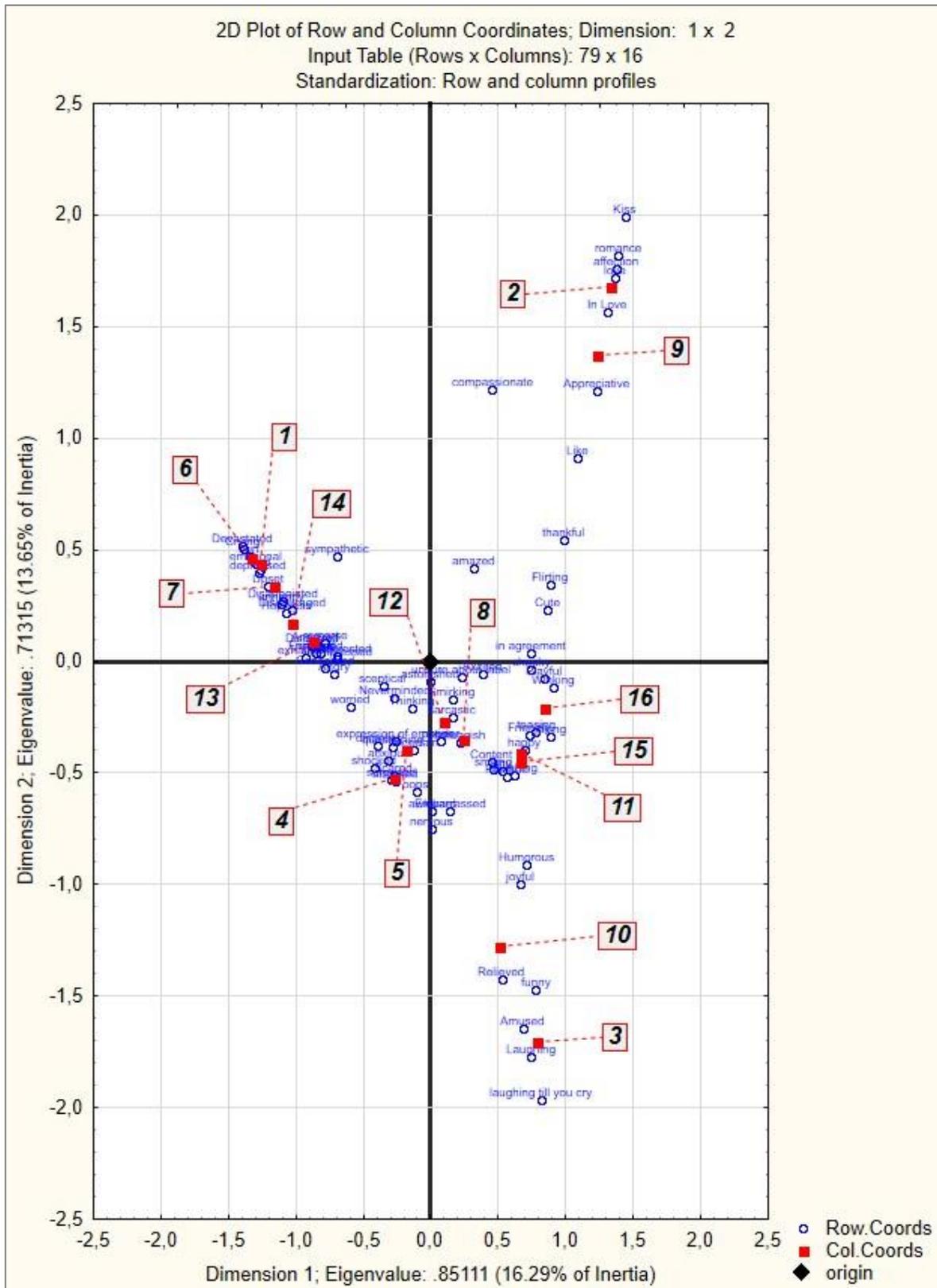


Figure 6. Emoji Correspondence Analysis (CA)

Based on Figure 6, for statistical analysis purposes, the respective emojis were grouped into clusters. The clusters combine emojis for which similar descriptive

labels were given by respondents. Subsequently, for the purpose of this study, 7 clusters were identified and are outlined in Table 11.

Table 11

Emoji CA Clusters

Cluster	Emoji	Image
Cluster 1	Emoji 1	
	Emoji 6	
Cluster 2	Emoji 7	
	Emoji 13	
	Emoji 14	
Cluster 3	Emoji 4	
	Emoji 5	
Cluster 4	Emoji 8	
	Emoji 12	
Cluster 5	Emoji 11	
	Emoji 15	
	Emoji 16	
Cluster 6	Emoji 3	
	Emoji 10	
Cluster 7	Emoji 2	
	Emoji 9	

Note: For the preceding semantic analysis sections, for each of the interaction scenarios, for example, emojis and platforms and emojis and age groups, the descriptive labels associated with each emoji were examined. Based on the CA figures for each interaction, emojis were clustered according to similar descriptive

label associations between the respective clustered emojis. Accordingly, the descriptive labels associated with each of the scenarios were combined and are provided in Addendum D - J respectively.

Evidently, for the purpose of this study to explore the interpretation of emojis and the influence of the various variables, the focus was placed on the descriptive label with the strongest association to each of the respective emojis based on the CA performed. Thus, for each emoji or emoji interaction examined, one label will be outlined and utilised for further analysis and comparison.

Based on Figure 6 and the relevant standardised residuals examined, Table 4.6 outlines the strongest associated descriptive labels which were associated with each of the emojis within the respective clusters. Based on the Emoji Label column in Table 4.6 it was evident that even though the labels associated with each emoji differed within the clusters, the majority of clusters contained emojis with similar meanings and/or interpretations. Likewise, when examining the list of descriptive labels associated with each emoji which is provided in Addendum D, it was also noted that due to the proximity of the clusters, overlaps in the descriptive labels indicated were evident. Examples include Cluster 1, 2 and 3.

Table 12

Clusters and Emoji Labels

Cluster	Emoji	Image	Emoji Label
Cluster 1	Emoji 1		sad
	Emoji 6		crying
Cluster 2	Emoji 7		disappointed
	Emoji 13		disinterested
	Emoji 14		tired
Cluster 3	Emoji 4		shocked
	Emoji 5		excited

Cluster	Emoji	Image	Emoji Label
Cluster 4	Emoji 8		content
	Emoji 12		smirking
Cluster 5	Emoji 11		happy
	Emoji 15		blushing
	Emoji 16		winking
Cluster 6	Emoji 3		laughing
	Emoji 10		relieved
Cluster 7	Emoji 2		kiss
	Emoji 9		in love

4.4.2 Semantic Analysis for Emojis and Platforms

To explore the semantic analysis of emojis and the influence of platforms, Figure 7 was examined. Figure 7 provides the CA for emojis and platforms, thus outlining the descriptive labels associated with each emoji based on the platform. The platforms relevant for this study and included in the analyses were: Microsoft Office (M), Apple WhatsApp (AW), Twitter (T) and Android WhatsApp (ANW) (for further reference to the platforms, acronyms will be used).

When examining Figure 7, the first emoji cluster included emojis 1, 6 and 7. The second cluster included emojis 13, 14 and M8. The third cluster included emojis 4, 5, and 12. The fourth cluster included emojis 3 and 10. The fifth cluster included emojis 8 (AW8, T8, and ANW8), 11, 15 and 16. Lastly, the sixth cluster included emojis 2 and 9. For more information regarding the labels, refer to Addendum E to explore the various descriptive labels associated with each emoji, per platform.

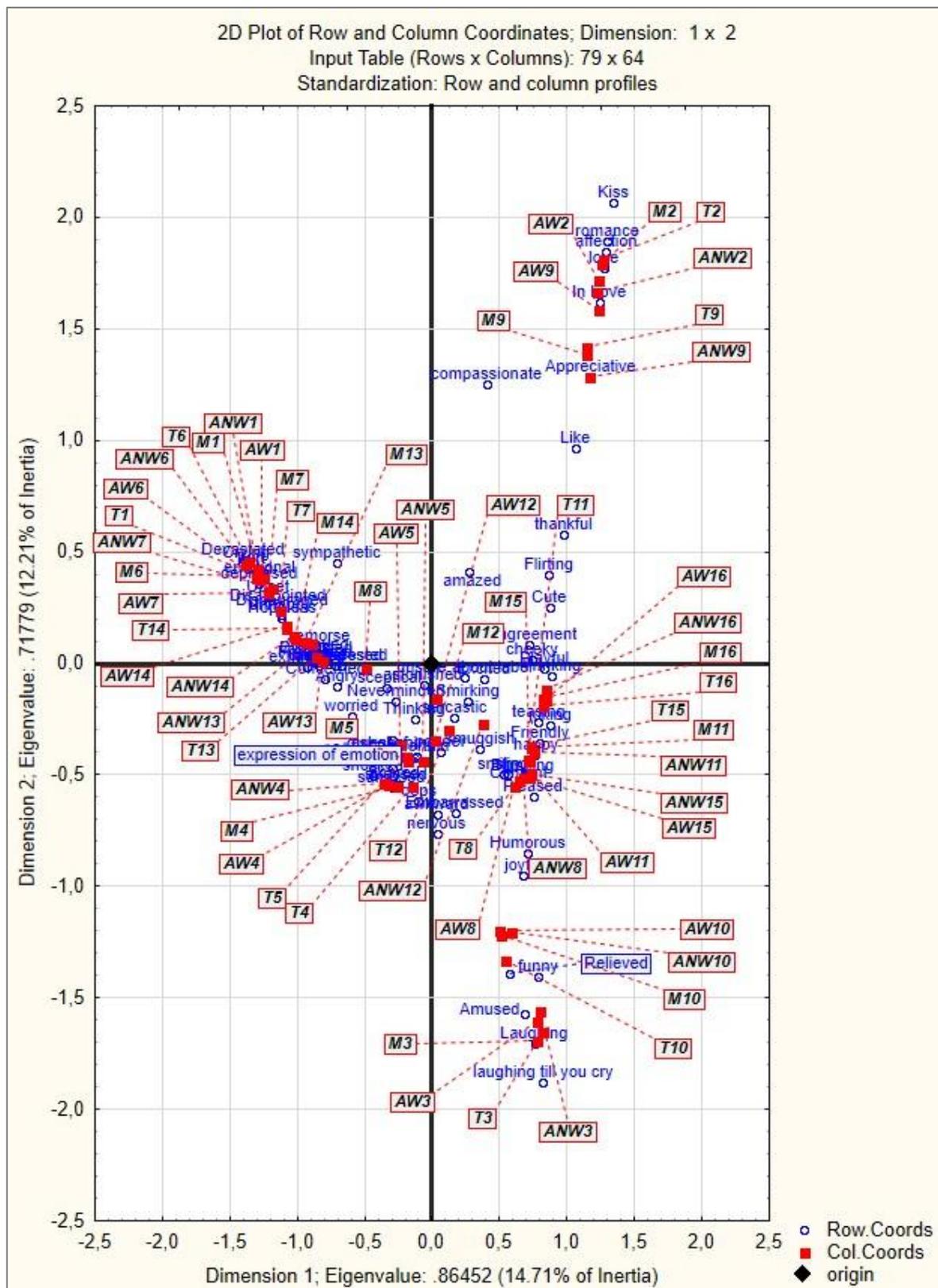


Figure 7. Platform*Emoji Correspondence Analysis (CA)

For further analyses, based on Figure 7 and the relevant standardised residuals examined, Table 13 outlines the strongest associated descriptive labels for each

emoji, per platform. From Table 13, it was evident that from the 16 emojis examined, approximately 56% indicated differences in the descriptive labels associated per platform (*). These emojis included: emoji 4, 5, 8, 11, 12, 13, 14, 15 and 16. For emojis 13 and 14 in particular, for each of the four platforms, a varying descriptive label was associated. For example, for emoji 13, for M, AW, T, and ANW the respective labels associated with each platform included *annoyed*, *irritated*, *angry* and *disgusted*.

However, from Table 13 it was also evident that for approximately 44% of the emojis, the descriptive labels associated corresponded 100% across the four platforms. For example for emojis 1 and 9, the descriptive labels associated across all four platforms included *sad* and in love respectively. The emojis for which the labels corresponded across platforms included emojis 1, 2, 3, 6, 7, 9 and 10.

Based on the above, it could thus be concluded that when examining the influence of platforms on the semantic interpretation of emojis, interpretation differences were evident across the emojis examined due to variations in the descriptive labels associated.

Table 13

Platforms and Emoji Labels

Emoji	Microsoft Office (M)	Apple WhatsApp (AW)	Twitter (T)	Android WhatsApp (ANW)
Emoji 1	 sad	 sad	 sad	 sad
Emoji 2	 kiss	 kiss	 kiss	 kiss
Emoji 3	 laughing	 laughing	 laughing	 laughing
Emoji 4*	 shocked	 shocked	 embarrassed	 shocked

Emoji	Microsoft Office (M)	Apple WhatsApp (AW)	Twitter (T)	Android WhatsApp (ANW)
Emoji 5*	 nervous	 excited	 scared	 nervous
Emoji 6	 crying	 crying	 crying	 crying
Emoji 7	 disappointed	 disappointed	 disappointed	 disappointed
Emoji 8*	 tired	 content	 content	 content
Emoji 9	 in love	 in love	 in love	 in love
Emoji 10	 relieved	 relieved	 relieved	 relieved
Emoji 11*	 smiling	 happy	 blushing	 happy
Emoji 12*	 ponder	 neverminded	 smirking	 smirking
Emoji 13*	 annoyed	 irritated	 angry	 disgusted
Emoji 14*	 tired	 frustrated	 unhappy	 hopeless
Emoji 15*	 happy	 shy	 blushing	 happy
Emoji 16*	 winking	 joking	 winking	 winking

Note. The * indicates emojis for which differences in descriptive labels are evident.

4.4.3 Semantic Analysis for Emojis and Age Groups

To explore the semantic analysis of emojis and the influence of age groups, Figure 8 was examined. Figure 8 outlines the CA for emojis and age groups, thus, outlining the descriptive labels associated with each emoji based on the respective age groups. The age groups analysed, included < 25, 25 – 39, 40 – 54 and 55 >.

When examining Figure 8, the first emoji cluster included emojis 3 and 10. The second cluster included emojis 11, 15 and 16. The third cluster included emojis 2 and 9. The fourth included emojis 4, 5, 8 and 13. Lastly, the fifth cluster included emojis 1, 6, 7, 13 and 14. For more information regarding the labels, refer to Addendum F, to explore the various descriptive labels associated with each emoji, per age category.

For further analyses, based on Figure 8 and the relevant standardised residuals examined, Table 14 outlines the strongest associated descriptive labels for each emoji, per age category. From Table 14, it was evident that for approximately 88% of the emojis examined, differences in the descriptive labels associated per age category were identified. These emojis included emojis 2, 3, 4, 5, 6, 7, 9, 10, 11, 12, 13, 14, 15 and 16. For emojis 5 and 12 in particular, for each of the four age categories, a varying descriptive label was associated. For example, for emoji 😊, for the age categories of < 25, 25 – 39, 40 – 54 and 55 >, the labels associated with each category included *stressed*, *excited*, *frustrated* and *angry* respectively.

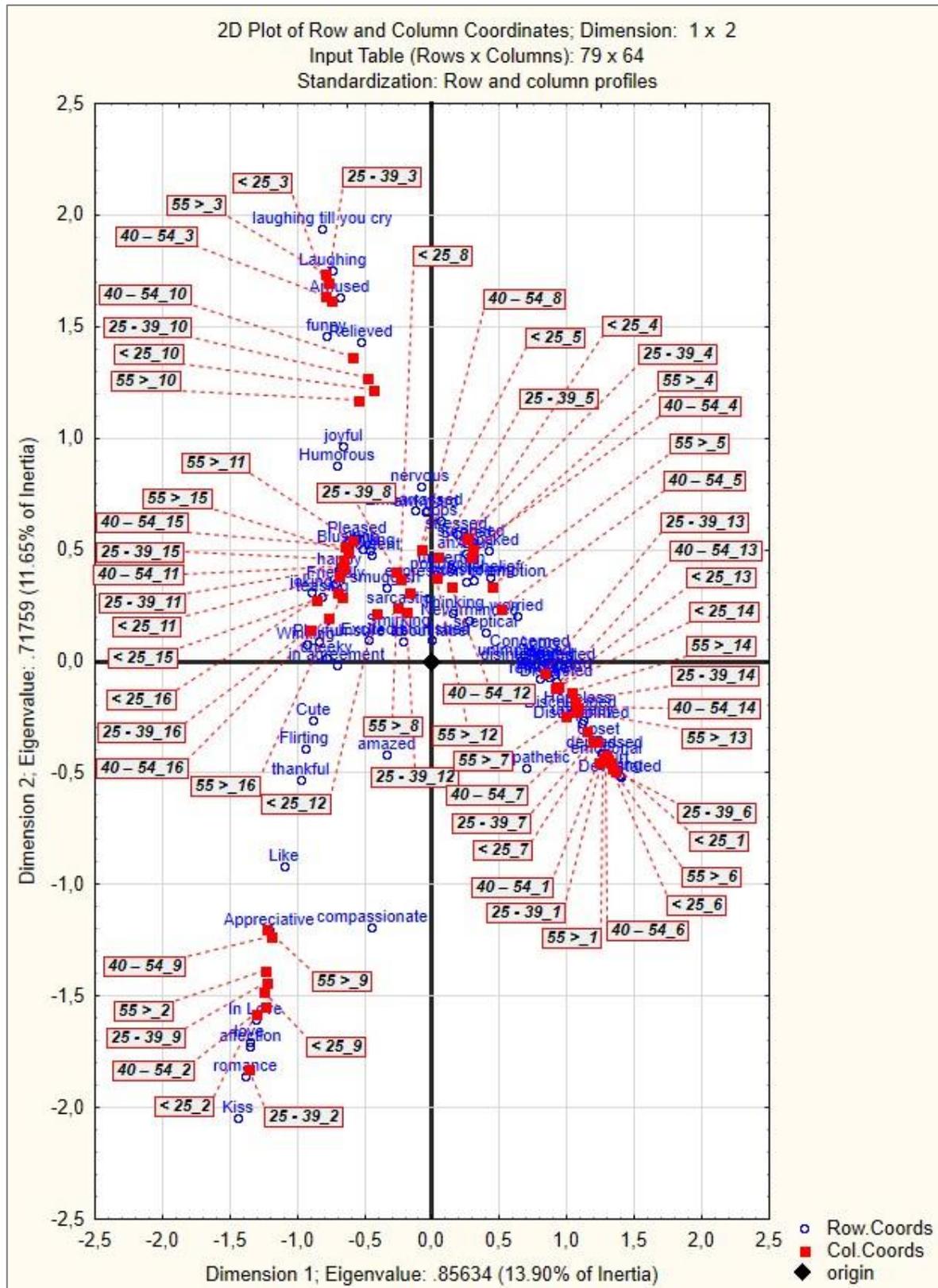


Figure 8. Age*Emoji Correspondence Analysis (CA)

From Table 14, it was, however, also evident that for approximately 12% of the emojis, the descriptive labels associated corresponded 100% across the four age

categories. An example included emoji 🙄 for which the descriptive label across all four age categories included *content*. The emojis for which the labels corresponded across the age categories included emojis 1 and 8.

Based on the above, it could thus be concluded that when examining the influence of age categories on the semantic interpretation of emojis, across the emojis examined, significant interpretation differences were evident.

Table 14

Age Groups and Emoji Labels

Emoji	Image ^a	< 25	25 - 39	40 - 54	55 >
Emoji 1		sad	sad	sad	sad
Emoji 2*		kiss	kiss	love	affection
Emoji 3*		laughing	laughing	funny	laughing till you cry
Emoji 4*		shocked	shocked	shocked	surprised
Emoji 5*		stressed	excited	frustrated	angry
Emoji 6*		crying	crying	devastated	crying
Emoji 7*		disappointed	disappointed	disappointed	sympathetic
Emoji 8		content	content	content	content
Emoji 9*		in love	in love	love	love
Emoji 10*		humorous	relieved	relieved	relieved
Emoji 11*		smiling	happy	happy	happy
Emoji 12*		smuggish	smirking	ponder	thinking
Emoji 13*		annoyed	annoyed	disgusted	unhappy
Emoji 14*		tired	frustrated	unhappy	frustrated

Emoji	Image ^a	< 25	25 - 39	40 - 54	55 >
Emoji 15*		blushing	blushing	blushing	shy
Emoji 16*		cheeky	winking	winking	playful

Note. The * indicates emojis for which differences in descriptive labels are evident.

^aApple WhatsApp images were used for the purpose of illustration.

4.4.4 Semantic Analysis for Emojis and Gender

To explore the semantic analysis of emojis and the influence of gender groups, Figure 9 was examined. Figure 9 outlines the CA for emojis and gender categories, thus outlining the emojis and descriptive labels associated per gender category namely, males and females.

When examining Figure 9, the first emoji cluster included emojis 1, 6, 7, 13 and 14. The second cluster included emojis 4, 5, 8 and 12. The third included emojis 3 and 10. The fourth cluster included emojis 11, 15 and 16. The final cluster, cluster five, included emojis 2 and 9. For more information regarding the labels, refer to Addendum G, to explore the various descriptive labels associated with each emoji, per gender.

For further analyses, based on Figure 9 and the relevant standardised residuals examined, Table 15 outlines the strongest associated descriptive labels for each emoji, per gender category. From Table 15, it was evident that from the 16 emojis examined, approximately 31% indicated differences in the descriptive labels associated per gender. For example, for emoji , males indicated the *angry* label whereas females indicated the *excited* label. The emojis for which differences were evident included emojis 5, 12, 13, 14 and 15.

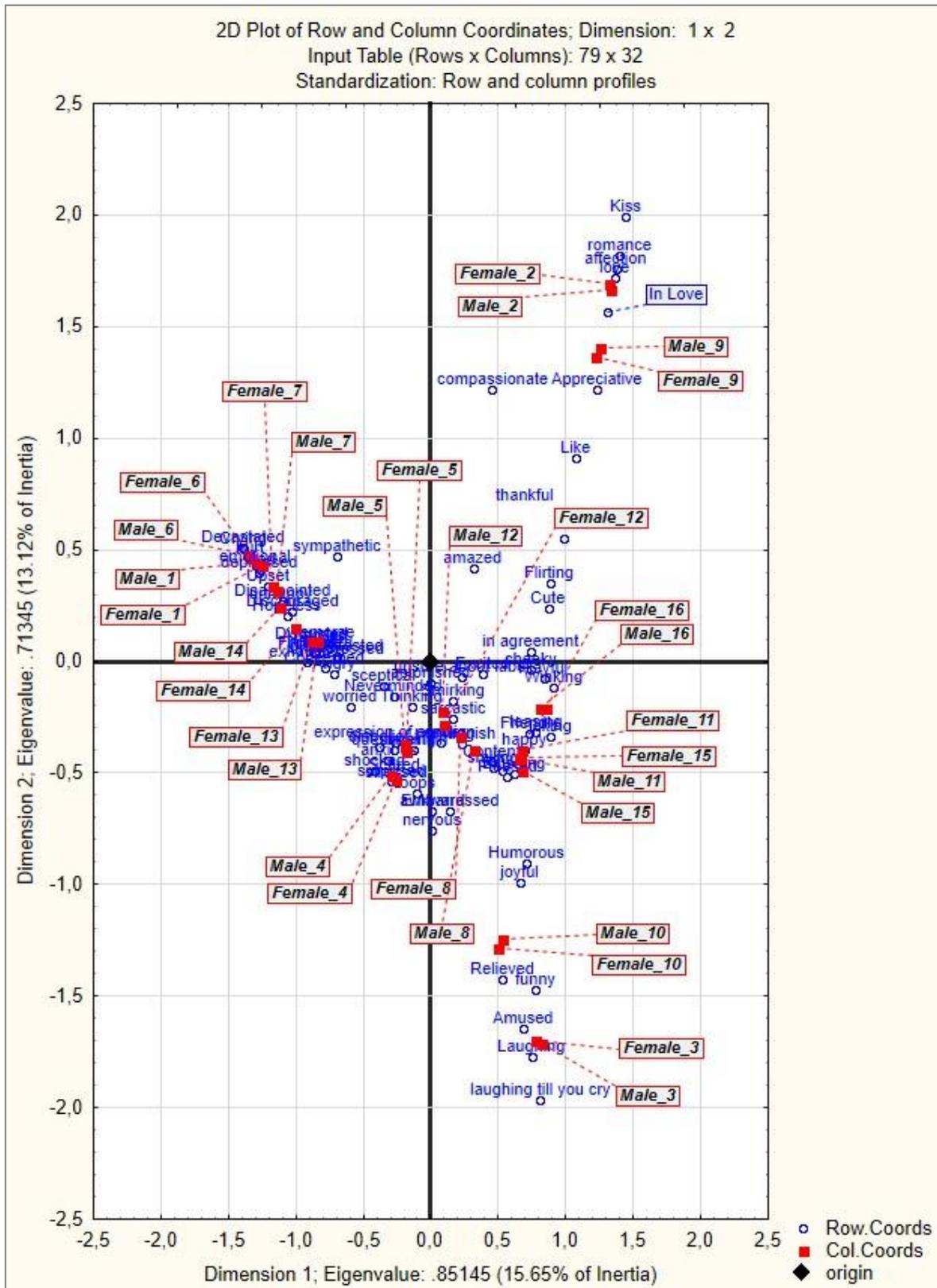


Figure 9. Gender*Emoji Correspondence Analysis (CA)

From Table 15 it was, however, also evident that for approximately 69% of the emojis, the descriptive labels associated corresponded 100% across the genders.

For example, for emojis 🙄 and 😘, the descriptive labels indicated by the two genders included *sad* and *kiss* respectively. The emojis for which the labels corresponded across the genders included emojis 1, 2, 3, 4, 6, 7, 8, 9, 10, 11 and 16.

Evidently, based on the above, it could thus be concluded that when examining the influence of gender groups on the semantic interpretation of emojis, interpretation differences were evident across the emojis examined.

Table 15

Gender and Emoji Labels

Emoji	Image ^a	Males	Females
Emoji 1		sad	sad
Emoji 2		kiss	kiss
Emoji 3		laughing	laughing
Emoji 4		shocked	shocked
Emoji 5*		angry	excited
Emoji 6		crying	crying
Emoji 7		disappointed	disappointed
Emoji 8		content	content
Emoji 9		in love	in love
Emoji 10		relieved	relieved
Emoji 11		happy	happy
Emoji 12*		neverminded	smirking
Emoji 13*		disinterested	annoyed
Emoji 14*		tired	hopeless
Emoji 15*		happy	blushing

Emoji	Image ^a	Males	Females
Emoji 16		winking	winking

Note. The * indicates emojis for which differences in descriptive labels are evident.

^aApple WhatsApp images were used for the purpose of illustration.

4.4.5 Semantic Analysis for Emojis and Racial Groups

To explore the semantic analysis of emojis and the influence of racial groups/categories, Figure 10 was examined. Figure 10 outlines the CA for emojis and racial groups and thus, the descriptive labels associated per racial group, namely African, Coloured and White.

Based on Figure 10, the first emoji cluster included emojis 1, 6, 7, 13 and 14. The second cluster included emojis 4, 5, 8 and 12. The third included emojis 3 and 10. The fourth cluster included emojis 11, 15 and 16. The final cluster, cluster five, included emojis 2 and 9. For more information regarding the labels, refer to Addendum H, to explore the various descriptive labels associated with each emoji, per racial category.

For further analyses, based on Figure 10 and the relevant standardised residuals examined, Table 16 outlines the strongest associated descriptive labels for each emoji, per racial category. Based on Table 16, for 75% of the emojis examined, differences in the descriptive labels associated per race category were evident. These emojis included emojis 2, 3, 4, 5, 7, 8, 9, 10, 11, 12, 13 and 14. For emojis 5, 11, 12 and 14 in particular, for each of the racial categories, a varying descriptive label was associated. For example, for emoji 5, for the African, Coloured and White racial categories, the labels associated with each category included *smiling*, *nervous* and *excited* respectively.

An example included emoji 🥹 for which the descriptive label across the three racial categories included *crying*. The emojis for which the labels corresponded across the age categories included emojis 1, 6, 15 and 16.

Based on the above, it could thus be concluded that when examining the influence of racial categories on the semantic interpretation of emojis, across the emojis examined, interpretation differences were evident.

Table 16

Racial Groups and Emoji Labels

Emoji	Image ^a	African	Coloured	White
Emoji 1		sad	sad	sad
Emoji 2*		love	kiss	kiss
Emoji 3*		laughing	laughing till you cry	laughing
Emoji 4*		surprised	shocked	shocked
Emoji 5*		smiling	nervous	excited
Emoji 6		crying	crying	crying
Emoji 7*		sad	disappointed	disappointed
Emoji 8*		disinterested	content	content
Emoji 9*		love	in love	in love
Emoji 10*		awkward	relieved	relieved
Emoji 11*		blushing	smiling	happy
Emoji 12*		smirking	neverminded	ponder
Emoji 13*		annoyed	irritated	annoyed
Emoji 14*		exhausted	tired	frustrated
Emoji 15		blushing	blushing	blushing

Emoji	Image ^a	African	Coloured	White
Emoji 16		winking	winking	winking

Note. The * indicates emojis for which differences in descriptive labels are evident.

^aApple WhatsApp images were used for the purpose of illustration.

4.4.6 Semantic Analysis for Emojis and Industries

To explore the semantic analysis of emojis and the influence of industries of work, Figure 11 was examined. Figure 11 provides the CA for emojis and industries of work, thus outlining the descriptive labels associated with each emoji based on the respective industries of work. The industries of work relevant for this study and included in the analyses were the Secondary and Tertiary sectors as referred to in section 4.2.

When examining Figure 11, the first emoji cluster included emojis 3 and 10. The second cluster included emojis 8, 11, 12, 15 and 16. The third cluster included emojis 2 and 9. The fourth cluster included emojis 4 and 5. The final cluster, namely the fifth cluster, included emojis 1, 6, 7, 13 and 14. For more information regarding the labels, refer to Addendum I to explore the various descriptive labels associated with each emoji, per industry sector.

In order for further analyses, based on Figure 11 and the relevant standardised residuals examined, Table 17 outlines the strongest associated descriptive labels for each emoji, per industry sector. Based on Table 17 it was evident that from the 16 emojis examined, approximately 38% indicated differences in the descriptive labels associated per industry sector. For example, for emoji , respondents in the secondary industry sector indicated the *neverminded* label whereas respondents in the tertiary industry sector indicated the *ponder* label. The emojis for which differences were evident included emojis 1, 5, 12, 13, 14 and 15.

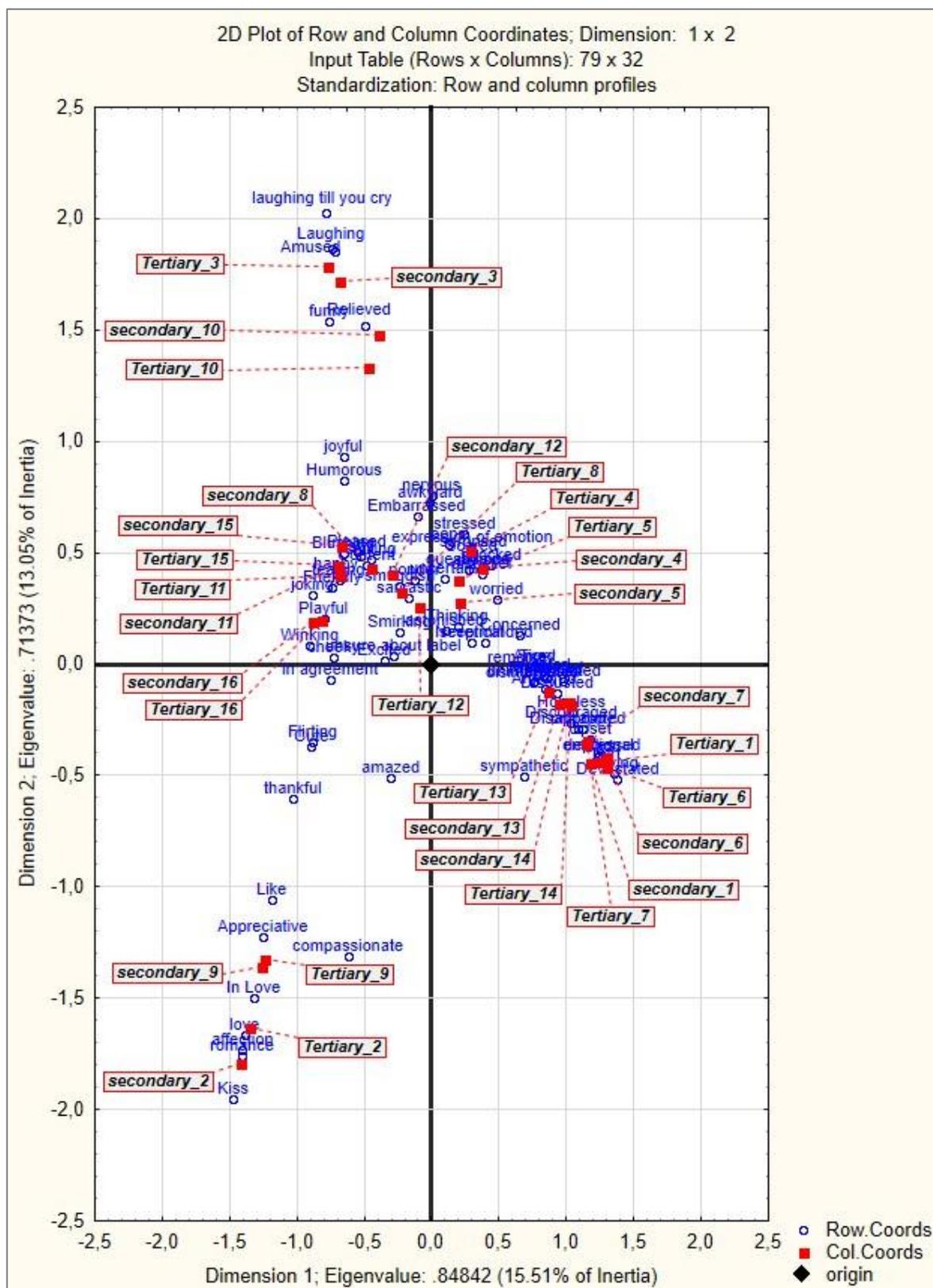


Figure 11. Industry of Work*Emoji Correspondence Analysis (CA)

However, from Table 17 it was also evident that for approximately 62% of the emojis, the descriptive labels associated corresponded 100% across the two industry

sectors. For example, for emojis  and , the descriptive labels indicated across the two industry sectors included *laughing* and *shocked* respectively. The emojis for which the labels corresponded across the industry sectors included emojis 2, 3, 4, 6, 7, 8, 9, 10, 11 and 16.

Based on the above, it could thus be concluded that when examining the influence of industry sectors on the semantic interpretation of emojis, interpretation differences were evident across the emojis examined.

Table 17

Industries of Work and Emoji Labels

Emoji	Image ^a	Secondary	Tertiary
Emoji 1*		remorse	sad
Emoji 2		kiss	kiss
Emoji 3		laughing	laughing
Emoji 4		shocked	shocked
Emoji 5*		oops	nervous
Emoji 6		crying	crying
Emoji 7		disappointed	disappointed
Emoji 8		content	content
Emoji 9		in love	in love
Emoji 10		relieved	relieved
Emoji 11		happy	happy
Emoji 12*		neverminded	ponder
Emoji 13*		sceptical	annoyed
Emoji 14*		frustrated	tired
Emoji 15*		shy	blushing

Emoji	Image ^a	Secondary	Tertiary
Emoji 16		winking	winking

Note. The * indicates emojis for which differences in descriptive labels are evident.

^aApple WhatsApp images were used for the purpose of illustration.

4.4.7 Semantic Analysis for Emojis and Hierarchy Levels

To explore the semantic analysis of emojis and the influence of hierarchy levels, Figure 12 was examined. Figure 12 outlines the CA for emojis and hierarchy levels. Hence, the emojis and descriptive labels associated per hierarchy level can be explored. The hierarchy levels analysed included Professional/Operational/Non-Management Level (Professional), Middle-Level Management (Middle) and Top Level Management (Top). For further reference to the hierarchy levels, the acronyms will be used.

From Figure 12, the first emoji cluster included emojis 3 and 10. The second cluster included emojis 11, 15, 16 as well as Top Management 8. The third included emojis 2 and 9. The fourth cluster included emojis 4, 5, 8 (Professional and Middle) as well as emoji 12. The final cluster, namely the fifth cluster, included emojis 1, 6, 7, 13 and 14. For more information regarding the labels, refer to Addendum J, to explore the various descriptive labels associated with each emoji, per hierarchy level.

For further analyses, based on Figure 12 and the relevant standardised residuals examined, Table 18 outlines the strongest associated descriptive labels for each emoji, per hierarchy level. Based on Table 18, for approximately 69% of the emojis examined, differences in the descriptive labels associated per hierarchy level were evident. These emojis included emojis 2, 3, 5, 6, 7, 9, 12, 13, 14, 15 and 16. For emojis 5, 12 and 14 in particular, for each of the three hierarchy levels, a varying descriptive label was associated. For example, for emoji , for the Professional, Middle, and Top hierarchy levels, the labels indicated by each included *tired*, *exhausted* and *frustrated* respectively.

hierarchy levels. An example included emoji 🥲 for which the descriptive label across the hierarchy levels included *relieved*. The emojis for which the labels corresponded across the hierarchy levels included emojis 1, 4, 8, 10 and 11.

Based on the above, it could thus be concluded that when examining the influence of hierarchy levels on the semantic interpretation of emojis, across the emojis examined, interpretation differences were evident.

Table 18

Hierarchy Levels and Emoji Labels

Emoji	Image ^a	Professional/ Operational/Non- Management	Middle	Top
Emoji 1		sad	sad	sad
Emoji 2*		kiss	love	kiss
Emoji 3*		laughing	laughing	funny
Emoji 4		shocked	shocked	shocked
Emoji 5*		excited	oops	angry
Emoji 6*		crying	crying	devastated
Emoji 7*		disappointed	disappointed	unhappy
Emoji 8		content	content	content
Emoji 9*		in love	love	in love
Emoji 10		relieved	relieved	relieved
Emoji 11		happy	happy	happy
Emoji 12*		smirking	neverminded	ponder
Emoji 13*		annoyed	annoyed	unhappy
Emoji 14*		tired	exhausted	frustrated

Emoji	Image ^a	Professional/ Operational/Non- Management	Middle	Top
Emoji 15*		blushing	blushing	shy
Emoji 16*		winking	winking	joking

Note. The * indicates emojis for which differences in descriptive labels are evident.

^aApple WhatsApp images were used for the purpose of illustration.

4.5 Sentiment Analysis

For each of the research hypotheses outlined, the sentiment analyses follow, outlining the results obtained. To interpret the sentiment analyses, the p-value is examined. Should the p-value be smaller than .05 ($p < .05$), the item is regarded as being statistically significant.

Note: For the purpose of this study, due to a large number of emojis and variables being examined, in order to explore the interaction effects, a focus was placed on identifying and exploring only the most prominent differences in sentiment scores for the various emojis and variables. To aid in identifying only the most prominent differences, the error bars were used as an indicator. Should a large overlapping between the variables for each emoji be evident, those emojis were highlighted to not be further examined.

4.5.1 Sentiment Analysis for Emojis

To investigate the sentiment analysis of emojis and platforms, it is necessary to explore the possibility of an interaction effect and accordingly, Table 19 was examined. Table 19 provides the p-values for the main effects, namely, *platform*, *emoji*, and the *platform*emoji* interaction effect. For the purposes of this research, only the *emoji* effect and *platform*emoji* interaction effect was examined.

Table 19

Platform Degrees of Freedom - Satterthwaite

	Sum Sq	Mean Sq	Num DF	Den DF	F value	p value
Platform	4.97	1.66	3	5000	2.72	0.04
Emoji	5297.03	353.14	15	5086	579.45	0
Platform*emoji	103.65	2.3	45	5082	3.78	0

4.5.1.1 Emoji Effect

Before exploring whether an interaction effect is evident, the *emoji* effect was explored. The *emoji* effect provided the mean sentiment scores of the 16 emojis by ignoring the platforms and, thus, testing whether the 16 emojis were the same in terms of sentiment. Based on the p-value being smaller than .01, it was evident that the 16 emojis were not the same in terms of sentiment due to the p-value being statistically significant. Evidently, the H_0 hypothesis was rejected stating that there is no difference in the sentiment scores of the emojis. Accordingly, Addendum K and Figure 13 was examined to determine where the differences in the sentiment analyses of the emojis lie. Figure 13, provides a graphical depiction of the *emoji* effect means obtained for each of the 16 emojis.

From Figure 13, the letters shown, indicate significant differences, or not, between the respective emojis. Evidently, should a letter overlap occur when two emojis are compared, for example, emoji 9 and 3 (letter “a” overlaps), the corresponding post hoc p-values are regarded as not being statistically significant. However, should there be no overlap between two emojis compared, the difference between the emojis are regarded as being statistically significant.

Consequently, based on Figure 13, it is evident that emojis 9 and 3 were on the same level and scored the highest positive scores, significantly higher than the rest. Emojis 2 and 11 then followed in descending order, even though still maintaining a high positive score. Following emojis 2 and 11, emojis 16, 15 and 10 were viewed on the same level, but lower than emojis 2 and 11. Next, emojis 8, 12, 5 and 4 followed in descending order obtaining more neutral scores. Ensuing, emojis 7 and 1 were viewed on the same level with a negative sentiment score. Likewise, following emojis 7 and 1, emojis 1 and 13 were also on the same level but with a slightly lower

negative score than that of emojis 7 and 1. Finally, emojis 14 and 6 were viewed on the same level with the most negative sentiment score.

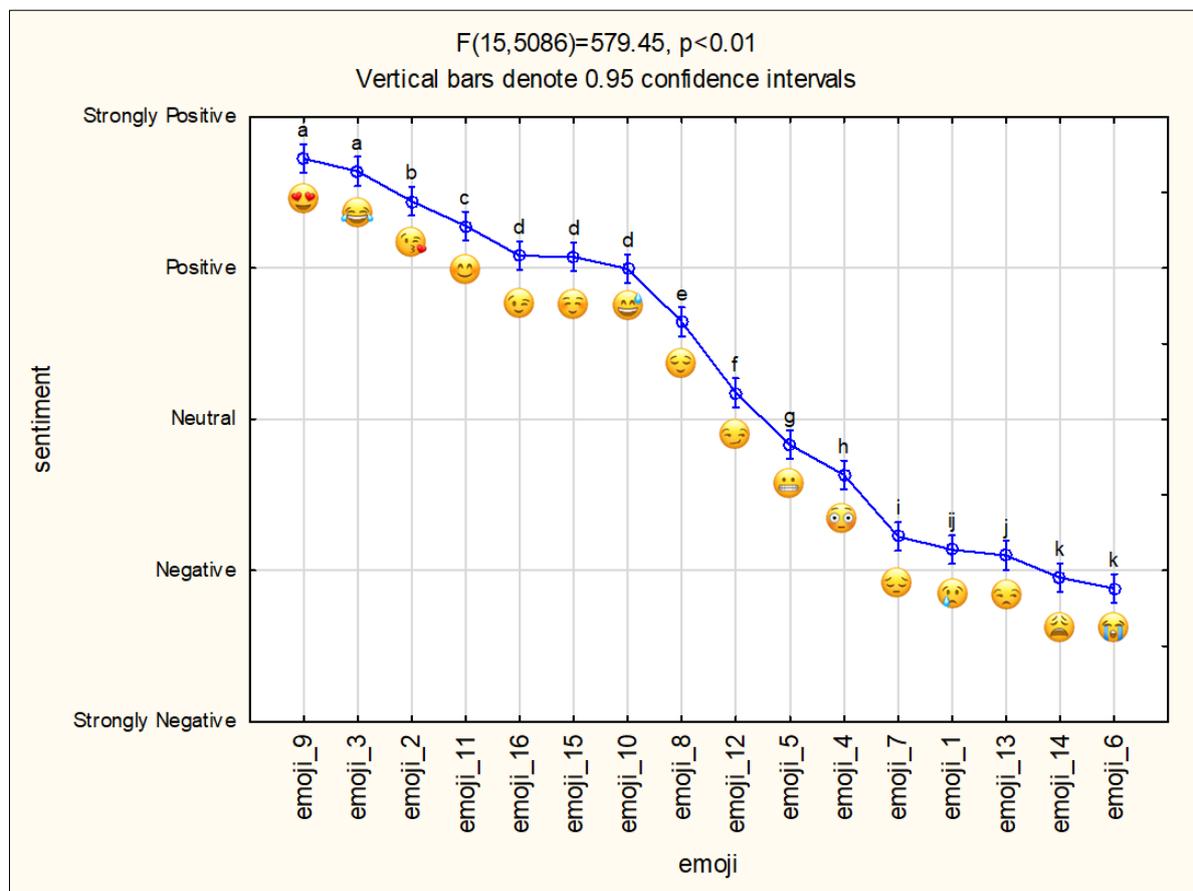


Figure 13. Emoji Effect LSD Means Graph

4.5.2 Sentiment Analysis for Emojis and Platforms

Following the examination of the *emoji* effect, the *platform*emoji* interaction effect was explored to determine whether an interaction effect was evident between the emojis and platforms or more specifically, whether the difference in emoji sentiment was dependent on the platforms. Based on Table 19 the interaction effect was found to be significant ($.00 < .05$). Thus, it was indicated that differences in emoji sentiment were platform dependent. Consequently, the H_0 hypothesis was rejected and Figure 14 and the Platform*emoji Post Hoc Table provided in Addendum L was examined to determine which platforms contributed to differences in sentiment scores of emojis.

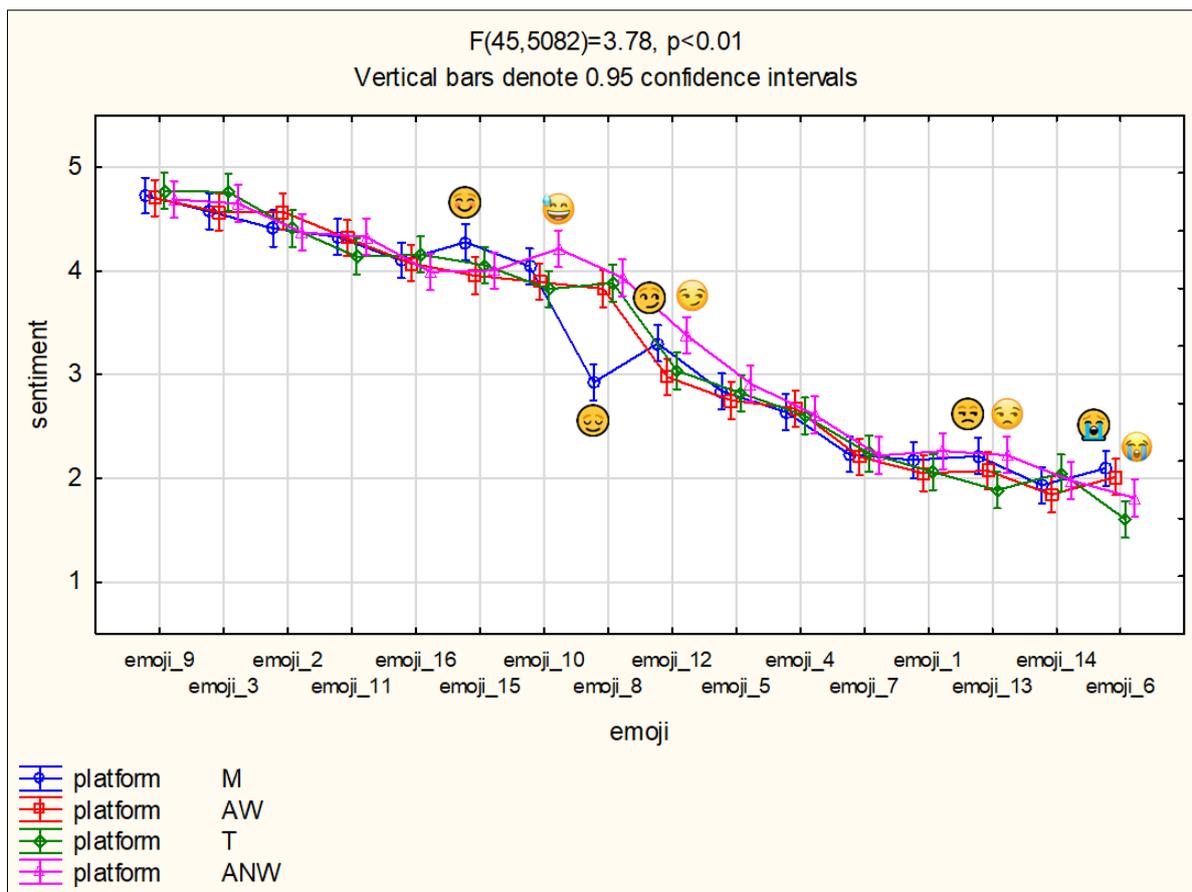


Figure 14. Platform*emoji LSD Means Graph

Based on Figure 14, the following emojis were further examined: Emojis 15, 10, 8, 12, 13 and 6. Note: The emojis illustrated relates to the results summarised in Table 20.

Table 20

Sentiment - Platform and Emoji Summary

Emoji	Image ^a	Description
Emoji 15		M () scored the emoji slightly more positive in comparison to both AW () and ANW ()
Emoji 10		ANW () scored the emoji slightly more positive in comparison to both AW () and T ()
Emoji 8		M () scored the emoji significantly more negative when compared to the other three platforms.

Emoji	Image ^a	Description
Emoji 12		Both M () and ANW () scored the emoji slightly more positive in comparison to AW () and T ().
Emoji 13		Both M () and ANW () scored the emoji slightly more positive in comparison to T ().
Emoji 6		M () scored the emoji slightly more positive in comparison to both T () and ANW (). Likewise, AW () also scored slightly more positive when compared to T ().

^aApple WhatsApp images were used for the purpose of illustration.

4.5.3 Sentiment Analysis for Emojis and Age Groups

To investigate the sentiment analysis of emojis and age groups, the possibility of an interaction effect was explored and consequently, Table 21 was examined. Table 21 provides the p-values for the main effects, namely, *age*, *emoji*, and the *age*emoji* interaction effect. For the purposes of this research, only the *age*emoji* interaction effect was examined as the focus was on investigating the influence of age groups on the interpretation of emojis.

Table 21

Age Group Degrees of Freedom - Satterthwaite

	Sum Sq	Mean Sq	Num DF	Den DF	F value	p value
Age	2.3	0.77	3	339	1.28	0.28
Emoji	2745.42	183.03	15	4909	305.39	0
Age*emoji	81.03	1.8	45	4904	3	0

4.5.3.1 Age*emoji Interaction Effect

The *age*emoji* interaction effect was explored to determine whether an interaction effect was evident between the emojis and varying age groups. More specifically, it was investigated whether the difference in emoji sentiment was dependent on age groups. Based on Table 21, the interaction effect was found to be significant ($.00 < .05$). Therefore, differences in emoji sentiment were indicated to be dependent on age groups. Consequently, the H_0 hypothesis was rejected and Figure 15 and the

Age*emoji Post Hoc Table provided in Addendum M was examined to determine which age groups contributed to differences in sentiment scores of emojis.

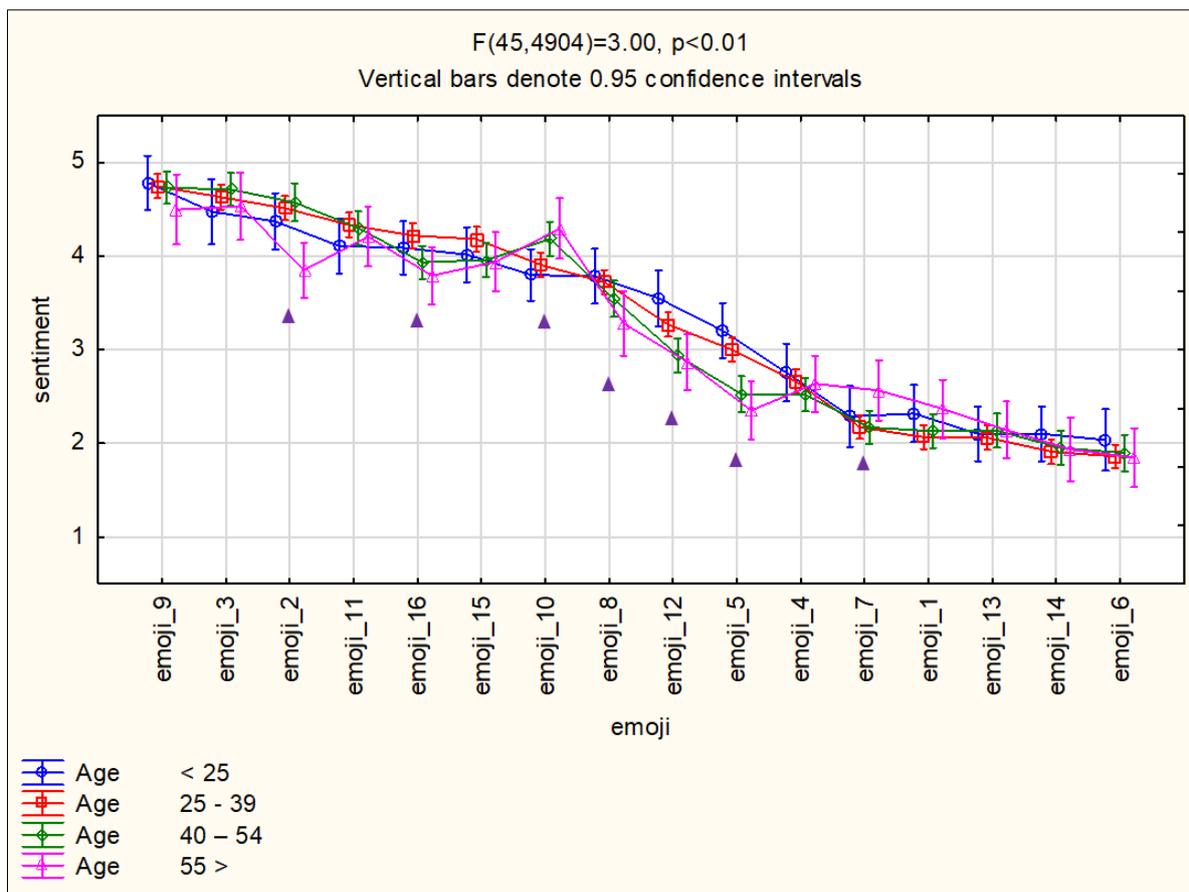


Figure 15. Age*emoji LSD Means Graph

Based on Figure 15, the following emojis were further examined: Emojis 2, 16, 10, 8, 12, 5 and 7 (illustrated with a triangle (▲)). Table 22 provides a summary of the results obtained for each emoji.

Table 22

Sentiment - Age Group and Emoji Summary

Emoji	Image ^a	Description
Emoji 2		The 55 > age group scored the emoji slightly more negative in comparison to all other age groups.
Emoji 16		The 25 – 39 age group scored the emoji slightly more positive when compared to the 40 – 54 and 55 > age groups.

Emoji	Image ^a	Description
Emoji 10		Both the 40 – 54 and 55 > age groups scored the emoji slightly more positive in comparison to the < 25 and 25 – 39 age groups.
Emoji 8		The 55 > age group scored the emoji slightly more negative when compared to the < 25 and 25 – 39 age groups.
Emoji 12		Both the 40 – 54 and 55 > age groups scored the emoji slightly more negative in comparison to the < 25 and 25 – 39 age groups.
Emoji 5		Both the 40 – 54 and 55 > age groups scored the emoji more negative in comparison to the < 25 and 25 – 39 age groups.
Emoji 7		The 55 > age group scored the emoji slightly more positive in comparison to the 25 – 39 and 40 – 54 age groups.

^aApple WhatsApp images were used for the purpose of illustration.

4.5.4 Sentiment Analysis for Emojis and Gender

To investigate the sentiment analysis of emojis and gender, the possibility of an interaction effect was explored and subsequently, Table 23 was examined. Table 23 provides the p-values for the main effects, namely, *gender*, *emoji*, and the *gender*emoji* interaction effect. For the purposes of this research, only the *gender*emoji* interaction effect was examined.

Table 23

Gender Degrees of Freedom - Satterthwaite

	Sum Sq	Mean Sq	Num DF	Den DF	F value	p value
Gender	1.42	1.42	1	335	2.34	0.13
Emoji	3925.06	261.67	15	5023	429.85	0
Gender*emoji	19.2	1.28	15	5023	2.1	0.01

4.5.4.1 Gender*emoji Interaction Effect

The *gender*emoji* interaction effect was explored to determine whether an interaction effect was evident between the emojis and gender. More specifically, it was examined whether the difference in emoji sentiment was dependent on gender. Based on Table 23, the interaction effect was found to be significant ($.01 < .05$).

Thus, differences in emoji sentiment were indicated to be gender-dependent. Consequently, the H_0 hypothesis was rejected and Figure 16 and the Gender*emoji Post Hoc Table provided in Addendum N was examined to determine which gender(s) contributed to differences in sentiment scores of emojis.

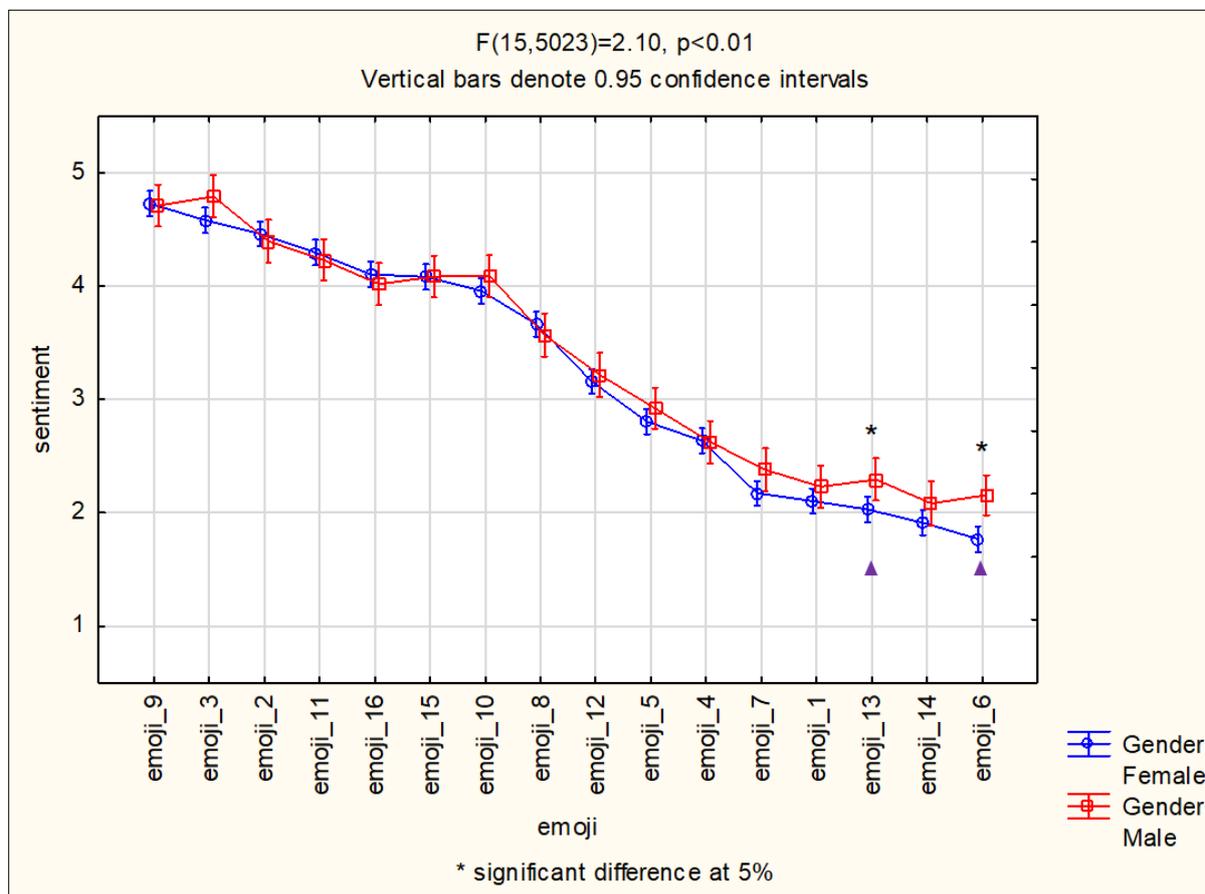


Figure 16. Gender*emoji LSD Means Graph

Based on Figure 16, the following two emojis were further examined: emoji 13 and 6 (illustrated with a triangle (▲)). Table 24 provides a summary of the results obtained for the two emojis.

Table 24

Sentiment - Gender and Emoji Summary

Emoji	Image ^a	Description
Emoji 13		Males scored the emoji significantly more positive in comparison to females.

Emoji	Image ^a	Description
Emoji 6		Males scored the emoji significantly more positive in comparison to females.

^aApple WhatsApp images were used for the purpose of illustration.

4.5.5 Sentiment Analysis for Emojis and Racial Groups

To investigate the sentiment analysis of emojis and racial groups, the possibility of an interaction effect was explored and accordingly, Table 25 was examined. Table 25 provides the p-values for the main effects, namely, *race*, *emoji*, and the *race*emoji* interaction effect. For the purposes of this research, only the *race*emoji* interaction effect was examined.

Table 25

Racial Groups Degrees of Freedom - Satterthwaite

	Sum Sq	Mean Sq	Num DF	Den DF	F value	p value
Race	1.91	0.96	2	339	1.59	0.21
Emoji	1069.51	71.3	15	4710	118.51	0
Race*emoji	41.27	1.38	30	4706	2.29	0

4.5.5.1 Race*emoji Interaction Effect

The *race*emoji* interaction effect was explored to determine whether an interaction effect was evident between the emojis and varying racial groups. More specifically, it was investigated whether the difference in emoji sentiment was dependent on racial groups. Based on Table 25, the interaction effect was found to be significant ($.00 < .05$). Thus, differences in emoji sentiment were indicated to be racial group dependent. Evidently, the H_0 hypothesis was rejected and Figure 17 and the Race*emoji Post Hoc Table provided in Addendum O was examined to determine which racial groups contributed to differences in sentiment scores of emojis.

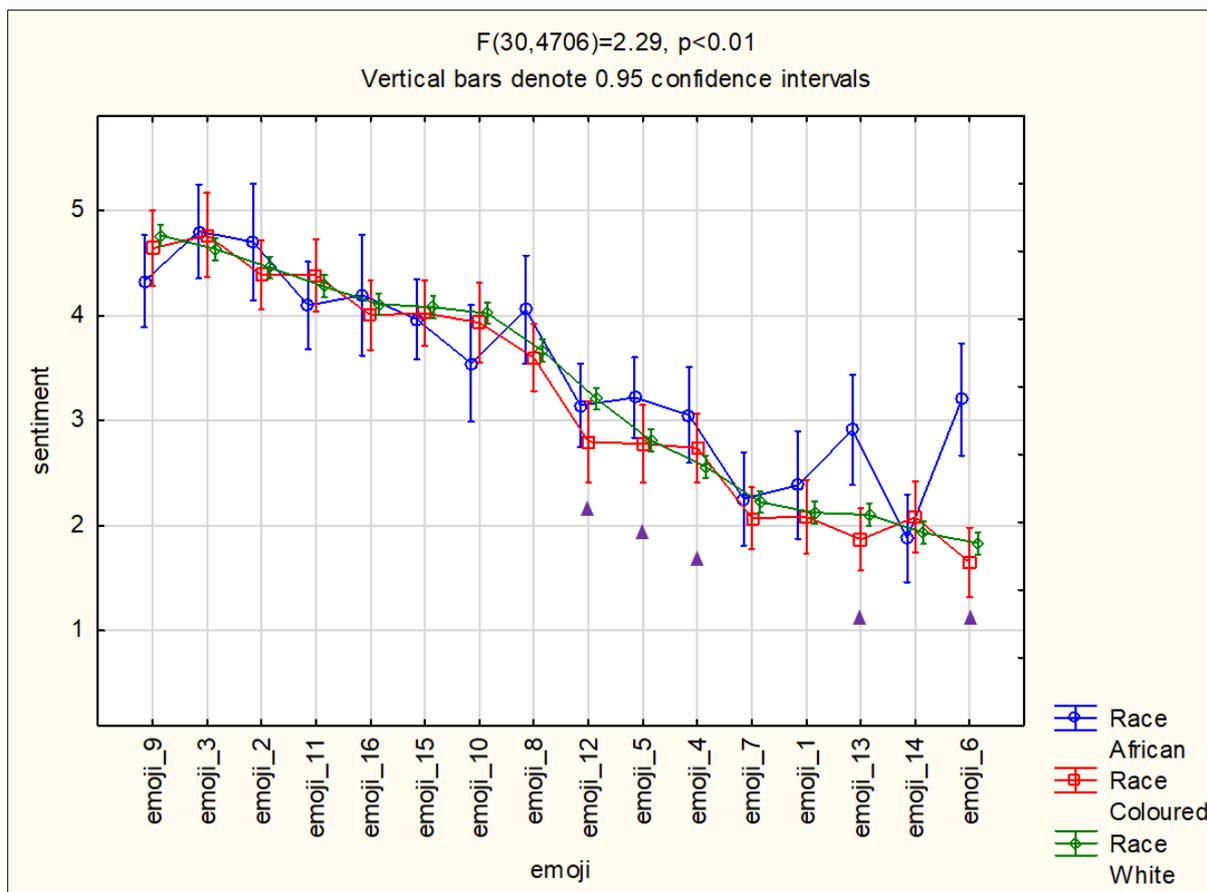


Figure 17. Race*emoji LSD Means Graph

Based on Figure 17, the following emojis were further examined: Emojis 12, 5, 4, 13 and 6 (illustrated with a triangle (▲)). Table 26 provides a summary of the results obtained for the emojis.

Table 26

Sentiment - Racial Groups and Emoji Summary

Emoji	Image ^a	Description
Emoji12		The Coloured racial group scored the emoji to be slightly more negative in comparison to the African and White racial groups.
Emoji 5		The African racial group scored the emoji to be more positive in comparison to the White racial group.
Emoji 4		The African racial group scored the emoji to be more positive in comparison to the White racial group.

Emoji	Image ^a	Description
Emoji 13		The African racial group scored the emoji to be significantly more positive in comparison to both the African and White racial groups.
Emoji 6		The African racial group scored the emoji to be significantly more positive in comparison to both the African and White racial groups.

^aApple WhatsApp images were used for the purpose of illustration.

4.5.6 Sentiment Analysis for Emojis and Industries

To investigate the sentiment analysis of emojis and industries of work, Table 27 was examined in order to explore whether an interaction effect was evident. Based on the p-values provided for the *industry_of_work*emoji* interaction effect, it was concluded that sentiment differences in emojis were not dependent on industries of work due to the p-value not being statistically significant. Hence, in terms of sentiment, no further analyses for emojis and industries of work were performed.

Table 27

Industry of Work Degrees of Freedom - Satterthwaite

	Sum Sq	Mean Sq	Num DF	Den DF	F value	p value
Industry_of_work	0.73	0.73	1	281	1.16	0.28
Emoji	1149.82	76.65	15	3881	122.43	0
Industry_of_work*emoji	12.17	0.81	15	3881	1.3	0.2

4.5.7 Sentiment Analysis for Emojis and Hierarchy Levels

To investigate the sentiment analysis of emojis and hierarchy levels, the possibility of an interaction effect was explored and consequently, Table 28 was examined. Table 28 provides the p-values for the main effects, namely, *hierarchy*, *emoji* and the *hierarchy*emoji* interaction effect. For the purposes of this research, only the *hierarchy*emoji* interaction effect was examined.

Table 28

Hierarchy Level Degrees of Freedom - Satterthwaite

	Sum Sq	Mean Sq	Num DF	Den DF	F value	p value
Hierarchy	2.85	1.43	2	315	2.34	0.1
Emoji	2799.38	186.63	15	4618	305.95	0
Hierarchy*emoji	36.84	1.23	30	4614	2.01	0

4.5.7.1 Hierarchy*emoji Interaction Effect

The *hierarchy*emoji* interaction effect was explored to determine whether an interaction effect was evident between the emojis and hierarchy levels. More specifically, it was investigated whether the difference in emoji sentiment was dependent on hierarchy levels. Based on Table 28, the interaction effect was found to be significant ($.00 < .05$). Subsequently, differences in emoji sentiment were indicated to be dependent on hierarchy level.

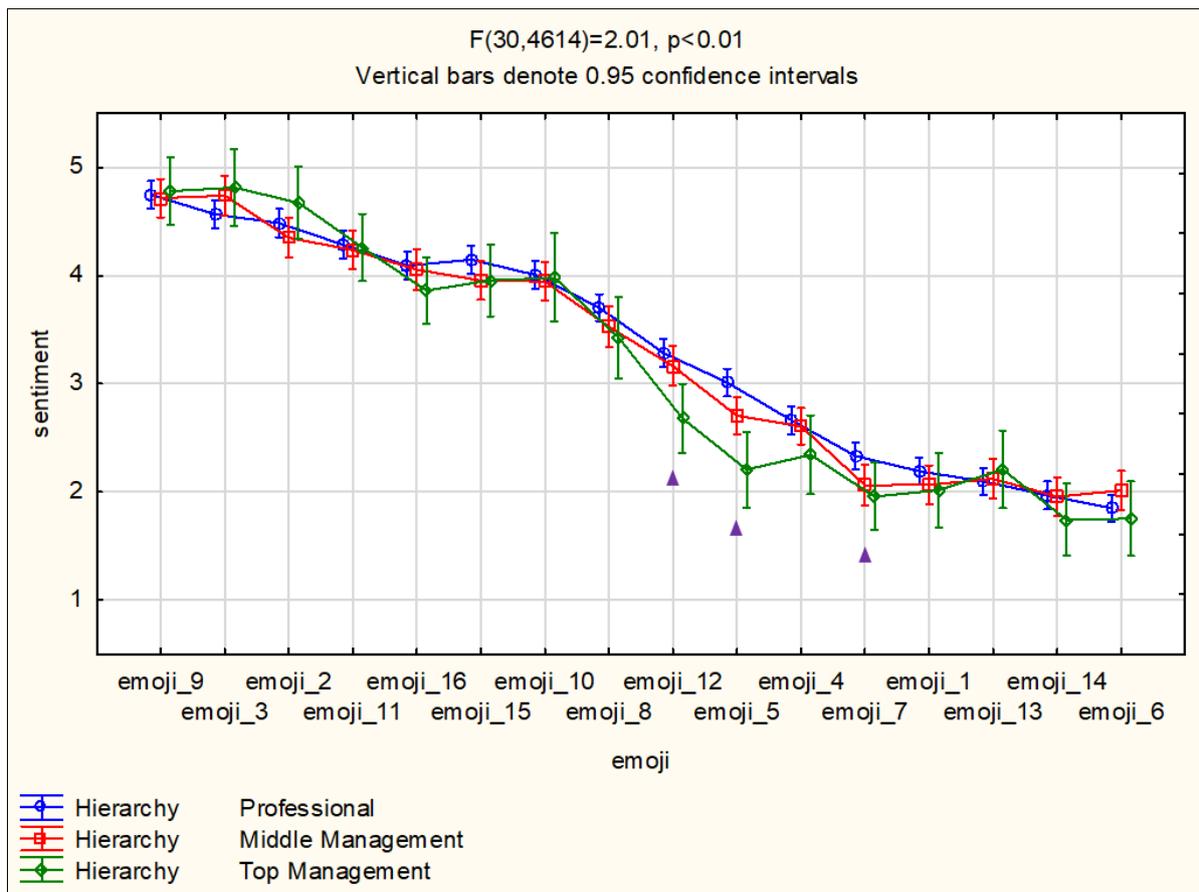


Figure 18. Hierarchy*emoji LSD Means Graph

Evidently, the H_0 hypothesis was rejected and Figure 18 and the Hierarchy*emoji Post Hoc Table provided in Addendum P was examined to determine which hierarchy levels contributed to differences in sentiment scores of emojis. Based on Figure 18, the following emojis were further examined: Emojis 12, 5 and 7 (illustrated with a triangle (▲)). Table 29 provides a summary of the results obtained for the emojis.

Table 29

Sentiment - Hierarchy Level and Emoji Summary

Emoji	Image ^a	Description
Emoji 12		The Top Management level scored the emoji more negative in comparison to the Professional and Middle Management levels.
Emoji 5		Both the Top Management as well as Middle Management level scored the emoji more negative in comparison to the Professional Level – with Top Management scoring even more negative than Middle Management.
Emoji 7		The Professional Level scored the emoji slightly more positive in comparison to the Top and Middle Management levels.

^aApple WhatsApp images were used for the purpose of illustration.

4.6 Results Summarised

From the aforementioned information outlining the results obtained for both the semantic and sentiment analyses for each of the respective emojis, the section which follows summarises the results and findings obtained per emoji, per research objective.

4.6.1 Emoji and Platform Interpretation Summary

Based on the semantic and sentiment analyses performed for emojis and platforms, Table 30 summarises the results and findings obtained for the emojis examined. From Table 30, it was evident that from the 16 emojis examined no interpretation differences across platforms were identified for 5 of the emojis. These emojis included emojis 1 – 3, 7 and 9. For semantic interpretation, 5 emojis indicated differences in interpretation without any sentiment interpretation differences. These

emojis included emojis 4, 5, 11, 14 and 16. Similarly, for sentiment interpretation, 2 emojis, namely emojis 6 and 10, indicated differences in interpretation without any semantic interpretation differences.

Based on the remaining emojis, differences in interpretation for both semantics and sentiment were identified, indicating significant interpretation differences across platforms. These emojis included emojis 8, 12, 13 and 15. Hence, it was concluded, that across platforms, interpretation differences occurred for 68.75% of the emojis. Evidently, the null hypothesis for emojis and platform interpretations was rejected.

Table 30

*Platform*Emoji Interpretation Summary*

Emoji	Image ^a	Semantic findings	Sentiment findings
Emoji 1		<i>No semantic interpretation differences were obtained.</i>	<i>No sentiment interpretation differences were obtained.</i>
Emoji 2		<i>No semantic interpretation differences were obtained.</i>	<i>No sentiment interpretation differences were obtained.</i>
Emoji 3		<i>No semantic interpretation differences were obtained.</i>	<i>No sentiment interpretation differences were obtained.</i>
Emoji 4		M: shocked AW: shocked T: embarrassed ANW: shocked	<i>No sentiment interpretation differences were obtained.</i>
Emoji 5		M: nervous AW: excited T: scared ANW: nervous	<i>No sentiment interpretation differences were obtained.</i>
Emoji 6		<i>No semantic interpretation differences were obtained.</i>	M () scored the emoji slightly more positive in comparison to both T () and ANW (). Likewise, AW () also scored slightly more positive when compared to T ().

Emoji	Image ^a	Semantic findings	Sentiment findings
Emoji 7		<i>No semantic interpretation differences were obtained.</i>	<i>No sentiment interpretation differences were obtained.</i>
Emoji 8		M: tired AW: content T: content ANW: content	M () scored the emoji significantly more negative when compared to the other three platforms.
Emoji 9		<i>No semantic interpretation differences were obtained.</i>	<i>No sentiment interpretation differences were obtained.</i>
Emoji 10		<i>No semantic interpretation differences were obtained.</i>	ANW () scored the emoji slightly more positive in comparison to both AW () and T ().
Emoji 11		M: smiling AW: happy T: blushing ANW: happy	<i>No sentiment interpretation differences were obtained.</i>
Emoji 12		M: ponder AW: neverminded T: smirking ANW: smirking	Both M () and ANW () scored the emoji slightly more positive in comparison to AW () and T ().
Emoji 13		M: annoyed AW: irritated T: angry ANW: disgusted	Both M () and ANW () scored the emoji slightly more positive in comparison to T ().
Emoji 14		M: tired AW: frustrated T: unhappy ANW: hopeless	<i>No sentiment interpretation differences were obtained.</i>

Emoji	Image ^a	Semantic findings	Sentiment findings
Emoji 15		M: happy AW: shy T: blushing ANW: happy	M () scored the emoji slightly more positive in comparison to both AW () and ANW ().
Emoji 16		M: winking AW: joking T: winking ANW: winking	<i>No sentiment interpretation differences were obtained.</i>

^aApple WhatsApp images were used for the purpose of illustration.

4.6.2 Emoji and Age Group Interpretation Summary

Based on the semantic and sentiment analyses performed for emojis and age groups, Table 31 summarises the results and findings obtained for the 16 emojis. Based on Table 31 it was evident that from the 16 emojis, only two emojis did not indicate any differences in interpretation. These emojis included emojis 1 and 6. For semantic interpretation, 7 emojis indicated differences in interpretation without any sentiment interpretation differences. These emojis included emojis 3, 4, 9, 11, 13, 14 and 15. Likewise, for sentiment interpretation, only 1 emoji, namely emoji 8, indicated differences in interpretation without any semantic interpretation differences.

Regarding the remaining emojis, differences in interpretation for both semantics and sentiment were identified, indicating significant interpretation differences across age groups. These emojis included emojis 2, 5, 7, 10, 12 and 16. Thus, it was concluded, that across age groups, interpretation differences occurred for 87.5% of the emojis. Consequently, the null hypothesis for emojis and age group interpretations was rejected.

Table 31

*Age*Emoji Interpretation Summary*

Emoji	Image ^a	Semantic findings	Sentiment findings
Emoji 1		<i>No semantic interpretation differences were obtained.</i>	<i>No sentiment interpretation differences were obtained.</i>

Emoji	Image ^a	Semantic findings	Sentiment findings
Emoji 2		25 <: Kiss 25 – 39: Kiss 40 – 54: love 55 >: affection	The 55 > age group scored the emoji slightly more negative in comparison to all other age groups.
Emoji 3		25 <: laughing 25 – 39: laughing 40 – 54: funny 55 >: laughing until you cry	<i>No sentiment interpretation differences were obtained.</i>
Emoji 4		25 <: shocked 25 – 39: shocked 40 – 54: shocked 55 >: surprised	<i>No sentiment interpretation differences were obtained.</i>
Emoji 5		25 <: stressed 25 – 39: excited 40 – 54: frustrated 55 >: angry	Both the 40 – 54 and 55 > age groups scored the emoji more negative in comparison to the < 25 and 25 – 39 age groups.
Emoji 6		<i>No semantic interpretation differences were obtained.</i>	<i>No sentiment interpretation differences were obtained.</i>
Emoji 7		25 <: disappointed 25 – 39: disappointed 40 – 54: disappointed 55 >: sympathetic	The 55 > age group scored the emoji slightly more positive in comparison to the 25 – 39 and 40 – 54 age groups.
Emoji 8		<i>No semantic interpretation differences were obtained.</i>	The 55 > age group scored the emoji slightly more negative when compared to the < 25 and 25 – 39 age groups.
Emoji 9		25 <: in love 25 – 39: in love 40 – 54: love 55 >: love	<i>No sentiment interpretation differences were obtained.</i>

Emoji	Image ^a	Semantic findings	Sentiment findings
Emoji 10		25 <: humorous 25 – 39: relieved 40 – 54: relieved 55 >: relieved	Both the 40 – 54 and 55 > age groups scored the emoji slightly more positive in comparison to the < 25 and 25 – 39 age groups.
Emoji 11		25 <: smiling 25 – 39: happy 40 – 54: happy 55 >: happy	<i>No sentiment interpretation differences were obtained.</i>
Emoji 12		25 <: smug 25 – 39: smirking 40 – 54: ponder 55 >: thinking	Both the 40 – 54 and 55 > age groups scored the emoji slightly more negative in comparison to the < 25 and 25 – 39 age groups.
Emoji 13		25 <: annoyed 25 – 39: annoyed 40 – 54: disgusted 55 >: unhappy	<i>No sentiment interpretation differences were obtained.</i>
Emoji 14		25 <: tired 25 – 39: frustrated 40 – 54: unhappy 55 >: frustrated	<i>No sentiment interpretation differences were obtained.</i>
Emoji 15		25 <: blushing 25 – 39: blushing 40 – 54: blushing 55 >: shy	<i>No sentiment interpretation differences were obtained.</i>
Emoji 16		25 <: cheeky 25 – 39: winking 40 – 54: winking 55 >: playful	The 25 – 39 age group scored the emoji slightly more positive when compared to the 40 – 54 and 55 > age groups.

^aApple WhatsApp images were used for the purpose of illustration.

4.6.3 Emoji and Gender Interpretation Summary

Based on the semantic and sentiment analyses performed for emojis and genders, Table 32 summarises the results and findings obtained for the 16 emojis. Based on Table 32 it was evident that from the 16 emojis examined, no interpretation differences between males and females were identified for 10 of the emojis. These emojis included emojis 1 – 4, 7 – 11 as well as 16. For semantic interpretation, 4 emojis indicated differences in interpretation without any sentiment interpretation differences. These emojis included emojis 5, 12, 14 and 15. Similarly, for sentiment interpretation, only 1 emoji, namely emoji 6, indicated differences in interpretation without any semantic interpretation differences.

In terms of the remaining emojis, differences in interpretation for both semantics and sentiment were identified, indicating significant interpretation differences across gender groups. This emoji included emoji 13. Thus, it was concluded, that across genders, interpretation differences occurred for 37.5% of the emojis. Evidently, the null hypothesis for emojis and gender interpretations was rejected.

Table 32

*Gender*Emoji Interpretation Summary*

Emoji	Image ^a	Semantic findings	Sentiment findings
Emoji 1		<i>No semantic interpretation differences were obtained.</i>	<i>No sentiment interpretation differences were obtained.</i>
Emoji 2		<i>No semantic interpretation differences were obtained.</i>	<i>No sentiment interpretation differences were obtained.</i>
Emoji 3		<i>No semantic interpretation differences were obtained.</i>	<i>No sentiment interpretation differences were obtained.</i>
Emoji 4		<i>No semantic interpretation differences were obtained.</i>	<i>No sentiment interpretation differences were obtained.</i>
Emoji 5		Males: angry Females: excited	<i>No sentiment interpretation differences were obtained.</i>
Emoji 6		<i>No semantic interpretation differences were obtained.</i>	Males scored the emoji significantly more positive in comparison to females.

Emoji	Image ^a	Semantic findings	Sentiment findings
Emoji 7		<i>No semantic interpretation differences were obtained.</i>	<i>No sentiment interpretation differences were obtained.</i>
Emoji 8		<i>No semantic interpretation differences were obtained.</i>	<i>No sentiment interpretation differences were obtained.</i>
Emoji 9		<i>No semantic interpretation differences were obtained.</i>	<i>No sentiment interpretation differences were obtained.</i>
Emoji 10		<i>No semantic interpretation differences were obtained.</i>	<i>No sentiment interpretation differences were obtained.</i>
Emoji 11		<i>No semantic interpretation differences were obtained.</i>	<i>No sentiment interpretation differences were obtained.</i>
Emoji 12		Males: neverminded Females: smirking	<i>No sentiment interpretation differences were obtained.</i>
Emoji 13		Males: disinterested Females: annoyed	Males scored the emoji significantly more positive in comparison to females.
Emoji 14		Males: tired Females: hopeless	<i>No sentiment interpretation differences were obtained.</i>
Emoji 15		Males: happy Females: blushing	<i>No sentiment interpretation differences were obtained.</i>
Emoji 16		<i>No semantic interpretation differences were obtained.</i>	<i>No sentiment interpretation differences were obtained.</i>

^aApple WhatsApp images were used for the purpose of illustration.

4.6.4 Emoji and Racial Groups Interpretation Summary

Based on the semantic and sentiment analyses performed for emojis and racial categories, Table 33 summarises the results and findings obtained for the 16 emojis. From Table 33 it was evident that, across racial groups, only three emojis did not indicate any differences in interpretation. These emojis included emojis 1, 15 and 16. For semantic interpretation, 8 emojis indicated differences in interpretation without any sentiment interpretation differences. Likewise, for sentiment interpretation, 1 emoji, namely emoji 6, indicated differences in interpretation without any semantic interpretation differences.

Based on the remaining emojis, differences in interpretation for both semantics and sentiment were identified, indicating significant interpretation differences across racial groups. These emojis included emojis 4, 5, 12 and 13. Thus, it was concluded, that across racial groups, interpretation differences occurred for 81.25% of the emojis. Consequently, the null hypothesis for emojis and racial category interpretations was rejected.

Table 33

*Racial Category*Emoji Interpretation Summary*

Emoji	Image ^a	Semantic findings	Sentiment findings
Emoji 1		<i>No semantic interpretation differences were obtained.</i>	<i>No sentiment interpretation differences were obtained.</i>
Emoji 2		African: love Coloured: kiss White: kiss	<i>No sentiment interpretation differences were obtained.</i>
Emoji 3		African: laughing Coloured: laughing till you cry White: laughing	<i>No sentiment interpretation differences were obtained.</i>
Emoji 4		African: surprised Coloured: shocked White: shocked	The African racial group scored the emoji to be more positive in comparison to the White racial group.
Emoji 5		African: smiling Coloured: nervous White: excited	The African racial group scored the emoji to be more positive in comparison to the White racial group.
Emoji 6		<i>No semantic interpretation differences were obtained.</i>	The African racial group scored the emoji to be significantly more positive in comparison to both the African and White racial groups.

Emoji	Image ^a	Semantic findings	Sentiment findings
Emoji 7		African: sad Coloured: disappointed White: disappointed	<i>No sentiment interpretation differences were obtained.</i>
Emoji 8		African: disinterested Coloured: content White: content	<i>No sentiment interpretation differences were obtained.</i>
Emoji 9		African: love Coloured: in love White: in love	<i>No sentiment interpretation differences were obtained.</i>
Emoji 10		African: awkward Coloured: relieved White: relieved	<i>No sentiment interpretation differences were obtained.</i>
Emoji 11		African: blushing Coloured: smiling White: happy	<i>No sentiment interpretation differences were obtained.</i>
Emoji 12		African: smirking Coloured: neverminded White: ponder	The Coloured racial group scored the emoji to be slightly more negative in comparison to the African and White racial groups.
Emoji 13		African: annoyed Coloured: irritated White: annoyed	The African racial group scored the emoji to be significantly more positive in comparison to both the African and White racial groups.
Emoji 14		African: exhausted Coloured: tired White: frustrated	<i>No sentiment interpretation differences were obtained.</i>
Emoji 15		<i>No semantic interpretation differences were obtained.</i>	<i>No sentiment interpretation differences were obtained.</i>
Emoji 16		<i>No semantic interpretation differences were obtained.</i>	<i>No sentiment interpretation differences were obtained.</i>

^aApple WhatsApp images were used for the purpose of illustration.

4.6.5 Emoji and Industry of Work Interpretation Summary

Based on the semantic and sentiment analyses performed for emojis and industries of work (sectors), Table 34 summarises the results and findings obtained for the 16 emojis. From Table 34, it was evident that from the 16 emojis examined, no interpretation differences between the two industry sectors were identified for 10 of the emojis. These emojis included emojis 2 – 4, 6 – 11 and 16. For semantic interpretation, 6 emojis indicated differences in interpretation without any sentiment interpretation differences. However, for sentiment interpretation, overall, no sentiment interpretation differences were identified.

Thus, across industry sectors, based on the semantic interpretation differences, 37.5% of the emojis indicated interpretation differences. Consequently, even though no sentiment interpretation differences occurred, the null hypothesis was still rejected for emojis and industry of work interpretations seeing as semantic interpretation differences were identified.

Table 34

*Industry of Work*Emoji Interpretation Summary*

Emoji	Image ^a	Semantic findings	Sentiment findings
Emoji 1		Secondary: remorse Tertiary: sad	<i>No sentiment interpretation differences were obtained.</i>
Emoji 2		<i>No semantic interpretation differences were obtained.</i>	<i>No sentiment interpretation differences were obtained.</i>
Emoji 3		<i>No semantic interpretation differences were obtained.</i>	<i>No sentiment interpretation differences were obtained.</i>
Emoji 4		<i>No semantic interpretation differences were obtained.</i>	<i>No sentiment interpretation differences were obtained.</i>
Emoji 5		Secondary: oops Tertiary: nervous	<i>No sentiment interpretation differences were obtained.</i>
Emoji 6		<i>No semantic interpretation differences were obtained.</i>	<i>No sentiment interpretation differences were obtained.</i>
Emoji 7		<i>No semantic interpretation differences were obtained.</i>	<i>No sentiment interpretation differences were obtained.</i>

Emoji	Image ^a	Semantic findings	Sentiment findings
Emoji 8		<i>No semantic interpretation differences were obtained.</i>	<i>No sentiment interpretation differences were obtained.</i>
Emoji 9		<i>No semantic interpretation differences were obtained.</i>	<i>No sentiment interpretation differences were obtained.</i>
Emoji 10		<i>No semantic interpretation differences were obtained.</i>	<i>No sentiment interpretation differences were obtained.</i>
Emoji 11		<i>No semantic interpretation differences were obtained.</i>	<i>No sentiment interpretation differences were obtained.</i>
Emoji 12		Secondary: neverminded Tertiary: ponder	<i>No sentiment interpretation differences were obtained.</i>
Emoji 13		Secondary: sceptical Tertiary: annoyed	<i>No sentiment interpretation differences were obtained.</i>
Emoji 14		Secondary: frustrated Tertiary: tired	<i>No sentiment interpretation differences were obtained.</i>
Emoji 15		Secondary: shy Tertiary: blushing	<i>No sentiment interpretation differences were obtained.</i>
Emoji 16		<i>No semantic interpretation differences were obtained.</i>	<i>No sentiment interpretation differences were obtained.</i>

^aApple WhatsApp images were used for the purpose of illustration.

4.6.6 Emoji and Hierarchy Level Interpretation Summary

Based on the semantic and sentiment analyses performed for emojis and hierarchy levels, Table 35 summarises the results and findings obtained for the 16 emojis. From Table 35 it was evident that from the emojis examined, 5 emojis did not indicate any differences in interpretation across hierarchy levels. These emojis included emojis 1, 4, 8, 10 and 11. For semantic interpretation, 8 emojis indicated differences in interpretation without any sentiment interpretation differences. These emojis included emojis 2, 3, 6, 9 and 13 – 16. Likewise, for sentiment interpretation, no emojis indicated differences in interpretation without any semantic interpretation differences.

Based on the remaining emojis, differences in interpretation for both semantics and sentiment were identified, indicating significant interpretation differences across hierarchy levels. These emojis included emojis 5, 7 and 12. Thus, it was concluded, that across hierarchy levels, interpretation differences occurred for 68.75% of the emojis. Consequently, the null hypothesis for emojis and hierarchy level interpretations was rejected.

Table 35

*Hierarchy Level*Emoji Interpretation Summary*

Emoji	Image ^a	Semantic findings	Sentiment findings
Emoji 1		<i>No semantic interpretation differences were obtained.</i>	<i>No sentiment interpretation differences were obtained.</i>
Emoji 2		Professional: kiss Middle: love Top: kiss	<i>No sentiment interpretation differences were obtained.</i>
Emoji 3		Professional: laughing Middle: laughing Top: funny	<i>No sentiment interpretation differences were obtained.</i>
Emoji 4		<i>No semantic interpretation differences were obtained.</i>	<i>No sentiment interpretation differences were obtained.</i>
Emoji 5		Professional: excited Middle: oops Top: angry	Both the Top Management as well as Middle Management level scored the emoji more negative in comparison to the Professional Level – with Top Management scoring even more negative than Middle Management.
Emoji 6		Professional: crying Middle: crying Top: devastated	<i>No sentiment interpretation differences were obtained.</i>

Emoji	Image ^a	Semantic findings	Sentiment findings
Emoji 7		Professional: disappointed Middle: disappointed Top: unhappy	The Professional Level scored the emoji slightly more positive in comparison to the Top and Middle Management levels.
Emoji 8		<i>No semantic interpretation differences were obtained.</i>	<i>No sentiment interpretation differences were obtained.</i>
Emoji 9		Professional: in love Middle: love Top: in love	<i>No sentiment interpretation differences were obtained.</i>
Emoji 10		<i>No semantic interpretation differences were obtained.</i>	<i>No sentiment interpretation differences were obtained.</i>
Emoji 11		<i>No semantic interpretation differences were obtained.</i>	<i>No sentiment interpretation differences were obtained.</i>
Emoji 12		Professional: smirking Middle: neverminded Top: ponder	The Top Management level scored the emoji more negative in comparison to the Professional and Middle Management levels.
Emoji 13		Professional: annoyed Middle: annoyed Top: unhappy	<i>No sentiment interpretation differences were obtained.</i>
Emoji 14		Professional: tired Middle: exhausted Top: frustrated	<i>No sentiment interpretation differences were obtained.</i>
Emoji 15		Professional: blushing Middle: blushing Top: shy	<i>No sentiment interpretation differences were obtained.</i>
Emoji 16		Professional: winking Middle: winking Top: joking	<i>No sentiment interpretation differences were obtained.</i>

^aApple WhatsApp images were used for the purpose of illustration.

4.7 Chapter Four Summary

In this chapter, the results and findings of the statistical data analyses were reported and discussed. The subsequent chapter provides a discussion on the implications of the research findings obtained, practical recommendations, a discussion outlining the limitations of the study as well as recommendations for future research.

CHAPTER 5

IMPLICATIONS AND RECOMMENDATIONS FOR FUTURE RESEARCH

The final chapter outlines the implications of the research findings, practical recommendations, limitations as well as recommendations for future research.

5.1 Discussion and Implications of Research Findings

For each of the respective variables of interest, a discussion follows, focussing on the research objectives outlined. Based on the outcomes of the research objectives, the impact on the overall research question posed was explored.

5.1.1 Differing Communication Platforms

As was outlined by literature studies, due to emoji fonts differing on platforms rendered, the appearances of emojis may vary extensively across platforms. Based on a study done by Chang et al. (2016), it was found that differences in the interpretation of emojis exist between five of the major mobile platforms, namely Google, Microsoft, Apple, Samsung, and LG.

Due to this study focusing on organisational communication and the potential influence of varying emoji interpretations, the focus was placed on exploring emoji interpretations across four organisational text-based communication platforms namely WhatsApp (Apple and Android), Twitter and Microsoft Office. Accordingly, the research objective included determining whether differences in the interpretation of emojis occurred across the four organisational communication platforms.

Subsequently, through making use of survey methodology and CA and mixed-method ANOVA analysis techniques (whereby a focus was placed on measuring the semantics and sentiment of the respective emojis), the interpretation of emojis across four organisational communication platforms, as well as numerous demographic variables, were examined. When referring to section 4.6.1, based on the findings of this study, it was confirmed that emoji interpretations differences do occur across the four platforms explored, affirming the conclusions drawn by Bai et al. (2019) and Chang et al. (2016). Consequently, for the differing communication platform variable, the research objective was achieved and the corresponding null hypothesis was rejected.

5.1.2 Age

Based on research relating to age groups and the categorisation of age groups into five generations (Krohn, 2004), a gap in current published research was identified relating to whether employed individuals part of varying age groups differ in their interpretation of emojis. Subsequently, the research objective for this study included determining whether differences across age groups in the interpretation of emojis occur. By examining the interpretation of emojis across various age groups, this study found that interpretation differences do occur across age groups as outlined in section 4.6.2. Evidently, for the age group variable, the research objective was achieved and the corresponding null hypothesis was rejected.

5.1.3 Gender

Due to gender being regarded as forming a central element in the analysis of emotions in the workplace (Bennie & Huang, 2010; Brescoll, 2016; Ollilainen, 2000), for this study, the gender variable was examined.

With reference to gender and emoticons and emojis, previous studies focused primarily on the use of emoticons between genders whereby it was confirmed that males and females differ in why and how often they use emoticons (Bai et al., 2019; Bos et al., 2008; Huang et al., 2008 & Wolf, 2000). As a void currently exists within current published research, for this study, however, the focus was placed on the interpretation of emojis between males and females. Evidently, the research objective included determining whether gender differences in the interpretation of emojis occur between males and females.

Based on section 4.6.3, this study identified that for males and females, interpretation differences of emojis do occur. Even though it was only identified for 37.5% of the emojis, differences were evident and consequently, the gender variable research objective was achieved and the corresponding null hypothesis was rejected.

5.1.4 Racial Groups

Based on previous research studies which explored the impact of culture on the interpretation of emojis, it was confirmed that for some emoticons and emojis used, interpretation differences did occur (Bai et al., 2019; Koda, 2004). Due to emojis

being increasingly used within organisational communication, as well as based on the significant impact of culture on organisational communication and the need outlined by Chang et al. (2016) to explore cultural differences as a demographic variable, the influence of racial groups on the interpretation of emojis was further examined. Hence, for this study, the research objective included determining whether racial group differences in the interpretation of emojis occur.

With reference to section 4.6.4, this study affirmed the conclusions drawn by Koda (2004), in that, across racial groups, interpretation differences of emojis did occur. Evidently, this led to the racial group variable's research objective being achieved and the corresponding null hypothesis being rejected.

5.1.5 Industry of Work

In recent years, in order to ensure an emotional connection between brands and customers, various brands have begun using emojis as a means of obtaining this connection (Hutchinson, 2015; Urban, 2016). Great controversy also exists in terms of whether emoticons and emojis should be used within organisational communication for varying industries of work (Brooke, 2016). Evidently, when exploring the influence of emojis on industries of work, a gap in current published research also exists in terms of whether emojis are interpreted differently across various industries of work. Hence, for this study, the research objective included determining whether industry differences in the interpretation of emojis occur.

When examining the findings of this study in section 4.6.5, it was identified that even though no sentiment differences in the interpretation of emojis were found, based on semantic interpretations, differences were however identified. Consequently, the industry of work variable's research objective was achieved and the corresponding null hypothesis was rejected.

5.1.6 Hierarchy Level

Finally, in terms of hierarchy level, previous research done by Holtgraves (2011) concluded that degrees of closeness, as well as the nature of relationships between individuals, influence the frequency of use of emoticons. Accordingly, this study furthermore aimed to explore whether hierarchy level has an impact on the

interpretation of emojis and subsequently, the research objective included determining whether hierarchy level differences in the interpretation of emojis occur.

Based on the relevant research findings of this study outlined in section 4.6.6, significant emoji interpretation differences across hierarchy levels were identified. As such, the hierarchy level research objective was thus achieved and the corresponding null hypothesis was rejected.

When taking the above-mentioned into consideration, with emoji usage having shown to rapidly increase worldwide, this study focused on the interpretation of emojis and the potential influence on organisational text-based CMC. Based on the study results, it was not only indicated that approximately 50% of respondents make use of emojis during formal communication (which further highlights the significant importance of having insight and understanding regarding the interpretation thereof), but, based on the six variables examined, emoji interpretation differences were identified for each of the six variables. Hence, interpretation differences for emojis were not only identified across platforms, but also across age groups, genders, racial categories, industries of work as well as hierarchy levels.

Overall, the main aim of this research study was thus achieved, in that increased insight was obtained in terms of exploring emoji interpretations across six variables which possibly impact organisational communication. Due to all six null hypotheses being rejected, this study could be viewed as providing a valuable contribution towards the understanding of how to more effectively use and interpret emojis within organisational communication.

Research has shown that interpretation differences could potentially have an adverse impact on communication, resulting in misinterpretation and ultimately, miscommunication between the sender and receiver. Evidently, due to the variables of interest forming an integral part of organisational composition and operations globally, it is evident that increased organisational attention and focus should be directed towards addressing these findings.

5.1.7 Implication Overview

The results of the study proved to have a significant impact on organisations worldwide as strategic organisational measures are required in order to avoid and/or

prevent miscommunication which can alter effective organisational communication. Such strategic measures could include awareness training and the implementation of policies surrounding the appropriate use of emojis as discussed in the Recommendations section. For employees, this study highlights the need for increased awareness surrounding the appropriate use of emojis not only within personal communication, but also within organisational communication. Attention should be directed towards interpretation differences which could result based on the outlined variables of interest.

5.2 Recommendations

Due to emojis being viewed as the communication language of the future, increased emoji usage within organisational communication is regarded as inevitable. Consequently, organisations are encouraged to, instead, of trying to avoid emoji usage within organisational communication, instead, focus on implementing sound organisational practises to address the effective use thereof. Below, practical recommendations are provided to effectively address interpretation differences and encourage appropriate usage thereof within organisational communication:

1. The first recommendation includes developing a training course relating to emoji and organisational communication usage. The training course should be presented to employees to equip them with the necessary knowledge surrounding emojis and organisational communication. The course could potentially be done either by means of e-learning or alternatively, classroom training. Course topics could include education relating to appropriate scenarios in which emojis can be used within organisational communication, differing emoji renderings as well as the influence of various variables on emoji interpretations, including age groups and gender differences. To encourage individuals to partake, incentive programmes could be developed in which, should an employee pass the training course examination, an emoji badge could be awarded to the employee signifying competence in emoji use within organisational communication.
2. The second recommendation includes developing an emoji usage policy. The aim of the policy should be to address the appropriate use of emojis within organisational communication based on an organisation's requirements in

order to encourage standardisation. The emoji usage policy could be developed and distributed in line with an organisation's social media policy during induction and topics to include could be appropriate usage within an organisational setting as well as scenarios in which emojis are not permitted within organisational communication.

3. The third recommendation includes arranging an information session(s) whereby an expert on emojis could address employees and provide them with guidance and education on how to best use emojis within an organisational setting based on an organisation's requirements. Topics that could be addressed include general emoji education, differing platform renderings as well as the impact of misinterpretation. Such information sessions could contribute to employees gaining practical insight relating to emojis and more effectively comprehend the potential impact of miscommunication.
4. In line with the third recommendation, the final recommendation includes launching an emoji awareness campaign. The campaign could entail arranging information sessions addressing emojis and emoji usage within organisational environments and distributing pamphlets and flyers providing core information relating to emojis. Emoji information pop-ups could also be developed to appear on employee's company laptop screen, as a means of reminding employees regarding important emoji information.

5.3 Strengths and Contributions of the Study

With the overall objective of this study including identifying variables which may influence effective organisational communication, the results of the study proved to be imperative to organisations not only in South Africa, but worldwide. By identifying emoji interpretation differences for each of the variables studied namely platform, age, gender, racial groups, industries of work as well as hierarchy levels, this study contributed significantly to the future of organisational communication. By affirming that differences are evident and by providing practical and actionable recommendations, organisations are equipped to take pro-active measures in creating awareness and addressing these differences.

Within the South African context specifically, relatively little scientific research is available pertaining to the appropriate and effective usage as well as understanding

of emojis. Hence, with emojis being regarded as the communication language of the future and the usage thereof being regarded as inevitable, this study was of great importance and provided a valuable contribution. Evidently, as the focus of this study was one of the firsts for Southern Africa, the results contributed significantly in laying the ground work for subsequent future studies focusing on the void within current published research relating to emoji interpretations.

Likewise, due to this study being one of the few studies within the field of Industrial Psychology utilising Correspondence Analysis (CA) as data analysis technique, this could be viewed as breaking new ground and opening new possibilities for the field. With reference to the Industrial Psychology field in particular, this study provided valuable insight and knowledge regarding variables that may impact effective organisational CMC. Such insight and knowledge could contribute to Industrial Psychologists more effectively assisting organisations in implementing practises and strategies to overcome CMC barriers faced due to emoji interpretation differences.

5.4 Limitations and Recommendations for Future Research

In order to improve future studies, although this study provides valuable insight into the interpretation of emojis and the influence on organisational CMC, a number of limitations need to be considered, highlighting opportunities and avenues for future research studies.

5.4.1 Demographic Distributions

Based on the analyses of the respondents' demographic variable distributions, the first limitation could be identified. Following the analyses of the demographic variables, strong outliers were evident. An example includes the demographic variable, race, where 82% of the respondents reported as White and less than 19% of other races were represented. Such a representation could pose a potential limitation in that it could result in skewed analyses. For future studies, a more representative sample in terms of demographic variables could be obtained, providing the opportunity to have a more symmetrical representation and an increased possibility of generalising the findings.

5.4.2 Variables of Interest

Research indicated that additional variables are available which can potentially influence the interpretation of emojis, including personality, context, and culture. For this study, however, these variables were not included and as such future studies could potentially look into investigating these variables.

5.4.3 Number of Respondents

Even though a fairly large number of responses were obtained (n=362), due to this being a relatively new field of research, particularly within the South African workforce, a larger amount of responses would possibly have contributed to increased insight and knowledge regarding the variables of interest. Seeing as the data collection period for this study was rather short due to time constraints, future studies could potentially make provision for increased time to gather data. Likewise, future studies could potentially also look into not only using electronic surveys, but hard-copies could also be distributed to increase the number of responses.

5.4.4 Presentation of Semantics Interpretation Question

In this study, respondents were provided the opportunity to list their own and as many words as they like to interpret the emojis presented. In terms of analyses, this presentation of the semantics question posed significant challenges in terms of 'cleaning' the data in order to analyse without losing valuable information. Thus, future studies could potentially look into using a qualitative analysis programme such as ALTA8.ti to provide content analyses for semantics interpretations.

5.4.5 Emoji Renderings

Due to the nature of this study being exploratory, it was evident that respondents required increased information regarding emojis having different renderings across platforms. Thus, future studies could potentially focus on providing insight into emoji renderings before commencing with the respective data collection method.

5.5 Conclusion

Globally, a rapid change is evident within the organisational workforce. Due to the impending impact of technology and globalisation, organisations worldwide have begun to more readily rely on CMC as a means of communicating. With the increase

in the use of CMC, a decrease in the expression of non-verbal cues is, however, evident due to the lack and/or absence of non-verbal cues in CMC. To address this, employees have begun to, not only in informal (personal) communication but also, formal communication, to make use of emojis as a means of compensating for the lack of and/or absence of non-verbal cues.

With emojis being regarded as the communication language of the future and the only language which will allow individuals to communicate with one another globally, the need to examine and explore the interpretation thereof has become inevitable. Previous research findings alluded to the fact that interpretation differences for emojis are present for a number of variables including platforms and cultures. Seeing as communication is still regarded as being an instrumental component to the success and effectiveness of an organisation, identifying variables that may influence effective communication is of significant importance. Due to emoji interpretation differences possibly leading to misinterpretation and miscommunication which could contribute to an increased potential for conflict and lawsuits as well as decreased morale, performance and trust, the need to identify variables that could contribute to interpretation differences is vital.

Subsequently, this study focused on exploring the influence of six organisational variables on the interpretation of emojis, namely, platform, age, gender, racial groups, industry of work as well as hierarchy level. In line with previous research findings as well as recommended avenues for future studies, based on the findings of this study, emoji interpretation differences were identified for each of the respective variables of interest. Due to the variables explored being regarded as instrumental to organisational operations and composition globally, increased organisational focus will need to be directed towards addressing the interpretation and use of emojis within organisational communication globally.

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ADDENDUM A

CONSENT FORM AND SURVEY EXAMPLE



UNIVERSITEIT-SELLENBOSCH-UNIVERSITY
jou kennisvennoot • your knowledge partner

Dear prospective participant,

You are kindly asked to participate in a research study conducted by Miss Talita du Plessis (MCom Industrial Psychology student) under the supervision of Mr. Marius Meyer from the Industrial Psychology Department at Stellenbosch University. The study and results will contribute to the completion of the thesis component of the Masters of Commerce degree in Industrial Psychology.

You have been selected as a possible candidate for this study as you are an employed individual who can potentially provide valuable information regarding the interpretation of emojis and the impact thereof on organisational Computer-Mediated Communication (CMC). Please take the time to read the information presented below outlining the details of the study.

Purpose of the Research Study

As emojis are viewed as the communication language of the future and are increasingly being used in organisational communication between and amongst colleagues, clients and managers, the need exists to determine whether emojis are interpreted and understood similarly. Should dissimilar interpretations occur; overall organisational communication can be affected, possibly resulting in misinterpretation and miscommunication contributing to increased potential for conflict, law suits, decreased moral, trust and performance and ultimately a communication breakdown.

Thus, the main aim of this study is to determine how various variables, including demographic variables such as age, gender, racial group, industry of work and hierarchy level as well as differing communication platforms including Apple WhatsApp, Android WhatsApp, Twitter and Microsoft Office, influence the

interpretation of emojis. Based on the findings, recommendations are to be made as to how organisations should go about in terms of managing the influence of emojis on organisational communication.

Procedures

Should you decide to participate in this research study, you will be required to complete a once-off electronic survey. The survey will consist of a series of questions pertaining to general demographic variables and emoji usage, as well as questions pertaining to your interpretation of a predetermined set of emojis.

Participation to the survey will require access to the Internet and may take approximately 10-15 minutes of your time to complete. It can however, be completed at a time and place convenient to you.

Compensation for Participation

No financial compensation will be provided for participating in the research study. You can however, choose to anonymously enter a lucky draw in which you stand a chance to win a voucher at an online store of your choice to the value of R 1 000.00. To enter the lucky draw, once you reach the end of the survey, select the lucky draw link. The link will direct you to a secondary survey, ensuring your anonymity, and here you will be asked to provide your email address in order to enter the lucky draw. The winner will be randomly selected and contacted on the 1st of December 2019 via the email address provided where after all contact information will be destroyed.

Potential Risks and Discomforts

other than the time which you will require to complete the survey, no potential risks or discomforts are foreseen should you agree to participate in this research study. Any concerns regarding potential negative consequences of providing organisational information are reduced through the anonymity of the data and confidential use of the results. The names and/or identities of participating organisations or employees will not be disclosed. Participants will not be exposed to any risk or discomfort relating to the short nature of the survey and the convenience of completing it at a time and place convenient to them.

The data obtained, will only be used to test a conceptual model and will not be used to determine the effectiveness of a participants' communication or how their communication efforts are influencing their overall performance.

Potential Benefits to Participants and/or Society

The use of emojis in both interpersonal and organisational communication is a widely occurring phenomenon. The findings and increased knowledge resulting from this research will contribute to increased understanding of the interpretation of emojis, particularly in that of organisational communication. Thus, the benefit of this study includes society as a whole by contributing to further insight into the use of emojis within organisational communication. Furthermore, to date, the knowledge of the Industrial Psychology field is rather limited in terms of the use of emojis in organisational communication and could thus greatly benefit from this study.

Anonymity, Security and Confidentiality

Anonymity is ensured in this study, as an anonymous link is used for distribution of the survey. An anonymous link ensures that no identifying information such as name or email address is collected. Likewise, all survey responses are anonymised, thus ensuring all personal data is removed.

Any information provided and obtained during this study which can be traced back to you as a participant, will remain confidential and will only be disclosed on your permission or as required by law. Information provided, will only be accessible to the researchers. Confidentiality and security of data will be maintained by means of restricting access to the data only to that of the researcher and research supervisor. The data will also be stored on a password protected computer ensuring further security and confidentiality.

The results of the study will be published in the form of an open source electronic thesis on Sun Scholar and in the form of an article in an accredited scholarly journal. Confidentiality of participants will be maintained in the publications by keeping their identities anonymous. In addition, the identity of the participating organisations will also be kept confidential in the publications. Only aggregated statistics reporting statistical fit will be reported on.

Participation and Withdrawal

Participation in the research study is completely voluntary, and you can decide whether you would like to participate or not. Should you volunteer to be a participant in the study, you may withdraw at any time by closing the browser without consequences of any kind. To ensure validity of the study and obtain the necessary data required, all questions are mandatory and need to be completed. The researcher may withdraw you from the research at any time, should circumstances arise which warrant doing so.

Identification of Researchers

Should you have any questions or concerns regarding the research, please feel free to contact Miss Talita du Plessis or Mr. Marius Meyer via the below contact details:

Miss Talita du Plessis

E: 17613884@sun.ac.za

C: 076 318 1606

Mr Marius Meyer

E: marius1@sun.ac.za

C: 021 808 3011

Rights of Research Participants

At any point in time, you may withdraw your consent and discontinue participation without any penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study. Should you have any questions regarding your rights as a research participant, please contact Mrs Maléne Fouché [mfouche@sun.ac.za; 021 808 4622] at the Division for Research Development.

I confirm that I am currently a working and employed individual.

- Yes
- No

I confirm that I have read and understood the information provided.

- Yes
- No

I voluntarily consent to take part in the survey under the stipulated conditions.

- Yes
- No

I agree that the data provided may be used for future research purposes.

- Yes
- No

Demographic Information

Please complete the below demographic questions by selecting the relevant answer provided.

Specify your gender.

- Female
 - Male
 - Other (Please specify)
-

Select your relevant age interval.

- < 25
- 25 – 29
- 30 – 34
- 35 – 39
- 40 – 44
- 45 – 49
- 50 – 54
- 55 - 59
- 60 >

Select your race.

- African
 - Coloured
 - Indian
 - White
 - Other (Please specify)
-

Select your country of residence.

Select your industry of work.

- Accounting and Legal
 - Business Services
 - Construction
 - Education
 - Finance
 - Food
 - Health care
 - Hospitality
 - Information Technology
 - Manufacturing
 - Media
 - Mining
 - Retail
 - Sales
 - Other (Please specify)
-

Select your hierarchy level.

- Professional/Operational/Non-Management Level (Front line employees, responsible for performing day to day activities as well as managing the units of operation, professionals or non-management)
 - Middle Level Management (Senior managers, managers, assistant managers)
 - Top Level Management (Vice presidents, presidents, general managers, managing directors, CEOs)
 - Other (Please specify)
-

Additional Information

Please complete the below additional information questions by selecting the relevant answer provided.

Indicate your mobile device software.

- Android (Samsung, Google, LG, Sony Ericsson, HTC, Huawei and Motorola)
 - iOS (Apple)
 - Not applicable (N/A)
 - Other (Please specify)
-

Do you make use of emojis during informal communication (E.g. communicating with family members)?

- Yes
- No

If used in an informal context, with whom do you **MOST** often use emojis (E.g. friends)?

- Family
 - Friends
 - Other (Please specify)
-

On which of the following platforms do you **MOST** often make use of emojis when communicating informally?

- Microsoft Office (E.g. Outlook)
 - Twitter
 - WhatsApp
 - Other (Please specify)
-

Do you make use of emojis during formal communication (E.g. communicating with colleagues/clients/managers)?

- Yes
- No

If used in a formal context, with whom do you **MOST** often use emojis (E.g. clients)?

- Clients
 - Colleagues
 - Manager
 - Other (Please specify)
-

On which of the following platforms do you **MOST** often make use of emojis when communicating formally?

- Microsoft Office (E.g. Outlook)
 - Twitter
 - WhatsApp
 - Other (Please specify)
-

Have you ever had a situation in which an emoji was misinterpreted or understood differently by someone else?

- Yes
- No

Please provide an example of such a situation.

Emoji Interpretation

The following section relates to emoji interpretations. Please answer the questions accordingly. To start this section, select Next.





1. If you had to use words to describe this emoji, which word(s) would you use?
(Please use commas to separate words listed e.g. love, affection).

2. Rate the sentiment of the emoji. E.g. Strongly Positive (2)

	Rating
Strongly Negative (-2)	<input type="checkbox"/>
Negative (-1)	<input type="checkbox"/>
Neutral (0)	<input type="checkbox"/>
Positive (1)	<input type="checkbox"/>
Strongly Positive (2)	<input type="checkbox"/>



1. If you had to use words to describe this emoji, which word(s) would you use?
(Please use commas to separate words listed).

2. Rate the sentiment of the emoji. E.g. Strongly Positive (2)

	Rating
Strongly Negative (-2)	<input type="checkbox"/>
Negative (-1)	<input type="checkbox"/>
Neutral (0)	<input type="checkbox"/>
Positive (1)	<input type="checkbox"/>
Strongly Positive (2)	<input type="checkbox"/>



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(Please use commas to separate words listed).

2. Rate the sentiment of the emoji. E.g. Strongly Positive (2)

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Thank you for participating in the research study. Should you have any comments regarding the study, please feel free to add them below.

To successfully submit your survey, please select Submit Survey.

To enter the lucky draw, please add your email address below. The winner will be randomly chosen and contacted on the 1st of December 2019.

Select Submit to record your entry.

ADDENDUM B**COMPLETE LIST OF DESCRIPTIVE LABELS**

about to cry

about to sneeze

acceptance of apology

accepting

accident

accomplishment

acknowledgement

acknowledgement of accomplishment

acknowledgement of hard work and effort

acknowledgement of mistake

acknowledgement of okay situation

admiration

adorable

adoration

affection

afflicted

afraid

aggressive

agitated

alarmed

almost blushing

almost crying

almost laughing

aloof

alright

amazed

ambiguous

amorous

amused

angel

angry

annoyed

anticipating

anxious

apathetic

apologetic

appreciative

approval

arrogant

ashamed

asking help

astonished

attraction

attractive

awkward

awkward grin

awkward laugh

awkward smile

backpedaling

bad

bad makeup

banter

baring teeth

bashing

beautiful

belief

bereaved

better times

bewildered

big mouth

biting teeth

bleak

blessed

blinded by emotion

blinking

blissful

blow

blushing

blushing smile

boasting

bold

bored

breakdown

broken

bumped

bursting

but not tear in sight

calm

careful

careless

casual

cautious

celebratory

charming

cheeky

cheeky grin

cheeky humour

cheeky smile

cheer up

cheesy

chirpy humour

clever

clumsy

comedy

comfortable

compassionate

complain

completed

compliment

comprehend

concerned

confident

confused

conspiracy

constipated

contempt

content

content smile

cool

coping

correct

correction

could go better

crazy

cringe

critical

crying

crying of disbelief

crying of joy

crying of laughter

crying with laughter

curious

cute

cynical

dammmm

dead

deceitful

defeated

delay

demotivated

depressed

desire

desperate

devastated

disagree

disappointed

disapproving

disaster

disbelief

discomfort

discouraged

discussed

disgusted

disillusion

disinterested

dislike

dismissive

displeased

distracted

distressed

disturbed

do not tell anyone

don't care

don't know

don't want to talk

drained

dramatic

dreadful

dreading

droopy

eager

ecstatic

effection

effort

elated

embarrassed

embarrassed grin

emotional

emotional reaction

emotionally broken

encouraging

endearment

enjoying

enthusiastic

euphemism

excited

exhausted

expression of appreciation

expression of correctness

expression of dissimilar preference

expression of emotion

expression of encouragement

expression of good wishes

expression of reassurance

expression of recognition

expression of reoccurrence of unpleasant event

expression of something being unfortunate

eye tick

fabulous

failed

fake smile

familiar

family

fantastic

fascinated

fear

feeling affection

feeling appreciated

feeling contrite

feeling cool

feeling good

feeling helpless

feeling let down

feeling loved

feeling rejected

feeling silly

feeling sorry

feeling sorry for myself

feeling special

feeling unwell

feverish

finding something funny

fine

flat face

flattered

flirting

focused

foot in mouth

forced grin

forgetful

friend

friendly

friendly smile

friendly sneaky smile

frowning

frustrated

fun

funny

funny situation

funny smile

funny story

gay

geeky smile

glad

glance

gloomy

glowing

go away

good

good mood

good-looking

goofy

gorgeous

gossiping

great

greeting

greeting with a kiss

grieving

grimace

grinding teeth

grinning

grinning in a smirking way

gross

growl

grumbling face

grumpy

guilty

happy

happy and blushing

happy and relieved

happy but afraid

happy but concerned

happy but deep down sad

happy but embarrassed

happy but nervous

happy but shy

happy but stressed

happy crying

happy sweating

happy sweating face

happy with myself

hard-working

healthy

heart

heartache

heartbroken

heartfelt

hearts

helpless

hidden meaning

holding in a sneeze

hopeful

hopeless

horrible

horror

hot

humble

humorous

hurt

hysterical

hysterical laughing

i am ok with you

idiotic

ignorant

ignore

impartial

impatient

implying something

impossible

impressed

in agreement

in harmony

in love

in the spotlight

inappropriate

inconvenience

incorrect

indecisive

indicating everything is okay

induced sweat

infatuation

inferred meaning

insecure

insincere

inspired

intense emotion

interest

intimate

introverted

invincible

ironic

ironic smile

irrelevant

irritated

it's a pleasure

it's hot

jaunty love

jealous

joking

joyful

judging

just wokeup

keep quite

keeping quite

kind

kind smile

kiss

kiss jokingly

kiss-ass

knowing a secret

laughing

laughing at someone out of compassion

laughing but under slight pressure

laughing till you cry

laughing until you sweat

laughing with sigh

lazy

light

like

lonely

looking good

looks down

loss

lost

loud

love

love the situation

love what i see

low

low energy

lucky

lurk

lying

mad

made it

make it better

marshmallow

matter-of-fact

mindful

misbehaving

mischievous

miserable

misintepretation

missed out

missing

mistake

misunderstanding

misunderstood

mixed emotions

mixed feelings

moaning

mock

mock agreement

moment of clarity

moody

mourn

mysterious

nagging

naughty

naughty kiss

near miss

nearly did something wrong

need clarity

need love

negative

negative emotion

negative observer

negative thoughts

neglected

nervous

nervous crying

nervous grin

nervous laughter

nervous smile

nervous sweating

neutral

neutral smile

neverminded

nice

no

no worries

normal

normal mood

not nice

not receiving the desired outcome

not serious

not understanding

not understood

not what i wanted

obedient

observer

obsessive

offended

okay

ominous

on the right track

oops

oppressed

overwhelmed

overwhelmed by humour

overworked

pain

panicked

partner

passionate

peaceful

pensive

perfect

perplexed

persevere

person

physical discomfort

platonic kiss

playful

playful kiss

pleasantly surprised

pleased

pleased smile

pleased with myself

pleasure

pointless

polite

ponder

positive

positive affect

positive affection

positive challenge

positive smile

pout

praying

pretending

preventing oneself from saying something

proud

proud and blushing

proud and humble

provocative

pulling face

punny

question comprehension

questioning

questioning in humorous manner

quick answer

quiet

quirky

rationalising

reacting negatively

realisation

receiving a compliment

receptive

recognition

reflect

regret

rejection

relaxed

relieved

relieved laughter

relieved smile

reluctantly positive

remain silent

remorse

resentful

reserved

response to beauty

rest

restless

restraining oneself

results

right

risky

romance

romantically unavailable

rude

sad

sad but in a humorous context

saint

sarcastic

sarcastic joking

sarcastic kiss

sas

saying something inappropriate

saying something silly

saying something wrong

scared

sceptical

screaming

secret greeting

secretive

seductive

seeing something beautiful

seeing something you love

seeking advice or guidance

seeking attention

self-conscious

self-control

self-examining

sentiment

serious

sexy

shameful

shared ideas

sharing a fun moment

sharing a good thought

sharp

shit

shocked

shockingly shy

show-stopping

shy

shy but happy

shy laughter

shy smile

shyly thankful

sick

side eye look

silent

silly

sincere

sleeping

sly smile

smiling

smiling excitedly

smiling shyly

smirking

smug smile

smuggish

sneaky

snobbish

soliciting

somber

something humorously and not serious intended

something is deeply wrong

something sad happened

something tragic happened

something went wrong

sorrow

soulbroken

speaking negatively

special

speechless

speckless

startled

stating something unbelievable

stressed

stressed but enjoying

strong face

stupid

succumb

suggestive

sulking

sunburn

sunshine

supportive

surprised

suspicious

sweat

sweating

sweating from fun

sweating of humility

sweet

sweet smile

sympathetic

talking

tame

tantrum

tears of happiness

teasing

teasing smile

teeth

tempting

tense

terrible

terrible news

terrified

thankful

that was tough to do

that's good

things going wrong

thinking

tip-off

tired

tired but happy

told you so

tough

tragedy

traumatised

trouble

trust

truth hurts

unable to deal with situation

unable to do something

unamused

unavailable

unbelievable

unbothered

uncaring

uncertain

uncertain smile

unclear

uncomfortable

unconcerned

under pressure

understanding

undervalued

unenthusiastic

unexcited

unexpected

unfair

unfair treatment

unfortunate

unhappy

unhappy surprise

unimpressed

uninspired

uninterested

uninvolved

unique

unplanned

unpleasant

unpleasantly surprised

unreal

unsatisfied

unsupported

until tears drop

untrustworthy

unwell

upset

usually in a light manner

vulnerable

waiting

waiting on bad news

wanting to cry

wanting to cry from shock

weak

weird

well

went through something

went to the dentist

what's cookin good lookin

whoops

winking

winking and laughing

wondering

worked hard

worried

worst makeup

wrong

yearning

yes

you think you know better

you're a star

you're awesome

you're sweet

ADDENDUM C**DESCRIPTIVE LABELS USED FOR DATA ANALYSIS**

affection
amazed
amused
angry
annoyed
anxious
appreciative
astonished
awkward
blushing
cheeky
compassionate
concerned
content
crying
cute
depressed
devastated
disappointed
disbelief
discouraged
disgusted
disinterested
embarrassed
emotional
excited
exhausted
expression of emotion
flirting
friendly
frustrated
funny
happy
hopeless
humorous
hurt
in agreement
in love
irritated
joking
joyful
kiss
laughing
laughing till you cry

like

love

nervous

neverminded

oops

playful

pleased

ponder

questioning

relieved

remorse

romance

sad

sarcastic

scared

sceptical

shocked

shy

smiling

smirking

smuggish

stressed

surprised

sympathetic

teasing

thankful

thinking

tired

uncertain

unhappy

unimpressed

upset

winking

worried

ADDENDUM D**EMOJI LABELS AND STANDARDISED RESIDUALS****CLUSTER 1****DESCRIPTIVE LABELS**

Label	Emoji 1	Emoji 6
angry		x
compassionate	x	
concerned	x	
crying	x	x
depressed		x
devastated	x	x
disappointed	x	
emotional	x	x
hurt	x	x
remorse	x	
sad	x	x
sympathetic	x	x
unhappy	x	x
upset	x	x
worried	x	

STANDARDISED RESIDUALS

Label	Emoji 1	Emoji 6
affection	-2.4131	-2.4342
amazed	-1.2654	-1.2765
amused	-2.2733	-1.8572
angry	-1.6950	0.1192
annoyed	-2.7645	-2.7888
anxious	-0.1707	-0.8554
appreciative	-1.4019	-1.4142
astonished	-1.4529	-1.4656
awkward	-1.2065	-1.2171
blushing	-3.3042	-3.3332
cheeky	-1.6631	-1.6777
compassionate	3.4758	-0.7457
concerned	4.3710	-1.5396
content	-3.9096	-3.9439
crying	14.9535	34.9899
cute	-1.6631	-1.0816
depressed	-0.6045	4.4728
devastated	2.2859	17.3019
disappointed	1.7038	-0.8829
disbelief	-1.9268	-1.5297

discouraged	-0.6834	-1.6552
disgusted	-1.2065	-1.2171
disinterested	-1.4777	-1.4907
embarrassed	-3.2710	-2.9967
emotional	5.5524	8.4553
excited	-2.3979	-2.4190
exhausted	-0.4752	-0.4932
expression of emotion	-1.4276	-1.4401
flirting	-2.6157	-2.6387
friendly	-2.0723	-2.0905
frustrated	-1.9393	-0.1229
funny	-4.0558	-3.8470
happy	-6.6414	-6.4012
hopeless	-1.4777	-0.1490
humorous	-1.4276	-1.4401
hurt	6.0550	6.6050
in agreement	-2.1414	-2.1602
in love	-3.5382	-3.5693
irritated	-2.3364	-1.5084
joking	-3.0284	-3.0550
joyful	-1.6187	-1.0205
kiss	-3.6991	-3.7316
laughing	-4.3250	-4.1338
laughing till you cry	-1.4777	-1.4907
like	-1.7063	-1.7213
love	-5.1825	-5.2280
nervous	-1.8298	-1.8459
neverminded	-1.4276	-1.4401
oops	-1.5731	-1.5869
playful	-1.5498	-1.5634
pleased	-1.9641	-1.9813
ponder	-1.2363	-1.2472
questioning	-1.4019	-0.7070
relieved	-3.2036	-3.2317
remorse	5.4108	-0.0726
romance	-1.2363	-1.2472
sad	29.0451	17.2052
sarcastic	-1.7484	-1.7638
scared	-1.0618	-1.6777
sceptical	-1.5021	-1.5153
shocked	-2.0296	-3.8084
shy	-3.3588	-3.3883
smiling	-3.1230	-3.1504
smirking	-1.4276	-1.4401
smuggish	-1.2065	-1.2171
stressed	-1.4777	-0.8198
surprised	-2.2817	-3.2431
sympathetic	6.0542	1.2443

teasing	-1.3217	-1.3333
thankful	-2.2733	-2.2932
thinking	-1.4019	-1.4142
tired	-2.1523	-1.7886
Total	-50.2985	-38.7393
uncertain	-2.3979	-2.4190
unhappy	4.2579	1.3166
unimpressed	-0.9374	-1.5869
upset	3.0211	8.7947
winking	-3.1462	-3.1739
worried	1.8390	-2.0727

CLUSTER 2**DESCRIPTIVE LABELS**

Label	Emoji 7	Emoji 13	Emoji 14
amazed			x
annoyed			x
astonished			x
concerned	x		x
depressed	x		x
disappointed	x	x	x
disbelief			x
discouraged	x	x	x
disgusted			x
disinterested	x	x	
emotional	x		x
exhausted	x		x
expression of emotion	x	x	x
frustrated			x
hopeless	x		
hurt	x	x	
irritated			x
questioning			x
remorse	x		
sad	x		
shocked			x
stressed			x
sympathetic	x		
thinking	x	x	
tired	x		x
unhappy	x	x	x
unimpressed	x	x	
upset	x	x	x
worried	x		x

STANDARDISED RESIDUALS

Label	Emoji 7	Emoji 13	Emoji 14
affection	-2.3264	-2.14494	-2.26827
amazed	-1.2200	-0.23578	0.49190
amused	-2.1916	-1.52581	-1.66890
angry	-1.1196	12.67629	-0.55010
annoyed	-1.9148	26.84266	3.94327
anxious	-1.4482	-1.33521	-0.70377
appreciative	-1.3515	-1.24610	-1.31775
astonished	-1.4007	-1.29143	0.09879
awkward	-1.1632	-1.07247	-1.13414
blushing	-3.1855	-2.93708	-3.10596
cheeky	-1.6034	-1.47830	-1.56330
compassionate	-0.6497	-1.26896	-1.34193
concerned	1.9269	-0.61943	0.65662
content	-3.7692	-3.47520	-3.67502
crying	-4.4369	-4.09088	-0.85878
cute	-1.6034	-1.47830	-1.56330
depressed	10.1794	-0.26729	2.61563
devastated	-0.7517	-0.51629	-1.23557
disappointed	24.0310	6.34007	9.08041
disbelief	-1.8265	0.30099	4.12160
discouraged	10.7674	0.79654	7.61197
disgusted	-1.1632	12.91393	1.51105
disinterested	0.6812	12.39032	-0.66910
embarrassed	-2.8364	-2.90756	-3.07474
emotional	0.2677	-1.47830	0.99539
excited	-2.3118	-2.13149	-2.25405
exhausted	0.4194	-1.12482	11.42093
expression of emotion	1.5300	0.30712	3.12925
flirting	-2.5217	-2.32506	-2.45875
friendly	-1.9978	-1.84203	-1.94794
frustrated	-1.8151	4.73851	14.51793
funny	-3.9101	-3.60516	-3.81245
happy	-6.2467	-5.56468	-6.24290
hopeless	2.0851	-0.55218	13.00954
humorous	-1.3763	-1.26896	-0.59673
hurt	1.7802	0.03195	-0.12622
in agreement	-1.5801	-1.90345	-2.01289
in love	-3.4111	-3.14510	-3.32594
irritated	-2.2525	23.44283	1.90166
joking	-2.9196	-2.69188	-2.84666
joyful	-1.5606	-1.43887	-1.52160
kiss	-3.5663	-3.28813	-3.47720
laughing	-4.1697	-3.84447	-3.81955
laughing till you cry	-1.4246	-1.31350	-1.38903

like	-1.6450	-1.51670	-1.60391
love	-4.9963	-4.60663	-4.87151
nervous	-1.7641	-1.62648	-1.13861
neverminded	-1.3763	6.61148	-1.34193
oops	-1.5166	-1.39833	-1.47873
playful	-1.4941	-1.37761	-1.45682
pleased	-1.8935	-1.74586	-1.84624
ponder	-1.1919	-0.18900	-1.16214
questioning	-1.3515	1.16142	0.95887
relieved	-3.0885	-2.84761	-3.01134
remorse	4.7326	-0.68012	-0.84391
romance	-1.1919	-1.09896	-1.16214
sad	18.8486	-2.30495	4.69197
sarcastic	-1.6856	1.66302	-1.64352
scared	-1.6034	-1.47830	-1.56330
sceptical	-1.4482	9.89893	-1.41199
shocked	-3.6173	-3.29325	1.77911
shy	-2.6206	-2.65069	-3.15730
smiling	-3.0108	-2.77602	-2.93564
smirking	-1.3763	-0.48092	-1.34193
smuggish	-1.1632	-1.07247	-1.13414
stressed	-0.7227	-1.31350	1.49069
surprised	-2.7768	-1.45795	-2.36019
sympathetic	4.2210	-1.67868	-0.08526
teasing	-1.2742	-1.17483	-1.24238
thankful	-2.1916	-2.02069	-2.13688
thinking	0.1283	1.96392	-1.31775
tired	5.6970	-0.49433	14.74469
Total	-30.9338	40.90592	10.57879
uncertain	-1.8792	1.15259	-0.92311
unhappy	4.6716	10.45349	9.84355
unimpressed	0.4615	12.18930	-0.80248
upset	2.9844	2.90722	7.63312
winking	-3.0332	-2.43909	-2.95746

CLUSTER 3

DESCRIPTIVE LABELS

Label	Emoji 4	Emoji 5
amazed	x	
angry		x
annoyed		x
anxious	x	x
astonished	x	x
awkward	x	x
blushing	x	
concerned	x	x

disbelief	x	x
embarrassed	x	x
excited		x
frustrated		x
irritated		x
nervous		x
oops	x	x
questioning	x	x
remorse		x
sarcastic		x
scared	x	x
shocked	x	
smiling		x
stressed		x
surprised	x	x
uncertain	x	x
worried	x	x

STANDARDISED RESIDUALS

Label	Emoji 4	Emoji 5
affection	-2.31975	-2.04192
amazed	5.35981	-0.13691
amused	-2.18538	-1.40379
angry	-2.07485	11.31461
annoyed	-2.28133	1.08049
anxious	2.01848	14.46348
appreciative	-1.34766	-1.18625
astonished	12.20704	0.39741
awkward	0.56444	11.71214
blushing	1.54579	-2.79602
cheeky	-1.59878	-1.40730
compassionate	-1.37238	-1.20802
concerned	3.30404	1.80593
content	-3.75843	-3.00602
crying	-4.42429	-3.89440
cute	-1.59878	-1.40730
depressed	-1.68082	-1.47951
devastated	-1.83393	-1.61428
disappointed	-4.16063	-3.30379
disbelief	11.00735	1.02452
discouraged	-2.02564	-1.78303
disgusted	-1.15988	-0.04149
disinterested	-1.42055	-1.25042
embarrassed	17.84431	0.48363
emotional	-0.97330	-1.40730
excited	-2.30521	18.17668
exhausted	-1.21649	-1.07079

expression of emotion	-0.64373	-0.38022
flirting	-2.51455	-2.21339
friendly	-1.99215	-1.75356
frustrated	-2.58056	8.73447
funny	-3.89898	-2.84926
happy	-6.38459	-2.95085
hopeless	-1.42055	-1.25042
humorous	-1.37238	-1.20802
hurt	-1.51229	-1.33117
in agreement	-2.05858	-1.81203
in love	-3.40143	-2.99405
irritated	-2.24609	2.06928
joking	-2.91127	-2.56259
joyful	-1.55614	-0.63971
kiss	-3.55612	-3.13021
laughing	-4.15780	-3.11336
laughing till you cry	-1.42055	-1.25042
like	-1.64031	-1.44386
love	-4.98207	-4.38538
nervous	-0.62206	17.18108
neverminded	-1.37238	-1.20802
oops	4.43893	12.19076
playful	-1.48989	-1.31145
pleased	-1.88814	-1.66200
ponder	-1.18852	-1.04617
questioning	6.07264	0.49974
relieved	-3.07969	-2.71084
remorse	-0.39513	1.21833
romance	-1.18852	-1.04617
sad	-6.95592	-6.28956
sarcastic	-1.68082	2.57587
scared	9.03433	12.80433
sceptical	-1.44404	-1.27109
shocked	42.45686	-0.46162
shy	-0.44169	-2.49040
smiling	-3.00227	9.08777
smirking	-1.37238	-1.20802
smuggish	-1.15988	-1.02096
stressed	-0.01265	11.54531
surprised	29.58928	4.63133
sympathetic	-0.71387	-1.59806
teasing	-1.27058	-1.11841
thankful	-2.18538	-1.92364
thinking	-1.34766	-1.18625
tired	-2.03806	-2.15372
Total	15.58866	59.25833
uncertain	1.16519	8.32019
unhappy	-3.05326	-0.91645

unimpressed	-0.85105	-1.33117
upset	-2.40805	-0.79649
winking	-3.02459	-2.66234
worried	5.11269	7.46399

CLUSTER 4**DESCRIPTIVE LABELS**

Label	Emoji 8	Emoji 12
amused		x
cheeky		x
concerned		x
content	x	
disbelief		x
discouraged	x	
disgusted		x
disinterested	x	x
expression of emotion	x	x
flirting		x
friendly	x	
happy	x	
in agreement	x	x
joyful	x	
like		x
neverminded		x
oops		x
playful		x
pleased	x	
ponder		x
questioning		x
relieved	x	
remorse	x	
sarcastic		x
sceptical		x
shy	x	
smiling		x
smirking		x
smuggish	x	x
teasing		x
thankful	x	
thinking	x	x
tired	x	
uncertain		x
unimpressed		x
worried		x

STANDARDISED RESIDUALS

Label	Emoji 8	Emoji 12
affection	-1.9807	-1.91206
amazed	-1.0387	-1.00269
amused	-1.8659	0.41932
angry	-1.7715	-1.12547
annoyed	-1.8284	-0.82101
anxious	-1.2329	-1.19025
appreciative	-1.1507	-1.11081
astonished	-1.1925	-1.15121
awkward	-0.9903	-0.95603
blushing	-1.6060	-2.61819
cheeky	-1.3651	6.27063
compassionate	-1.1718	-1.13119
concerned	-1.2527	0.44457
content	32.3158	-0.51549
crying	-3.7775	-3.64672
cute	-1.3651	-0.55895
depressed	-1.4351	-1.38542
devastated	-1.5658	-1.51162
disappointed	-0.1013	-2.20419
disbelief	-1.9305	3.50219
discouraged	1.7396	-1.07070
disgusted	-0.9903	0.08996
disinterested	0.4360	3.95341
embarrassed	-1.1950	-2.20606
emotional	-0.6325	-1.31780
excited	-1.4602	-1.90007
exhausted	-1.0387	-1.00269
expression of emotion	1.3885	0.63686
flirting	-2.1470	6.61203
friendly	1.2386	-0.42403
frustrated	-1.7495	-1.18675
funny	-3.0286	-1.34675
happy	9.2241	-3.93234
hopeless	-0.3884	-0.31684
humorous	-1.1718	-0.24716
hurt	-1.2912	-1.24651
in agreement	0.5181	4.78607
in love	-2.5599	-2.80363
irritated	-1.9178	-0.77105
joking	-2.4857	-0.73268
joyful	0.1766	-1.28265
kiss	-3.0363	-2.93113
laughing	-3.5500	-2.55169
laughing till you cry	-1.2129	-1.17089
like	-0.6865	0.86686

love	-4.2538	-4.10648
nervous	-1.5019	-1.44989
neverminded	-1.1718	14.78127
oops	-1.2912	1.16021
playful	-1.2721	2.84348
pleased	10.1735	-1.55630
ponder	-1.0148	18.41527
questioning	-1.1507	2.49018
relieved	1.5538	-2.53843
remorse	1.3601	-0.34954
romance	-1.0148	-0.97964
sad	-2.6422	-5.84965
sarcastic	-0.0415	11.60705
scared	-1.3651	-1.31780
sceptical	-1.2329	10.57202
shocked	-3.2994	-2.87122
shy	5.2229	-0.03135
smiling	-0.2227	0.75820
smirking	-0.3184	20.08542
smuggish	2.0390	13.68787
stressed	-1.2129	-1.17089
surprised	-1.8809	-0.58465
sympathetic	-0.2599	-1.49642
teasing	-0.1631	2.77215
thankful	1.8856	-1.80130
thinking	0.5875	15.99389
tired	3.1763	-0.52920
Total	-19.2224	85.97720
uncertain	-1.4602	14.41511
unhappy	-2.1628	-2.03862
unimpressed	-0.5168	5.17141
upset	-2.3644	-2.28249
winking	-2.5825	-1.28966
worried	-1.6865	0.21463

CLUSTER 5

DESCRIPTIVE LABELS

Label	Emoji 11	Emoji 15	Emoji 16
appreciative	x		x
awkward		x	
blushing	x	x	
cheeky			x
content	x	x	
cute	x	x	x
embarrassed	x	x	
excited	x		x

flirting		x	x
friendly	x	x	x
happy	x	x	
humorous			x
in agreement	x		x
joking			x
joyful	x	x	
like		x	x
playful			x
pleased	x	x	
questioning			x
sarcastic			x
sceptical			x
shy	x	x	
smiling	x	x	
smuggish		x	
teasing			x
thankful	x	x	x
winking			x

STANDARDISED RESIDUALS

Label	Emoji 11	Emoji 15	Emoji 16
affection	-1.8328	-0.9059	-2.23176
amazed	-0.3528	-1.1764	-1.17034
amused	-0.7400	-1.1669	-1.62685
angry	-2.0328	-2.0064	-1.99615
annoyed	-2.6038	-2.5699	-2.55680
anxious	-1.4148	-1.3964	-1.38926
appreciative	1.7091	-0.5359	1.01733
astonished	-1.3684	-1.3506	-1.34370
awkward	-1.1364	0.6615	-1.11588
blushing	13.2752	22.9728	-3.05596
cheeky	-0.9280	-1.5460	13.41506
compassionate	-0.6009	-0.5736	-0.56294
concerned	-1.4374	-1.4187	-1.41149
content	9.8959	4.3447	-1.95651
crying	-4.3347	-4.2783	-4.25646
cute	3.5408	5.5689	2.36270
depressed	-1.6468	-1.6254	-1.61706
devastated	-1.7968	-1.7734	-1.76436
disappointed	-4.5028	-4.4442	-4.42147
disbelief	-2.2152	-2.1864	-1.25581
discouraged	-1.9846	-1.9588	-1.94880
disgusted	-1.1364	-1.1216	-1.11588
disinterested	-1.3918	-1.3737	-1.36667
embarrassed	2.7616	6.1673	-3.02525
emotional	-1.5664	-1.5460	-1.53813

excited	0.8408	-0.4348	0.48766
exhausted	-1.1919	-1.1764	-1.17034
expression of emotion	-1.3446	-1.3271	-1.32033
flirting	-0.8400	0.4471	13.28871
friendly	9.3197	5.8599	3.82279
frustrated	-2.5283	-2.4954	-2.48267
funny	-2.5112	-2.7095	-0.01882
happy	21.2411	16.0159	-1.58393
hopeless	-1.3918	-1.3737	-1.36667
humorous	-1.3446	-1.3271	7.01095
hurt	-1.4817	-1.4624	-1.45493
in agreement	2.4454	-1.4883	11.65251
in love	-2.7324	-2.3772	-3.27240
irritated	-2.2006	-2.1720	-2.16089
joking	-2.1512	-2.4600	32.18874
joyful	2.4107	4.4760	-0.82915
kiss	-3.4841	-3.4388	-3.42122
laughing	-4.0736	-2.5283	-3.50009
laughing till you cry	-1.3918	-1.3737	-1.36667
like	-1.6071	0.9355	2.85765
love	-3.4472	-3.9875	-4.79309
nervous	-1.7234	-1.7010	-1.10141
neverminded	-1.3446	-1.3271	-1.32033
oops	-0.8068	-1.4624	-1.45493
playful	-1.4597	-1.4407	13.91504
pleased	6.2585	6.9371	-1.26602
ponder	-1.1645	-1.1493	-1.14344
questioning	-1.3204	-1.3032	0.24604
relieved	-3.0173	-2.9781	-2.96286
remorse	-0.8498	-1.8768	-1.33167
romance	-1.1645	-1.1493	-1.14344
sad	-7.3383	-7.2429	-7.20585
sarcastic	-1.6468	-1.6254	3.94859
scared	-1.5664	-1.5460	-1.53813
sceptical	-1.4148	-1.3964	0.05036
shocked	-3.7861	-3.7369	-3.71774
shy	8.8480	19.2959	-3.10648
smiling	14.7366	7.4301	-2.54217
smirking	-1.3446	-1.3271	-1.32033
smuggish	-0.2564	0.6615	-1.11588
stressed	-1.3918	-1.3737	-1.36667
surprised	-2.6978	-2.9886	-2.63703
sympathetic	-1.7787	-1.7556	-0.02903
teasing	-1.2449	-1.2287	10.23064
thankful	4.3974	4.9847	0.27567
thinking	-1.3204	-1.3032	-1.29653
tired	-2.3972	-2.3661	-2.35395

uncertain	-2.2585	-2.2292	-1.31596
unhappy	-3.2838	-3.2411	-3.22449
unimpressed	-1.4817	-1.4624	-1.45493
upset	-2.7131	-2.6778	-2.66412
winking	-2.9634	-2.9248	39.70393
worried	-1.9352	-1.9100	-1.90027

CLUSTER 6**DESCRIPTIVE LABELS**

Label	Emoji 3	Emoji 10
amused	x	x
anxious		x
awkward		x
embarrassed		x
exhausted		x
expression of emotion		x
funny	x	x
happy	x	x
humorous	x	x
joking	x	
joyful	x	x
laughing	x	x
laughing till you cry	x	x
nervous		x
oops		x
questioning		x
relieved		x
stressed		x
teasing	x	
tired		x
uncertain		x

STANDARDISED RESIDUALS

Label	Emoji 3	Emoji 10
affection	-2.2455	-2.04192
amazed	-1.1776	-1.07079
amused	22.9384	0.15575
angry	-2.0085	-1.82635
annoyed	-2.5726	-2.33932
anxious	-1.3978	0.30237
appreciative	-1.3045	-1.18625
astonished	-1.3520	-1.22940
awkward	-0.2321	0.93798
blushing	-3.0748	-2.79602

cheeky	-1.5476	-1.40730
compassionate	-1.3285	-1.20802
concerned	-1.4202	-0.51709
content	-3.3633	-3.00602
crying	-3.8157	-3.89440
cute	-1.5476	-1.40730
depressed	-1.6270	-1.47951
devastated	-1.7752	-1.61428
disappointed	-4.4487	-4.04538
disbelief	-0.8180	-0.98531
discouraged	-1.9608	-1.78303
disgusted	-1.1228	-1.02096
disinterested	-1.3751	-1.25042
embarrassed	-3.0439	4.09645
emotional	-1.5476	-1.40730
excited	-1.3352	-1.53630
exhausted	-1.1776	1.73087
expression of emotion	-1.3285	5.41440
flirting	-2.4341	-2.21339
friendly	-1.9284	-1.18329
frustrated	-2.4980	-2.27150
funny	33.3196	8.51434
happy	0.4537	3.27699
hopeless	-1.3751	-1.25042
humorous	3.1880	5.41440
hurt	-1.4639	-1.33117
in agreement	-1.9927	-1.81203
in love	-3.2926	-2.99405
irritated	-2.1742	-1.47129
joking	0.3755	-0.22121
joyful	6.4600	0.82040
kiss	-3.4423	-3.13021
laughing	40.9470	12.46114
laughing till you cry	18.2599	1.14878
like	-1.5878	-1.44386
love	-4.6153	-4.38538
nervous	-1.7028	6.84759
neverminded	-1.3285	-1.20802
oops	-1.4639	0.92248
playful	-0.7488	-0.54893
pleased	-1.2806	-1.06032
ponder	-1.1505	-0.09031
questioning	-1.3045	0.49974
relieved	-2.9811	45.24478
remorse	-1.8787	-0.53771
romance	-1.1505	-1.04617
sad	-7.2503	-6.59291
sarcastic	-1.6270	-0.80362

scared	-1.5476	-1.40730
sceptical	-1.3978	-1.27109
shocked	-3.7407	-3.40150
shy	-3.1256	-1.43489
smiling	-2.2180	-1.88589
smirking	-1.3285	-1.20802
smuggish	-1.1228	-1.02096
stressed	-1.3751	3.54798
surprised	-2.9917	-1.98526
sympathetic	-1.1884	-1.59806
teasing	1.2093	-1.11841
thankful	-2.1154	-1.92364
thinking	-1.3045	-1.18625
tired	-2.3685	0.63216
total	-15.2348	-0.44147
uncertain	-2.2314	0.43500
unhappy	-3.2444	-2.95021
unimpressed	-1.4639	-1.33117
upset	-2.6806	-2.43751
winking	-2.9278	-2.66234
worried	-1.9120	-0.58831

CLUSTER 7**DESCRIPTIVE LABELS**

Label	Emoji 2	Emoji 9
affection	x	x
amazed		x
appreciative	x	x
astonished		x
cheeky	x	
compassionate	x	x
cute	x	x
excited		x
flirting	x	
happy		x
in agreement	x	
in love		x
kiss	x	
like	x	x
love	x	x
playful	x	
romance	x	x
smirking		x
sympathetic	x	
thankful	x	x

STANDARDISED RESIDUALS

Label	Emoji 2	Emoji 9
affection	18.84554	7.7674
amazed	-1.28095	6.0060
amused	-2.30117	-2.2308
angry	-2.18479	-2.1180
annoyed	-2.79843	-2.3442
anxious	-1.52055	-1.4740
appreciative	8.44661	2.2590
astonished	-1.47068	2.7828
awkward	-1.22133	-1.1840
blushing	-3.34476	-2.9340
cheeky	0.69252	-1.6320
compassionate	7.55081	0.7406
concerned	-1.54488	-1.4976
content	-3.95757	-3.8365
crying	-4.65871	-4.5162
cute	1.28652	2.0445
depressed	-1.76988	-1.7157
devastated	-1.93110	-1.8720
disappointed	-4.83932	-4.6913
disbelief	-2.38082	-2.3080
discouraged	-2.13297	-2.0677
disgusted	-1.22133	-1.1840
disinterested	-1.49582	-1.4501
embarrassed	-3.31114	-3.2099
emotional	-1.68349	-1.6320
excited	-2.42735	4.8714
exhausted	-1.28095	-1.2418
expression of emotion	-0.75311	-1.4009
flirting	7.17173	-2.1772
friendly	-0.66758	-2.0335
frustrated	-2.71730	-2.6342
funny	-2.40057	-2.7237
happy	-4.78919	2.3822
hopeless	-1.49582	-1.4501
humorous	-1.44510	-0.6871
hurt	-1.59242	-1.5437
in agreement	1.06165	-0.6737
in love	-1.34805	42.0335
irritated	-2.36510	-2.2928
joking	-1.10827	-2.9718
joyful	-1.63859	-0.9589
kiss	46.46192	-3.6300
laughing	-4.37810	-3.7730
laughing till you cry	-1.49582	-1.4501
like	0.00966	11.4647

love	26.58742	32.2749
nervous	-1.85224	-1.7956
neverminded	-1.44510	-1.4009
oops	-1.59242	-1.5437
playful	0.98084	-1.5208
pleased	-1.98819	-1.9274
ponder	-1.25149	-1.2132
questioning	-1.41906	-1.3757
relieved	-3.24287	-3.1437
remorse	-2.04368	-1.9812
romance	7.53800	7.0294
sad	-7.88683	-7.6456
sarcastic	-1.20487	-1.7157
scared	-1.68349	-1.6320
sceptical	-1.52055	-1.4740
shocked	-4.06908	-3.9446
shy	-3.10594	-3.2960
smiling	-3.16134	-2.4120
smirking	-1.44510	0.0268
smuggish	-1.22133	-1.1840
stressed	-1.49582	-1.4501
surprised	-3.25434	-3.1548
sympathetic	1.22690	-1.8532
teasing	-0.59047	-0.5260
thankful	8.12831	0.4589
thinking	-1.41906	-1.3757
tired	-2.57641	-2.4976
uncertain	-2.42735	-2.3531
unhappy	-3.52921	-3.4213
unimpressed	-1.59242	-1.5437
upset	-2.91589	-2.8267
winking	-0.67296	-3.0874
worried	-2.07986	-2.0162

ADDENDUM E**EMOJI LABELS AND STANDARDISED RESIDUALS FOR PLATFORMS****EMOJI 1****DESCRIPTIVE LABELS**

Label	M	AW	T	ANW
anxious		x	x	
compassionate	x	x	x	x
concerned	x	x	x	x
crying	x	x	x	x
depressed		x		x
devastated	x	x	x	x
disappointed	x	x		x
discouraged	x			
emotional	x	x	x	
exhausted				x
hurt	x	x	x	x
remorse	x	x	x	x
sad	x	x	x	x
scared				x
shocked			x	
sympathetic	x	x	x	x
unhappy	x	x	x	x
unimpressed				x
upset	x	x	x	x
worried	x	x		x

STANDARDISED RESIDUALS

Label	M	AW	T	ANW
affection	-1.2576	-1.1905	-1.1905	-1.1861
amazed	-0.6595	-0.6243	-0.6243	-0.6220
amused	-1.1847	-1.1215	-1.1215	-1.1174
angry	-1.1248	-0.1256	-1.0648	-1.0609
annoyed	-1.4407	-1.3638	-1.3638	-1.3589
anxious	-0.7828	0.6084	0.6084	-0.7384
appreciative	-0.7306	-0.6916	-0.6916	-0.6891
astonished	-0.7572	-0.7168	-0.7168	-0.7142
awkward	-0.6288	-0.5952	-0.5952	-0.5931
blushing	-1.7220	-1.6301	-1.6301	-1.6242
cheeky	-0.8667	-0.8205	-0.8205	-0.8175
compassionate	1.9442	2.1355	2.1355	0.7233
concerned	0.4619	1.9034	3.2316	3.2488
content	-2.0375	-1.9288	-1.9288	-1.9218

crying	7.1909	6.0978	7.4191	9.2308
cute	-0.8667	-0.8205	-0.8205	-0.8175
depressed	-0.9112	0.2968	-0.8626	0.3041
devastated	2.0233	0.1214	2.2465	0.1287
disappointed	0.7195	1.4575	-0.2385	1.4800
disbelief	-1.2257	-1.1603	-0.2985	-1.1561
discouraged	0.7231	-1.0395	-1.0395	-0.0703
disgusted	-0.6288	-0.5952	-0.5952	-0.5931
disinterested	-0.7701	-0.7290	-0.7290	-0.7264
embarrassed	-1.7047	-1.6137	-1.6137	-1.6079
emotional	7.2096	0.3983	4.0548	-0.8175
excited	-1.2497	-1.1830	-1.1830	-1.1787
exhausted	-0.6595	-0.6243	-0.6243	0.9857
expression of emotion	-0.7440	-0.7043	-0.7043	-0.7017
flirting	-1.3632	-1.2904	-1.2904	-1.2857
friendly	-1.0800	-1.0223	-1.0223	-1.0186
frustrated	-0.6842	-1.3243	-0.5692	-1.3195
funny	-2.1137	-2.0009	-2.0009	-1.9936
happy	-3.4612	-3.2765	-3.2765	-3.2646
hopeless	-0.7701	-0.7290	-0.7290	-0.7264
humorous	-0.7440	-0.7043	-0.7043	-0.7017
hurt	4.0591	4.3780	1.8009	1.8131
in agreement	-1.1160	-1.0564	-1.0564	-1.0526
in love	-1.8440	-1.7456	-1.7456	-1.7392
irritated	-1.2176	-1.1527	-1.1527	-1.1485
joking	-1.5783	-1.4940	-1.4940	-1.4886
joyful	-0.8436	-0.7986	-0.7986	-0.7957
kiss	-1.9278	-1.8249	-1.8249	-1.8183
laughing	-2.2540	-2.1337	-2.1337	-2.1260
laughing till you cry	-0.7701	-0.7290	-0.7290	-0.7264
like	-0.8892	-0.8418	-0.8418	-0.8387
love	-2.7009	-2.5567	-2.5567	-2.5474
nervous	-0.9536	-0.9027	-0.9027	-0.8994
neverminded	-0.7440	-0.7043	-0.7043	-0.7017
oops	-0.8198	-0.7761	-0.7761	-0.7733
playful	-0.8077	-0.7646	-0.7646	-0.7618
pleased	-1.0236	-0.9690	-0.9690	-0.9654
ponder	-0.6443	-0.6099	-0.6099	-0.6077
questioning	-0.7306	-0.6916	-0.6916	-0.6891
relieved	-1.6696	-1.5804	-1.5804	-1.5747
remorse	3.6999	4.0240	2.0160	1.0229
romance	-0.6443	-0.6099	-0.6099	-0.6077
sad	15.3955	14.3677	14.6279	13.6647
sarcastic	-0.9112	-0.8626	-0.8626	-0.8594
scared	-0.8667	-0.8205	-0.8205	0.4058
sceptical	-0.7828	-0.7411	-0.7411	-0.7384

shocked	-2.0949	-0.9746	0.0339	-0.9637
shy	-1.7505	-1.6571	-1.6571	-1.6510
smiling	-1.6276	-1.5407	-1.5407	-1.5351
smirking	-0.7440	-0.7043	-0.7043	-0.7017
smuggish	-0.6288	-0.5952	-0.5952	-0.5931
stressed	-0.7701	-0.7290	-0.7290	-0.7264
surprised	-1.6755	-1.5860	-0.9555	-0.3147
sympathetic	4.0960	2.2883	3.3616	2.3034
teasing	-0.6888	-0.6520	-0.6520	-0.6497
thankful	-1.1847	-1.1215	-1.1215	-1.1174
thinking	-0.7306	-0.6916	-0.6916	-0.6891
tired	-1.3264	-0.4592	-1.2556	-1.2511
uncertain	-1.2497	-1.1830	-1.1830	-1.1787
unhappy	2.0356	1.1870	1.7684	3.5379
unimpressed	-0.8198	-0.7761	-0.7761	0.5199
upset	1.1633	3.5047	0.6900	0.7028
winking	-1.6397	-1.5522	-1.5522	-1.5465
worried	0.7970	1.9460	-0.0271	0.9703

EMOJI 2**DESCRIPTIVE LABELS**

Label	M	AW	T	ANW
affection	x	x	x	x
appreciative	x	x	x	x
cheeky	x	x	x	x
compassionate	x	x	x	x
cute	x	x		x
expression of emotion			x	
flirting	x		x	x
friendly		x		
in agreement	x		x	x
kiss	x	x	x	x
like	x		x	
love	x	x	x	x
playful	x		x	x
romance		x	x	x
sarcastic	x			
sympathetic	x	x		x
teasing			x	
thankful	x	x	x	x
winking		x		x

STANDARDISED RESIDUALS

Label	M	AW	T	ANW
affection	12.81645	7.82949	9.91530	7.10692
amazed	-0.63549	-0.63771	-0.65734	-0.63103
amused	-1.14164	-1.14562	-1.18088	-1.13363
angry	-1.08390	-1.08768	-1.12116	-1.07629
annoyed	-1.38833	-1.39318	-1.43606	-1.37859
anxious	-0.75436	-0.75700	-0.78029	-0.74907
appreciative	4.97769	4.95547	4.76468	2.16186
astonished	-0.72962	-0.73217	-0.75470	-0.72450
awkward	-0.60592	-0.60803	-0.62675	-0.60167
blushing	-1.65938	-1.66517	-1.71642	-1.64773
cheeky	0.36212	0.35504	0.29362	0.37644
compassionate	0.67790	2.06052	6.00082	6.31154
concerned	-0.76643	-0.76911	-0.79278	-0.76105
content	-1.96340	-1.97025	-2.03089	-1.94962
crying	-2.31124	-2.31931	-2.39069	-2.29502
cute	0.36212	2.74134	-0.86391	0.37644
depressed	-0.87806	-0.88112	-0.90824	-0.87190
devastated	-0.95804	-0.96139	-0.99097	-0.95132
disappointed	-2.40084	-2.40922	-2.48337	-2.38400
disbelief	-1.18115	-1.18528	-1.22175	-1.17286
discouraged	-1.05819	-1.06188	-1.09457	-1.05077
disgusted	-0.60592	-0.60803	-0.62675	-0.60167
disinterested	-0.74210	-0.74469	-0.76760	-0.73689
embarrassed	-1.64270	-1.64843	-1.69917	-1.63117
emotional	-0.83520	-0.83812	-0.86391	-0.82934
excited	-1.20424	-1.20844	-1.24563	-1.19579
exhausted	-0.63549	-0.63771	-0.65734	-0.63103
expression of emotion	-0.71693	-0.71943	0.60690	-0.71190
flirting	0.97020	4.75076	3.05706	5.59544
friendly	-0.07981	0.87077	-1.07647	-1.03340
frustrated	-1.34808	-1.35279	-1.39442	-1.33862
funny	-1.05490	-1.55468	-1.63219	-0.53924
happy	-2.13601	-2.45061	-2.29052	-2.70802
hopeless	-0.74210	-0.74469	-0.76760	-0.73689
humorous	-0.71693	-0.71943	-0.74158	-0.71190
hurt	-0.79002	-0.79278	-0.81718	-0.78448
in agreement	0.78438	-0.15250	0.68561	0.80507
in love	-1.21412	-0.10065	-0.20576	-1.19768
irritated	-1.17336	-1.17745	-1.21369	-1.16512
joking	-0.20578	-0.87091	-0.93744	-0.18582
joyful	-0.81293	-0.81576	-0.84087	-0.80722
kiss	25.05713	21.73848	24.61925	21.46567
laughing	-2.17203	-2.17961	-2.24669	-2.15679
laughing till you	-0.74210	-0.74469	-0.76760	-0.73689

cry				
like	0.31010	-0.85989	1.37008	-0.85088
love	13.53489	13.85257	12.53769	13.28026
nervous	-0.91892	-0.92213	-0.95051	-0.91247
neverminded	-0.71693	-0.71943	-0.74158	-0.71190
oops	-0.79002	-0.79278	-0.81718	-0.78448
playful	0.50651	-0.78103	1.67918	0.52105
pleased	-0.98636	-0.98981	-1.02027	-0.97944
ponder	-0.62088	-0.62305	-0.64222	-0.61652
questioning	-0.70401	-0.70647	-0.72821	-0.69907
relieved	-1.60883	-1.61444	-1.66413	-1.59754
remorse	-1.01390	-1.01743	-1.04875	-1.00678
romance	-0.62088	2.58697	8.70031	4.24946
sad	-3.91275	-3.92641	-4.04725	-3.88529
sarcastic	0.26082	-0.88112	-0.90824	-0.87190
scared	-0.83520	-0.83812	-0.86391	-0.82934
sceptical	-0.75436	-0.75700	-0.78029	-0.74907
shocked	-2.01872	-2.02576	-2.08811	-2.00455
shy	-1.09397	-1.69269	-1.74479	-1.67497
smiling	-1.56838	-1.57386	-1.62229	-1.55738
smirking	-0.71693	-0.71943	-0.74158	-0.71190
smuggish	-0.60592	-0.60803	-0.62675	-0.60167
stressed	-0.74210	-0.74469	-0.76760	-0.73689
surprised	-1.61452	-1.62016	-1.67002	-1.60319
sympathetic	1.16037	2.20045	-0.98101	0.12009
teasing	-0.66375	-0.66607	0.76996	-0.65909
thankful	2.36210	5.83748	3.05325	5.04125
thinking	-0.70401	-0.70647	-0.72821	-0.69907
tired	-1.27819	-1.28265	-1.32212	-1.26922
uncertain	-1.20424	-1.20844	-1.24563	-1.19579
unhappy	-1.75088	-1.75700	-1.81107	-1.73860
unimpressed	-0.79002	-0.79278	-0.81718	-0.78448
upset	-1.44661	-1.45166	-1.49634	-1.43646
winking	-1.58004	0.30652	-0.41063	0.34315
worried	-1.03184	-1.03544	-1.06731	-1.02460

EMOJI 3**DESCRIPTIVE LABELS**

Label	M	AW	T	ANW
amused	x	x	x	x
awkward	x			
funny	x	x	x	x
happy		x		
humorous	x	x	x	x
joking	x		x	
joyful		x	x	x

laughing	x	x	x	x
laughing till you cry	x	x	x	x
playful			x	
pleased			x	
sympathetic				x
teasing	x		x	

STANDARDISED RESIDUALS

Label	M	AW	T	ANW
affection	-1.09145	-1.1599	-1.10548	-1.13300
amazed	-0.57236	-0.6082	-0.57972	-0.59415
amused	13.55998	10.8046	6.64024	14.85961
angry	-0.97623	-1.0374	-0.98877	-1.01339
annoyed	-1.25042	-1.3288	-1.26648	-1.29802
anxious	-0.67942	-0.7220	-0.68815	-0.70529
appreciative	-0.63408	-0.6738	-0.64222	-0.65822
astonished	-0.65714	-0.6983	-0.66559	-0.68216
awkward	1.28669	-0.5799	-0.55274	-0.56650
blushing	-1.49453	-1.5882	-1.51374	-1.55143
cheeky	-0.75223	-0.7994	-0.76190	-0.78087
compassionate	-0.64571	-0.6862	-0.65401	-0.67029
concerned	-0.69030	-0.7336	-0.69917	-0.71657
content	-1.76836	-1.3471	-1.79108	-1.83568
crying	-1.60126	-1.7601	-2.10839	-2.16089
cute	-0.75223	-0.7994	-0.76190	-0.78087
depressed	-0.79083	-0.8404	-0.80099	-0.82094
devastated	-0.86287	-0.9170	-0.87396	-0.89572
disappointed	-2.16235	-2.2979	-2.19013	-2.24466
disbelief	-0.12381	-0.2460	-1.07749	-0.19878
discouraged	-0.95307	-1.0128	-0.96532	-0.98935
disgusted	-0.54573	-0.5799	-0.55274	-0.56650
disinterested	-0.66838	-0.7103	-0.67696	-0.69382
embarrassed	-1.47951	-1.5723	-1.49852	-1.53584
emotional	-0.75223	-0.7994	-0.76190	-0.78087
excited	-0.16262	-1.1526	-0.18825	-1.12590
exhausted	-0.57236	-0.6082	-0.57972	-0.59415
expression of emotion	-0.64571	-0.6862	-0.65401	-0.67029
flirting	-1.18311	-1.2573	-1.19831	-1.22815
friendly	-0.93732	-0.9961	-0.94936	-0.97300
frustrated	-1.21417	-1.2903	-1.22977	-1.26039
funny	14.51887	17.0298	18.05522	17.00004
happy	-1.00662	0.5668	-0.74189	2.01261
hopeless	-0.66838	-0.7103	-0.67696	-0.69382
humorous	2.45164	0.7711	2.40405	0.82159
hurt	-0.71154	-0.7561	-0.72068	-0.73863

in agreement	-0.96857	-1.0293	-0.98101	-1.00544
in love	-1.60039	-1.7007	-1.62095	-1.66131
irritated	-1.05680	-1.1230	-1.07037	-1.09703
joking	0.09034	-0.0817	0.77501	-0.01535
joyful	-0.73217	6.9333	4.65234	1.87139
kiss	-1.67317	-1.7781	-1.69466	-1.73686
laughing	22.58034	21.4913	20.22517	17.66659
laughing till you cry	9.80477	6.3292	12.61769	7.95395
like	-0.77177	-0.8202	-0.78169	-0.80115
love	-2.34409	-2.4910	-2.37420	-2.02236
nervous	-0.82764	-0.8795	-0.83827	-0.85914
neverminded	-0.64571	-0.6862	-0.65401	-0.67029
oops	-0.71154	-0.7561	-0.72068	-0.73863
playful	-0.70100	-0.7449	0.69843	-0.72768
pleased	-0.88838	-0.9441	0.21157	-0.92220
ponder	-0.55920	-0.5943	-0.56639	-0.58049
questioning	-0.63408	-0.6738	-0.64222	-0.65822
relieved	-1.44900	-1.5398	-1.46762	-1.50417
remorse	-0.91318	-0.9704	-0.92491	-0.94794
romance	-0.55920	-0.5943	-0.56639	-0.58049
sad	-3.52406	-3.7450	-3.56934	-3.65822
sarcastic	-0.79083	-0.8404	-0.80099	-0.82094
scared	-0.75223	-0.7994	-0.76190	-0.78087
sceptical	-0.67942	-0.7220	-0.68815	-0.70529
shocked	-1.81818	-1.9322	-1.84154	-1.88739
shy	-1.51924	-1.6145	-1.53876	-1.57707
smiling	-1.41258	-0.8350	-1.43073	-0.78439
smirking	-0.64571	-0.6862	-0.65401	-0.67029
smuggish	-0.54573	-0.5799	-0.55274	-0.56650
stressed	-0.66838	-0.7103	-0.67696	-0.69382
surprised	-1.45413	-1.5453	-1.47282	-1.50949
sympathetic	-0.85420	-0.9077	-0.86517	0.24104
teasing	1.07495	-0.6353	1.04605	0.99085
thankful	-1.02823	-1.0927	-1.04144	-1.06737
thinking	-0.63408	-0.6738	-0.64222	-0.65822
tired	-1.15121	-1.2234	-1.16600	-1.19504
uncertain	-1.08461	-1.1526	-1.09855	-1.12590
unhappy	-1.57695	-1.6758	-1.59721	-1.63698
unimpressed	-0.71154	-0.7561	-0.72068	-0.73863
upset	-1.30290	-1.3846	-1.31965	-1.35250
winking	-1.42308	-1.5123	-1.44137	-1.47726
worried	-0.92934	-0.9876	-0.94128	-0.96472

EMOJI 4**DESCRIPTIVE LABELS**

Label	M	AW	T	ANW
amazed	x	x	x	x
anxious	x	x	x	x
astonished	x	x	x	x
awkward			x	
blushing	x		x	
concerned	x	x	x	x
disbelief	x	x	x	x
embarrassed	x	x	x	x
emotional			x	
expression of emotion	x			
nervous	x		x	
oops	x	x	x	x
questioning	x	x	x	x
remorse			x	
scared	x	x	x	x
shocked	x	x	x	x
shy	x		x	
stressed	x			x
surprised	x	x	x	x
sympathetic			x	x
uncertain	x		x	
unimpressed			x	
worried	x	x	x	x

STANDARDISED RESIDUALS

Label	M	AW	T	ANW
affection	-1.21184	-1.21184	-1.10548	-1.10548
amazed	2.51167	4.08525	1.14526	2.87024
amused	-1.14164	-1.14164	-1.04144	-1.04144
angry	-1.08390	-1.08390	-0.98877	-0.98877
annoyed	-0.66805	-1.38833	-1.26648	-1.26648
anxious	0.57126	0.57126	0.76501	2.21817
appreciative	-0.70401	-0.70401	-0.64222	-0.64222
astonished	3.38209	10.23495	0.83685	9.85147
awkward	-0.60592	-0.60592	3.06561	-0.55274
blushing	1.35380	-1.65938	5.09243	-1.51374
cheeky	-0.83520	-0.83520	-0.76190	-0.76190
compassionate	-0.71693	-0.71693	-0.65401	-0.65401
concerned	3.14780	0.53831	2.16139	0.73111
content	-1.96340	-1.96340	-1.79108	-1.79108
crying	-2.31124	-2.31124	-2.10839	-2.10839

cute	-0.83520	-0.83520	-0.76190	-0.76190
depressed	-0.87806	-0.87806	-0.80099	-0.80099
devastated	-0.95804	-0.95804	-0.87396	-0.87396
disappointed	-2.40084	-2.40084	-1.73353	-1.73353
disbelief	4.74526	7.28515	2.63486	7.27529
discouraged	-1.05819	-1.05819	-0.96532	-0.96532
disgusted	-0.60592	-0.60592	-0.55274	-0.55274
disinterested	-0.74210	-0.74210	-0.67696	-0.67696
embarrassed	10.53239	4.44484	19.18851	1.83810
emotional	-0.83520	-0.83520	0.55062	-0.76190
excited	-1.20424	-1.20424	-1.09855	-1.09855
exhausted	-0.63549	-0.63549	-0.57972	-0.57972
expression of emotion	0.67790	-0.71693	-0.65401	-0.65401
flirting	-1.31360	-1.31360	-1.19831	-1.19831
friendly	-1.04070	-1.04070	-0.94936	-0.94936
frustrated	-1.34808	-1.34808	-1.22977	-1.22977
funny	-2.03682	-2.03682	-1.85806	-1.85806
happy	-3.33531	-3.33531	-3.04257	-3.04257
hopeless	-0.74210	-0.74210	-0.67696	-0.67696
humorous	-0.71693	-0.71693	-0.65401	-0.65401
hurt	-0.79002	-0.79002	-0.72068	-0.72068
in agreement	-1.07540	-1.07540	-0.98101	-0.98101
in love	-1.77690	-1.77690	-1.62095	-1.62095
irritated	-1.17336	-1.17336	-1.07037	-1.07037
joking	-1.52084	-1.52084	-1.38736	-1.38736
joyful	-0.81293	-0.81293	-0.74158	-0.74158
kiss	-1.85771	-1.85771	-1.69466	-1.69466
laughing	-2.17203	-2.17203	-1.98140	-1.98140
laughing till you cry	-0.74210	-0.74210	-0.67696	-0.67696
like	-0.85690	-0.85690	-0.78169	-0.78169
love	-2.60263	-2.60263	-2.37420	-2.37420
nervous	0.16931	-0.91892	0.35466	-0.83827
neverminded	-0.71693	-0.71693	-0.65401	-0.65401
oops	3.00735	3.00735	2.05446	0.66689
playful	-0.77832	-0.77832	-0.71001	-0.71001
pleased	-0.98636	-0.98636	-0.89979	-0.89979
ponder	-0.62088	-0.62088	-0.56639	-0.56639
questioning	0.71641	4.97769	2.47195	4.02904
relieved	-1.60883	-1.60883	-1.46762	-1.46762
remorse	-0.02760	-1.01390	1.23747	-0.92491
romance	-0.62088	-0.62088	-0.56639	-0.56639
sad	-3.40160	-3.91275	-3.00901	-3.56934
sarcastic	-0.87806	-0.87806	-0.80099	-0.80099
scared	5.15138	8.74333	0.55062	3.17564
sceptical	-0.75436	-0.75436	-0.68815	-0.68815
shocked	19.28192	28.19847	10.64800	26.39569

shy	1.27738	-1.68681	1.06074	-1.53876
smiling	-1.56838	-1.56838	-1.43073	-1.43073
smirking	-0.71693	-0.71693	-0.65401	-0.65401
smuggish	-0.60592	-0.60592	-0.55274	-0.55274
stressed	0.60544	-0.74210	-0.67696	0.80022
surprised	15.10872	15.72809	9.39071	18.89631
sympathetic	-0.94841	-0.94841	0.29067	0.29067
teasing	-0.66375	-0.66375	-0.60549	-0.60549
thankful	-1.14164	-1.14164	-1.04144	-1.04144
thinking	-0.70401	-0.70401	-0.64222	-0.64222
tired	-0.49583	-1.27819	-1.16600	-1.16600
uncertain	2.11736	-0.37384	1.63234	-1.09855
unhappy	-1.75088	-1.75088	-0.97112	-1.59721
unimpressed	-0.79002	-0.79002	0.66689	-0.72068
upset	-0.75534	-1.44661	-1.31965	-1.31965
winking	-1.58004	-1.58004	-1.44137	-1.44137
worried	3.81386	1.87558	4.37064	0.12110

EMOJI 5**DESCRIPTIVE LABELS**

Label	M	AW	T	ANW
amazed				x
angry	x	x	x	x
annoyed	x	x	x	
anxious	x	x	x	x
astonished		x		x
awkward	x	x	x	x
concerned	x	x	x	
disbelief		x	x	x
disgusted		x		
embarrassed		x	x	
excited	x	x	x	x
expression of emotion		x		
frustrated	x	x	x	x
irritated	x	x		x
joyful		x		
nervous	x	x	x	x
oops	x	x	x	x
questioning		x		x
remorse	x	x		
sarcastic	x		x	x
scared	x	x	x	x
shocked			x	x
smiling	x	x	x	x
stressed	x	x	x	x

surprised	x	x	x	x
uncertain	x	x	x	x
upset		x		
worried	x	x	x	x

STANDARDISED RESIDUALS

Label	M	AW	T	ANW
affection	-1.07725	-0.95064	-1.03841	-1.01339
amazed	-0.56491	-0.49852	-0.54455	1.35030
amused	-0.02947	-0.89557	-0.97826	-0.95469
angry	4.22579	7.38229	8.76128	2.40338
annoyed	0.38642	2.58366	0.49151	-1.16098
anxious	11.25937	6.16760	2.44761	8.88045
appreciative	-0.62582	-0.55227	-0.60326	-0.58873
astonished	-0.64859	1.17478	-0.62521	1.02882
awkward	8.74429	3.73236	5.25883	5.41403
blushing	-1.47508	-1.30172	-1.42191	-1.38764
cheeky	-0.74244	-0.65519	-0.71568	-0.69843
compassionate	-0.63731	-0.56241	-0.61433	-0.59953
concerned	0.78645	1.06199	2.38854	-0.64092
content	-1.74534	-1.54022	-1.08804	-1.64188
crying	-2.05455	-1.81309	-1.98049	-1.93276
cute	-0.74244	-0.65519	-0.71568	-0.69843
depressed	-0.78054	-0.68881	-0.75240	-0.73427
devastated	-0.85164	-0.75155	-0.82094	-0.80115
disappointed	-1.66564	-1.88338	-1.57119	-1.50960
disbelief	-0.09756	0.15267	1.95195	0.02469
discouraged	-0.94067	-0.83011	-0.90676	-0.88490
disgusted	-0.53862	1.62852	-0.51921	-0.50669
disinterested	-0.65968	-0.58215	-0.63590	-0.62057
embarrassed	-0.77545	1.03940	1.43406	-0.64573
emotional	-0.74244	-0.65519	-0.71568	-0.69843
excited	9.20514	10.69943	5.75167	10.90913
exhausted	-0.56491	-0.49852	-0.54455	-0.53143
expression of emotion	-0.63731	1.21566	-0.61433	-0.59953
flirting	-1.16771	-1.03047	-1.12561	-1.09849
friendly	-0.92512	-0.81639	-0.89177	-0.87028
frustrated	7.14636	2.72490	4.90458	2.42090
funny	-1.25831	-1.59782	-1.17239	-1.70328
happy	-1.61575	-1.46983	-1.45842	-1.35498
hopeless	-0.65968	-0.58215	-0.63590	-0.62057
humorous	-0.63731	-0.56241	-0.61433	-0.59953
hurt	-0.70228	-0.61974	-0.67696	-0.66065
in agreement	-0.95596	-0.84361	-0.92150	-0.89929
in love	-1.57955	-1.39392	-1.52262	-1.48592
irritated	0.87443	2.33880	-0.01085	1.05709

joking	-1.35193	-1.19305	-1.30320	-1.27179
joyful	-0.72264	0.93040	-0.69659	-0.67980
kiss	-1.65139	-1.45731	-1.59186	-1.55350
laughing	-1.93080	-1.70388	-1.86120	-0.71523
laughing till you cry	-0.65968	-0.58215	-0.63590	-0.62057
like	-0.76173	-0.67221	-0.73427	-0.71657
love	-2.31358	-2.04167	-2.23018	-2.17643
nervous	12.64928	4.82806	5.56246	10.94359
neverminded	-0.63731	-0.56241	-0.61433	-0.59953
oops	7.84133	5.83454	6.70896	3.88034
playful	-0.69187	-0.61056	-0.66693	-0.65086
pleased	-0.87682	-0.77377	-0.84521	-0.82484
ponder	-0.55193	-0.48706	-0.53203	-0.51921
questioning	-0.62582	1.25842	-0.60326	1.10986
relieved	-1.43014	-1.26207	-1.37859	-1.34537
remorse	3.53679	0.46192	-0.86880	-0.84786
romance	-0.55193	-0.48706	-0.53203	-0.51921
sad	-3.47819	-3.06942	-3.05455	-2.96638
sarcastic	1.78179	-0.68881	0.57667	3.35142
scared	5.99209	3.92367	9.06526	6.46048
sceptical	-0.67058	-0.59177	-0.64641	-0.63083
shocked	-1.79451	-0.32068	1.16064	0.08897
shy	-1.49947	-1.32324	-0.75357	-1.41058
smiling	5.06115	2.83358	5.35282	4.78812
smirking	-0.63731	-0.56241	-0.61433	-0.59953
smuggish	-0.53862	-0.47532	-0.51921	-0.50669
stressed	5.40390	9.72451	5.65443	2.60226
surprised	3.44214	1.89169	1.50781	2.35322
sympathetic	-0.84308	-0.74400	-0.81269	-0.79310
teasing	-0.59003	-0.52069	-0.56876	-0.55506
thankful	-1.01484	-0.89557	-0.97826	-0.95469
thinking	-0.62582	-0.55227	-0.60326	-0.58873
tired	-1.13623	-1.00269	-1.09527	-1.06887
uncertain	3.60025	3.28954	1.87534	7.93009
unhappy	-0.27143	-0.64544	-0.83380	-0.09820
unimpressed	-0.70228	-0.61974	-0.67696	-0.66065
upset	-1.28595	1.50879	-1.23959	-0.38308
winking	-1.40456	-1.23949	-1.35393	-1.32130
worried	3.44365	1.66139	8.16377	1.45498

EMOJI 6**DESCRIPTIVE LABELS**

Label	M	AW	T	ANW
angry		x		
anxious	x			

compassionate			x	
crying	x	x	x	x
cute	x			
depressed	x	x	x	x
devastated	x	x	x	x
disappointed			x	
emotional	x	x	x	x
exhausted			x	
frustrated	x	x		
hopeless	x	x		
hurt	x	x	x	x
joyful	x			
questioning	x			
remorse			x	x
sad	x	x	x	x
stressed		x		
sympathetic		x	x	x
unhappy			x	x
upset	x	x	x	x

STANDARDISED RESIDUALS

Label	M	AW	T	ANW
affection	-1.2778	-1.2203	-1.1818	-1.1861
amazed	-0.6701	-0.6399	-0.6197	-0.6220
amused	-0.3731	-1.1496	-1.1133	-1.1174
angry	-0.2680	2.5734	-1.0570	-1.0609
annoyed	-1.4639	-1.3980	-1.3539	-1.3589
anxious	0.4617	-0.7596	-0.7357	-0.7384
appreciative	-0.7424	-0.7089	-0.6866	-0.6891
astonished	-0.7694	-0.7347	-0.7115	-0.7142
awkward	-0.6389	-0.6101	-0.5909	-0.5931
blushing	-1.7497	-1.6709	-1.6183	-1.6242
cheeky	-0.8807	-0.8410	-0.8145	-0.8175
compassionate	-0.7560	-0.7219	0.7311	-0.7017
concerned	-0.8082	-0.7718	-0.7474	-0.7502
content	-2.0703	-1.9771	-1.9147	-1.9218
crying	17.6686	17.4376	16.8235	18.0716
cute	0.2548	-0.8410	-0.8145	-0.8175
depressed	2.3143	1.3778	3.8150	1.4677
devastated	8.8886	5.2547	9.7689	10.7928
disappointed	-0.5566	-1.1767	0.6484	-0.6478
disbelief	-0.4426	-0.3486	-1.1519	-1.1561
discouraged	-1.1158	-0.1271	-1.0320	-1.0358
disgusted	-0.6389	-0.6101	-0.5909	-0.5931
disinterested	-0.7825	-0.7473	-0.7237	-0.7264
embarrassed	-1.1548	-1.6541	-1.6020	-1.6079
emotional	3.6612	2.7261	4.0965	6.5220

excited	-1.2698	-1.2126	-1.1744	-1.1787
exhausted	-0.6701	-0.6399	0.9938	-0.6220
expression of emotion	-0.7560	-0.7219	-0.6992	-0.7017
flirting	-1.3851	-1.3228	-1.2810	-1.2857
friendly	-1.0974	-1.0480	-1.0149	-1.0186
frustrated	0.6889	0.8525	-0.5540	-1.3195
funny	-2.1478	-2.0510	-1.9863	-1.4920
happy	-3.2326	-3.0608	-3.2526	-3.2646
hopeless	0.4954	0.5909	-0.7237	-0.7264
humorous	-0.7560	-0.7219	-0.6992	-0.7017
hurt	2.7682	2.9756	4.4214	3.1064
in agreement	-1.1340	-1.0829	-1.0487	-1.0526
in love	-1.8737	-1.7893	-1.7329	-1.7392
irritated	-0.4290	-0.3352	-1.1443	-1.1485
joking	-1.6037	-1.5314	-1.4832	-1.4886
joyful	0.3094	-0.8186	-0.7928	-0.7957
kiss	-1.9589	-1.8707	-1.8117	-1.8183
laughing	-2.2903	-1.7300	-2.1182	-2.1260
laughing till you cry	-0.7825	-0.7473	-0.7237	-0.7264
like	-0.9036	-0.8629	-0.8357	-0.8387
love	-2.7444	-2.6208	-2.5381	-2.5474
nervous	-0.9690	-0.9253	-0.8961	-0.8994
neverminded	-0.7560	-0.7219	-0.6992	-0.7017
oops	-0.8330	-0.7955	-0.7704	-0.7733
playful	-0.8207	-0.7837	-0.7590	-0.7618
pleased	-1.0401	-0.9932	-0.9619	-0.9654
ponder	-0.6547	-0.6252	-0.6055	-0.6077
questioning	0.6047	-0.7089	-0.6866	-0.6891
relieved	-1.6964	-1.6200	-1.5690	-1.5747
remorse	-0.1338	-0.0415	0.0226	0.0153
romance	-0.6547	-0.6252	-0.6055	-0.6077
sad	9.6895	9.0041	7.4532	8.1813
sarcastic	-0.9259	-0.8842	-0.8563	-0.8594
scared	-0.8807	-0.8410	-0.8145	-0.8175
sceptical	-0.7954	-0.7596	-0.7357	-0.7384
shocked	-2.1287	-1.5409	-1.9687	-1.9759
shy	-1.7787	-1.6986	-1.6450	-1.6510
smiling	-1.6538	-1.5793	-1.5295	-1.5351
smirking	-0.7560	-0.7219	-0.6992	-0.7017
smuggish	-0.6389	-0.6101	-0.5909	-0.5931
stressed	-0.7825	0.5909	-0.7237	-0.7264
surprised	-1.7024	-1.6258	-1.5745	-1.5803
sympathetic	-0.0001	0.0921	2.3187	0.1489
teasing	-0.6999	-0.6684	-0.6473	-0.6497
thankful	-1.2038	-1.1496	-1.1133	-1.1174
thinking	-0.7424	-0.7089	-0.6866	-0.6891

tired	-1.3478	-1.2871	-0.4443	-0.4518
uncertain	-1.2698	-1.2126	-1.1744	-1.1787
unhappy	-0.2213	-0.0615	0.6351	2.3708
unimpressed	-0.8330	-0.7955	-0.7704	-0.7733
upset	3.7191	5.4082	4.2599	4.2340
winking	-1.6661	-1.5911	-1.5409	-1.5465
worried	-1.0880	-1.0390	-1.0063	-1.0100

EMOJI 7**DESCRIPTIVE LABELS**

Label	M	AW	T	ANW
angry			x	
compassionate				x
concerned	x	x	x	x
depressed	x	x	x	x
devastated			x	x
disappointed	x	x	x	x
discouraged	x	x	x	x
disinterested		x	x	
emotional			x	x
exhausted	x		x	
expression of emotion	x	x	x	
hopeless	x	x		x
hurt		x	x	x
remorse	x	x	x	x
sad	x	x	x	x
stressed		x		
sympathetic	x	x	x	x
thinking			x	
tired	x	x	x	x
unhappy	x	x	x	x
unimpressed	x		x	x
upset	x	x	x	x
worried	x	x	x	

STANDARDISED RESIDUALS

Label	M	AW	T	ANW
affection	-1.2858	-1.1008	-1.10082	-1.1554
amazed	-0.6743	-0.5773	-0.57728	-0.6059
amused	-1.2114	-1.0371	-1.03705	-1.0885
angry	-1.1501	-0.9846	1.04666	-1.0335
annoyed	-1.4731	-1.2612	-0.46822	-0.5683
anxious	-0.8004	-0.6853	-0.68526	-0.7193
appreciative	-0.7470	-0.6395	-0.63952	-0.6713

astonished	-0.7742	-0.6628	-0.66278	-0.6957
awkward	-0.6429	-0.5504	-0.55041	-0.5777
blushing	-1.7607	-1.5074	-1.50736	-1.5822
cheeky	-0.8862	-0.7587	-0.75869	-0.7963
compassionate	-0.7607	-0.6513	-0.65126	0.7793
concerned	0.4164	2.1764	0.74010	0.6377
content	-2.0833	-1.7835	-1.78354	-1.8720
crying	-2.4524	-2.0995	-2.09951	-2.2037
cute	-0.8862	-0.7587	-0.75869	-0.7963
depressed	7.6549	0.4561	5.47101	6.3296
devastated	-1.0166	-0.8703	0.27878	0.1813
disappointed	12.3693	12.9504	11.11631	11.6901
disbelief	-1.2533	-1.0729	-0.14094	-1.1262
discouraged	6.0021	3.2000	6.32092	5.9290
disgusted	-0.6429	-0.5504	-0.55041	-0.5777
disinterested	-0.7874	0.8093	2.29275	-0.7076
embarrassed	-1.7430	-1.4922	-0.82207	-1.5663
emotional	-0.8862	-0.7587	1.87744	0.4594
excited	-1.2778	-1.0939	-1.09392	-1.1482
exhausted	0.8087	-0.5773	1.15500	-0.6059
expression of emotion	1.8684	0.8842	0.88424	-0.6836
flirting	-1.3938	-1.1933	-1.19326	-1.2525
friendly	-1.1043	-0.9454	-0.94536	-0.9923
frustrated	-1.4304	-1.2246	-0.40799	-0.5073
funny	-2.1612	-1.8502	-1.85023	-1.9420
happy	-3.2564	-3.0298	-3.02976	-3.1801
hopeless	0.4826	2.2927	-0.67411	2.1191
humorous	-0.7607	-0.6513	-0.65126	-0.6836
hurt	-0.8383	2.0692	2.06923	0.5743
in agreement	-0.2647	-0.9769	-0.97688	-1.0254
in love	-1.8854	-1.6141	-1.61412	-1.6942
irritated	-1.2450	-1.0659	-1.06587	-1.1188
joking	-1.6137	-1.3815	-1.38152	-1.4501
joyful	-0.8626	-0.7385	-0.73845	-0.7751
kiss	-1.9712	-1.6875	-1.68753	-1.7713
laughing	-2.3047	-1.9731	-1.97305	-2.0709
laughing till you cry	-0.7874	-0.6741	-0.67411	-0.7076
like	-0.9092	-0.7784	-0.77840	-0.8170
love	-2.7616	-2.3642	-2.36421	-2.4815
nervous	-0.9750	-0.8347	-0.83474	-0.8762
neverminded	-0.7607	-0.6513	-0.65126	-0.6836
oops	-0.8383	-0.7176	-0.71765	-0.7533
playful	-0.8259	-0.7070	-0.70702	-0.7421
pleased	-1.0466	-0.8960	-0.89600	-0.9405
ponder	-0.6588	-0.5640	-0.56400	-0.5920
questioning	-0.7470	-0.6395	-0.63952	-0.6713

relieved	-1.7071	-1.4614	-1.46144	-1.5340
remorse	3.5718	2.3363	0.16475	3.1710
romance	-0.6588	-0.5640	-0.56400	-0.5920
sad	12.2271	11.0758	4.88615	9.1357
sarcastic	-0.9317	-0.7976	-0.79762	-0.8372
scared	-0.8862	-0.7587	-0.75869	-0.7963
sceptical	-0.8004	-0.6853	-0.68526	-0.7193
shocked	-2.1420	-1.8338	-1.28847	-1.9248
shy	-1.7898	-0.8797	-1.53228	-0.9865
smiling	-1.6642	-1.4247	-1.42470	-1.4954
smirking	-0.7607	-0.6513	-0.65126	-0.6836
smuggish	-0.6429	-0.5504	-0.55041	-0.5777
stressed	-0.7874	0.8093	-0.67411	-0.7076
surprised	-1.7131	-1.4666	-1.46662	-0.8898
sympathetic	1.9748	0.2992	1.45992	4.6250
teasing	-0.7043	-0.6029	-0.60295	-0.6329
thankful	-1.2114	-1.0371	-1.03705	-1.0885
thinking	-0.7470	-0.6395	2.48783	-0.6713
tired	2.3304	3.1452	4.86770	1.2429
uncertain	-1.2778	-1.0939	-0.17978	-1.1482
unhappy	2.9866	1.5532	4.06815	0.7267
unimpressed	0.3547	-0.7176	0.67579	0.5743
upset	2.3739	0.2079	0.20788	2.9708
winking	-1.6765	-1.4353	-1.43530	-1.5065
worried	0.7319	0.1296	3.33019	-0.9838

EMOJI 8**DESCRIPTIVE LABELS**

Label	M	AW	T	ANW
blushing			x	
content	x	x	x	x
disappointed	x			
discouraged	x			
disinterested		x	x	
embarrassed	x			
emotional		x		
excited				x
expression of emotion	x		x	
friendly		x	x	
happy		x	x	x
hopeless	x			
in agreement	x			x
joyful	x			x
like				x
pleased		x	x	x

relieved		x	x	
remorse	x	x		
sad	x			
sarcastic			x	x
shy	x	x	x	x
smiling			x	x
smirking				x
smuggish			x	x
sympathetic			x	x
teasing			x	
thankful	x	x	x	
thinking	x	x		
tired	x	x		
uncertain			x	
unimpressed	x			

STANDARDISED RESIDUALS

Label	M	AW	T	ANW
affection	-1.0384	-0.92324	-0.99807	-0.9981
amazed	-0.5445	-0.48415	-0.52339	-0.5234
amused	-0.9783	-0.86976	-0.94026	-0.9403
angry	-0.9288	-0.82577	-0.89270	-0.8927
annoyed	-0.3491	-1.05771	-1.14344	-1.1434
anxious	-0.6464	-0.57471	-0.62130	-0.6213
appreciative	-0.6033	-0.53635	-0.57983	-0.5798
astonished	-0.6252	-0.55586	-0.60092	-0.6009
awkward	-0.5192	-0.46162	-0.49904	-0.4990
blushing	-0.7186	-1.26420	0.09675	-1.3667
cheeky	-0.7157	-0.63630	-0.68787	-0.6879
compassionate	-0.6143	-0.54620	-0.59047	-0.5905
concerned	-0.6568	-0.58391	-0.63124	-0.6312
content	5.4501	17.22298	20.02712	22.5007
crying	-1.9805	-1.76083	-1.90355	-1.9035
cute	-0.7157	-0.63630	-0.68787	-0.6879
depressed	-0.7524	-0.66895	-0.72317	-0.7232
devastated	-0.8209	-0.72989	-0.78905	-0.7890
disappointed	5.2340	-1.82909	-1.97734	-1.9773
disbelief	-1.0121	-0.89986	-0.97280	-0.9728
discouraged	5.7102	-0.80619	-0.87153	-0.8715
disgusted	-0.5192	-0.46162	-0.49904	-0.4990
disinterested	-0.6359	1.20339	1.02495	-0.6112
embarrassed	0.7236	-1.25149	-0.61380	-1.3529
emotional	-0.7157	0.93528	-0.68787	-0.6879
excited	-1.0319	-0.91745	-0.99182	0.0164
exhausted	-0.5445	-0.48415	-0.52339	-0.5234
expression of emotion	2.6412	-0.54620	1.10310	-0.5905

flirting	-1.1256	-1.00077	-1.08188	-1.0819
friendly	-0.8918	2.99091	1.47626	-0.8571
frustrated	-0.2895	-1.02704	-1.11029	-1.1103
funny	-1.7453	-1.55176	-1.67753	-1.0814
happy	-0.7586	3.75569	7.44609	8.1742
hopeless	0.9367	-0.56537	-0.61119	-0.6112
humorous	-0.6143	-0.54620	-0.59047	-0.5905
hurt	-0.6770	-0.60188	-0.65066	-0.6507
in agreement	1.2489	-0.81930	-0.88570	1.3724
in love	-1.5226	-0.61504	-1.46346	-1.4635
irritated	-1.0054	-0.89392	-0.96638	-0.9664
joking	-1.3032	-1.15866	-1.25257	-1.2526
joyful	0.7390	-0.61933	-0.66953	0.8241
kiss	-1.5919	-1.41530	-1.53002	-1.5300
laughing	-1.8612	-1.65477	-1.78889	-1.7889
laughing till you cry	-0.6359	-0.56537	-0.61119	-0.6112
like	-0.7343	-0.65283	-0.70574	0.7112
love	-2.2302	-1.98282	-2.14353	-2.1435
nervous	-0.7874	-0.70008	-0.75683	-0.7568
neverminded	-0.6143	-0.54620	-0.59047	-0.5905
oops	-0.6770	-0.60188	-0.65066	-0.6507
playful	-0.6669	-0.59296	-0.64102	-0.6410
pleased	-0.8452	7.23295	6.57340	7.8044
ponder	-0.5320	-0.47302	-0.51136	-0.5114
questioning	-0.6033	-0.53635	-0.57983	-0.5798
relieved	-0.6532	4.48539	0.93906	-1.3250
remorse	3.7353	0.52216	-0.83505	-0.8350
romance	-0.5320	-0.47302	-0.51136	-0.5114
sad	3.8054	-2.98094	-3.22255	-3.2226
sarcastic	-0.7524	-0.66895	0.65962	0.6596
scared	-0.7157	-0.63630	-0.68787	-0.6879
sceptical	-0.6464	-0.57471	-0.62130	-0.6213
shocked	-1.7298	-1.53797	-1.66262	-1.6626
shy	4.0893	5.71826	0.77017	0.0504
smiling	-1.3439	-0.35797	0.25660	1.0308
smirking	-0.6143	-0.54620	-0.59047	1.1031
smuggish	-0.5192	-0.46162	1.50483	3.5087
stressed	-0.6359	-0.56537	-0.61119	-0.6112
surprised	-1.3835	-0.41704	-0.57769	-1.3297
sympathetic	-0.8127	-0.72255	0.49911	0.4991
teasing	-0.5688	-0.50568	1.28260	-0.5467
thankful	1.0662	1.42972	2.25036	-0.9403
thinking	1.0544	1.32808	-0.57983	-0.5798
tired	6.2089	0.05313	-0.10280	-0.1028
uncertain	-1.0319	-0.91745	0.01644	-0.9918
unhappy	-0.1673	-1.33392	-1.44203	-1.4420
unimpressed	0.8002	-0.60188	-0.65066	-0.6507

upset	-1.2396	-1.10210	-1.19143	-1.1914
winking	-1.3539	-1.20376	-1.30133	-1.3013
worried	-0.8842	-0.78611	-0.84983	-0.8498

EMOJI 9**DESCRIPTIVE LABELS**

Label	M	AW	T	ANW
affection	x	x	x	
amazed	x		x	x
appreciative		x		
astonished	x		x	
compassionate	x	x		
cute	x	x	x	x
excited	x		x	x
funny				x
happy	x	x	x	x
humorous	x			
in agreement	x			
in love	x	x	x	x
joyful				x
like	x	x	x	x
love	x	x	x	x
romance	x	x	x	x
smirking			x	x
teasing		x		
thankful		x		
thankful				x

STANDARDISED RESIDUALS

Label	M	AW	T	ANW
affection	5.2562	6.63379	4.54019	-1.1285
amazed	3.9938	-0.60592	5.63472	2.7879
amused	-1.1614	-1.08851	-1.14562	-1.0631
angry	-1.1027	-1.03346	-1.08768	-1.0093
annoyed	-0.7044	-1.32372	-1.39318	-1.2928
anxious	-0.7674	-0.71926	-0.75700	-0.7025
appreciative	-0.7162	2.30826	3.53999	-0.6556
astonished	1.9522	-0.69567	4.73105	-0.6794
awkward	-0.6164	-0.57772	-0.60803	-0.5642
blushing	-1.6881	-1.58215	-1.06463	-1.5452
cheeky	-0.8497	-0.79633	-0.83812	-0.7777
compassionate	0.6417	2.24225	-0.71943	-0.6676
concerned	-0.7797	-0.73077	-0.76911	-0.7137
content	-1.9974	-1.87203	-1.97025	-1.8283

crying	-2.3513	-2.20368	-2.31931	-2.1522
cute	1.5042	0.45942	1.54819	0.5080
depressed	-0.8933	-0.83720	-0.88112	-0.8176
devastated	-0.9746	-0.91346	-0.96139	-0.8921
disappointed	-2.4425	-2.28912	-2.40922	-2.2357
disbelief	-1.2016	-1.12619	-1.18528	-1.0999
discouraged	-1.0765	-1.00895	-1.06188	-0.9854
disgusted	-0.6164	-0.57772	-0.60803	-0.5642
disinterested	-0.7550	-0.70756	-0.74469	-0.6910
embarrassed	-1.6712	-1.56625	-1.64843	-1.5297
emotional	-0.8497	-0.79633	-0.83812	-0.7777
excited	4.4887	-1.14820	3.75663	2.4456
exhausted	-0.6465	-0.60592	-0.63771	-0.5918
expression of emotion	-0.7294	-0.68357	-0.71943	-0.6676
flirting	-1.3364	-0.45405	-1.31819	-1.2232
friendly	-1.0587	-0.99227	-1.04433	-0.9691
frustrated	-1.3714	-1.28535	-1.35279	-1.2553
funny	-1.5895	-1.94204	-2.04393	0.2122
happy	1.3223	0.27893	0.83597	2.3677
hopeless	-0.7550	-0.70756	-0.74469	-0.6910
humorous	0.6417	-0.68357	-0.71943	-0.6676
hurt	-0.8037	-0.75326	-0.79278	-0.7357
in agreement	0.7341	-0.05008	-1.07915	-1.0014
in love	18.6603	21.91562	21.21050	22.5196
irritated	-1.1937	-1.11875	-1.17745	-1.0926
joking	-1.5472	-1.45007	-1.52615	-1.4162
joyful	-0.8270	-0.77509	-0.81576	0.5640
kiss	-1.8899	-1.77126	-1.86420	-1.7299
laughing	-1.7571	-2.07095	-2.17961	-1.5282
laughing till you cry	-0.7550	-0.70756	-0.74469	-0.6910
like	6.0110	6.52674	6.11775	4.2149
love	18.5024	15.65261	15.00124	15.3189
nervous	-0.9348	-0.87616	-0.92213	-0.8557
neverminded	-0.7294	-0.68357	-0.71943	-0.6676
oops	-0.8037	-0.75326	-0.79278	-0.7357
playful	-0.7918	-0.74210	-0.78103	-0.7248
pleased	-1.0035	-0.94046	-0.98981	-0.9185
ponder	-0.6316	-0.59199	-0.62305	-0.5782
questioning	-0.7162	-0.67125	-0.70647	-0.6556
relieved	-1.6367	-1.53395	-1.61444	-1.4981
remorse	-1.0315	-0.96671	-1.01743	-0.9441
romance	0.9515	4.47569	5.79699	2.8811
sad	-3.9806	-3.73066	-3.92641	-3.6436
sarcastic	-0.8933	-0.83720	-0.88112	-0.8176
scared	-0.8497	-0.79633	-0.83812	-0.7777
sceptical	-0.7674	-0.71926	-0.75700	-0.7025

shocked	-2.0537	-1.92477	-2.02576	-1.8798
shy	-1.7160	-1.60831	-1.69269	-1.5708
smiling	-1.5956	-0.82667	-0.93847	-1.4605
smirking	-0.7294	-0.68357	0.67054	0.8303
smuggish	-0.6164	-0.57772	-0.60803	-0.5642
stressed	-0.7550	-0.70756	-0.74469	-0.6910
surprised	-1.6425	-1.53938	-1.62016	-1.5034
sympathetic	-0.9649	-0.90428	-0.95172	-0.8832
teasing	-0.6753	0.94726	-0.66607	-0.6181
thankful	-1.1614	1.66755	-0.27274	0.8182
thinking	-0.7162	-0.67125	-0.70647	-0.6556
tired	-1.3003	-1.21870	-1.28265	-1.1902
uncertain	-1.2251	-1.14820	-1.20844	-1.1214
unhappy	-1.7812	-1.66940	-1.75700	-1.6304
unimpressed	-0.8037	-0.75326	-0.79278	-0.7357
upset	-1.4717	-1.37929	-1.45166	-1.3471
winking	-1.6074	-1.50651	-1.58556	-1.4713
worried	-1.0497	-0.98382	-1.03544	-0.9609

EMOJI 10**DESCRIPTIVE LABELS**

Label	M	AW	T	ANW
amused	x		x	
anxious		x	x	
awkward	x	x		
concerned		x		
disbelief		x	x	
embarrassed	x	x	x	x
exhausted	x		x	x
expression of emotion	x	x	x	x
friendly			x	
funny	x	x	x	x
happy	x	x	x	x
humorous	x		x	x
joking	x			x
joyful	x		x	x
laughing	x	x	x	x
laughing till you cry	x	x		
nervous	x	x	x	x
oops	x		x	x
playful			x	
pleased				x
ponder			x	
questioning		x	x	

relieved	x	x	x	x
remorse		x		
sarcastic	x			
shy		x		
smiling	x			
stressed	x	x	x	x
tired	x			
uncertain	x			
worried			x	x

STANDARDISED RESIDUALS

Label	M	AW	T	ANW
affection	-1.03841	-1.01339	-1.02347	-1.00831
amazed	-0.54455	-0.53143	-0.53671	-0.52876
amused	2.08840	-0.95469	0.07296	-0.94990
angry	-0.92879	-0.90640	-0.91542	-0.90186
annoyed	-1.18965	-1.16098	-1.17254	-1.15516
anxious	-0.64641	0.95438	0.93249	-0.62767
appreciative	-0.60326	-0.58873	-0.59458	-0.58577
astonished	-0.62521	-0.61014	-0.61621	-0.60708
awkward	1.40680	1.46688	-0.51174	-0.50415
blushing	-1.42191	-1.38764	-1.40145	-1.38068
cheeky	-0.71568	-0.69843	-0.70538	-0.69493
compassionate	-0.61433	-0.59953	-0.60549	-0.59652
concerned	-0.65675	0.91932	-0.64730	-0.63771
content	-1.68242	-1.03282	-1.65822	-1.63365
crying	-1.98049	-1.93276	-1.95199	-1.92307
cute	-0.71568	-0.69843	-0.70538	-0.69493
depressed	-0.75240	-0.73427	-0.74158	-0.73059
devastated	-0.82094	-0.80115	-0.80913	-0.79714
disappointed	-2.05727	-2.00769	-2.02766	-1.99762
disbelief	-1.01212	0.02469	0.00489	-0.98278
discouraged	-0.90676	-0.88490	-0.89371	-0.88047
disgusted	-0.51921	-0.50669	-0.51174	-0.50415
disinterested	-0.63590	-0.62057	-0.62675	-0.61746
embarrassed	2.85491	2.99409	1.49581	0.82809
emotional	-0.71568	-0.69843	-0.70538	-0.69493
excited	-0.06282	-1.00704	-1.01706	-1.00199
exhausted	1.29183	-0.53143	1.32648	1.36245
expression of emotion	1.01344	4.40440	1.04605	4.43261
flirting	-1.12561	-1.09849	-1.10942	-1.09298
friendly	-0.89177	-0.87028	0.25880	-0.86591
frustrated	-1.15516	-1.12732	-1.13854	-1.12167
funny	5.70306	3.58065	4.67428	3.02575
happy	0.64095	2.58891	0.37815	2.99033
hopeless	-0.63590	-0.62057	-0.62675	-0.61746

humorous	5.89678	-0.59953	1.04605	4.43261
hurt	-0.67696	-0.66065	-0.66722	-0.65734
in agreement	-0.92150	-0.89929	-0.90824	-0.89479
in love	-1.52262	-1.48592	-1.50071	-1.47847
irritated	-0.01085	-0.98121	-0.99097	-0.97629
joking	0.99882	-1.27179	-0.50590	0.31509
joyful	0.73897	-0.67980	0.76996	0.80203
kiss	-1.59186	-1.55350	-1.56895	-1.54571
laughing	5.66084	4.23978	10.15850	4.83273
laughing till you cry	0.93669	2.60226	-0.62675	-0.61746
like	-0.73427	-0.71657	-0.72370	-0.71298
love	-2.23018	-2.17643	-2.19809	-2.16552
nervous	4.29248	3.13557	5.66649	0.54330
neverminded	-0.61433	-0.59953	-0.60549	-0.59652
oops	0.80022	-0.66065	0.83153	0.86395
playful	-0.66693	-0.65086	0.86395	-0.64760
pleased	-0.84521	-0.82484	-0.83305	0.39776
ponder	-0.53203	-0.51921	1.38266	-0.51660
questioning	-0.60326	1.10986	1.08726	-0.58577
relieved	18.20662	23.92654	21.45626	27.04875
remorse	-0.86880	1.51101	-0.85630	-0.84361
romance	-0.53203	-0.51921	-0.52437	-0.51660
sad	-3.35281	-3.27201	-3.30457	-3.25561
sarcastic	0.57667	-0.73427	-0.74158	-0.73059
scared	-0.71568	-0.69843	-0.70538	-0.69493
sceptical	-0.64641	-0.63083	-0.63711	-0.62767
shocked	-1.72983	-1.68814	-1.70494	-1.67968
shy	-0.75357	0.71621	-1.42461	-1.40351
smiling	0.14423	-1.31155	-1.32460	-1.30497
smirking	-0.61433	-0.59953	-0.60549	-0.59652
smuggish	-0.51921	-0.50669	-0.51174	-0.50415
stressed	2.50927	0.99085	2.56434	1.00207
surprised	-1.38347	-0.60946	-0.63019	-1.34336
sympathetic	-0.81269	-0.79310	-0.80099	-0.78913
teasing	-0.56876	-0.55506	-0.56058	-0.55227
thankful	-0.97826	-0.95469	-0.96419	-0.94990
thinking	-0.60326	-0.58873	-0.59458	-0.58577
tired	2.55680	-0.13331	-0.15316	-1.06352
uncertain	1.87534	-0.01402	-0.03383	-1.00199
unhappy	-1.50032	-1.46416	-1.47873	-1.45682
unimpressed	-0.67696	-0.66065	-0.66722	-0.65734
upset	-1.23959	-1.20972	-1.22175	-1.20365
winking	-1.35393	-1.32130	-1.33445	-1.31467
worried	-0.88418	-0.86287	0.27605	0.30622

EMOJI 11**DESCRIPTIVE LABELS**

Label	M	AW	T	ANW
amazed	x			
amused		x	x	
appreciative	x	x	x	
blushing	x	x	x	x
cheeky	x			
compassionate	x			
content	x	x	x	x
cute	x	x	x	x
embarrassed	x		x	x
excited	x	x		
flirting	x			
friendly	x	x	x	x
happy	x	x	x	x
in agreement	x	x		x
joyful	x	x	x	x
oops		x		
pleased	x	x	x	x
remorse		x	x	
shy	x	x	x	x
smiling	x	x	x	x
smuggish			x	
thankful	x	x	x	x

STANDARDISED RESIDUALS

Label	M	AW	T	ANW
affection	-1.21184	-1.1510	-1.02848	-0.2743
amazed	0.93809	-0.6036	-0.53934	-0.6012
amused	-1.14164	0.7602	0.06320	-1.0801
angry	-1.08390	-1.0295	-0.91990	-1.0255
annoyed	-1.38833	-1.3186	-1.17827	-1.3135
anxious	-0.75436	-0.7165	-0.64022	-0.7137
appreciative	2.13684	0.8269	1.07617	-0.6661
astonished	-0.72962	-0.6930	-0.61923	-0.6903
awkward	-0.60592	-0.5755	-0.51424	-0.5733
blushing	5.57226	2.8654	15.63351	3.5258
cheeky	0.36212	-0.7933	-0.70883	-0.7902
compassionate	0.67790	-0.6809	-0.60846	-0.6783
concerned	-0.76643	-0.7279	-0.65047	-0.7251
content	3.63912	6.1789	3.73479	6.2175
crying	-2.31124	-2.1952	-1.96154	-2.1867
cute	1.55943	0.4673	3.52350	1.7409

depressed	-0.87806	-0.8340	-0.74520	-0.8307
devastated	-0.95804	-0.9099	-0.81308	-0.9064
disappointed	-2.40084	-2.2803	-2.03758	-2.2714
disbelief	-1.18115	-1.1218	-1.00244	-1.1175
discouraged	-1.05819	-1.0051	-0.89808	-1.0012
disgusted	-0.60592	-0.5755	-0.51424	-0.5733
disinterested	-0.74210	-0.7048	-0.62981	-0.7021
embarrassed	2.61858	-0.9193	2.90956	1.0196
emotional	-0.83520	-0.7933	-0.70883	-0.7902
excited	0.45656	1.4791	-0.04358	-0.2616
exhausted	-0.63549	-0.6036	-0.53934	-0.6012
expression of emotion	-0.71693	-0.6809	-0.60846	-0.6783
flirting	0.20893	-0.4461	-1.11484	-0.4382
friendly	4.72465	8.1168	1.38117	4.0936
frustrated	-1.34808	-1.2804	-1.14411	-1.2754
funny	-1.05490	-1.4176	-1.15015	-1.4081
happy	9.55707	13.2472	6.70779	12.6897
hopeless	-0.74210	-0.7048	-0.62981	-0.7021
humorous	-0.71693	-0.6809	-0.60846	-0.6783
hurt	-0.79002	-0.7504	-0.67049	-0.7474
in agreement	1.71426	1.9157	-0.91268	1.9312
in love	-1.77690	-1.6877	-1.50804	-0.4914
irritated	-1.17336	-1.1144	-0.99582	-1.1101
joking	-0.20578	-1.4445	-1.29073	-1.4389
joyful	1.64733	0.5231	2.20895	0.5311
kiss	-1.85771	-1.7644	-1.57663	-1.7576
laughing	-2.17203	-2.0630	-1.84339	-2.0550
laughing till you cry	-0.74210	-0.7048	-0.62981	-0.7021
like	-0.85690	-0.8139	-0.72724	-0.8107
love	-1.83418	-2.4719	-0.39792	-2.0562
nervous	-0.91892	-0.8728	-0.77988	-0.8694
neverminded	-0.71693	-0.6809	-0.60846	-0.6783
oops	-0.79002	0.5824	-0.67049	-0.7474
playful	-0.77832	-0.7392	-0.66055	-0.7364
pleased	4.08276	5.4677	0.35745	2.2816
ponder	-0.62088	-0.5897	-0.52694	-0.5874
questioning	-0.70401	-0.6687	-0.59749	-0.6661
relieved	-1.60883	-1.5280	-1.36540	-1.5221
remorse	-1.01390	0.0754	0.30165	-0.9592
romance	-0.62088	-0.5897	-0.52694	-0.5874
sad	-3.91275	-3.7163	-3.32072	-3.7019
sarcastic	-0.87806	-0.8340	-0.74520	-0.8307
scared	-0.83520	-0.7933	-0.70883	-0.7902
sceptical	-0.75436	-0.7165	-0.64022	-0.7137
shocked	-2.01872	-1.9174	-1.71327	-1.9099
shy	4.24156	4.6397	6.25224	2.7904

smiling	9.90842	5.8948	3.17656	9.9729
smirking	-0.71693	-0.6809	-0.60846	-0.6783
smuggish	-0.60592	-0.5755	1.43038	-0.5733
stressed	-0.74210	-0.7048	-0.62981	-0.7021
surprised	-0.99514	-1.5335	-1.37023	-1.5275
sympathetic	-0.94841	-0.9008	-0.80491	-0.8973
teasing	-0.66375	-0.6304	-0.56332	-0.6280
thankful	4.98990	0.7602	0.06320	2.6232
thinking	-0.70401	-0.6687	-0.59749	-0.6661
tired	-1.27819	-1.2140	-1.08479	-1.2093
uncertain	-1.20424	-1.1438	-1.02203	-1.1393
unhappy	-1.75088	-1.6630	-1.48596	-1.6565
unimpressed	-0.79002	-0.7504	-0.67049	-0.7474
upset	-1.44661	-1.3740	-1.22773	-1.3686
winking	-1.58004	-1.5007	-1.34097	-1.4949
worried	-1.03184	-0.9800	-0.87572	-0.9762

EMOJI 12**DESCRIPTIVE LABELS**

Label	M	AW	T	ANW
amused	x		x	x
angry	x			
annoyed			x	
cheeky	x	x	x	x
concerned	x			
content				x
cute			x	
disbelief	x		x	x
discouraged		x		
disgusted			x	
disinterested	x	x	x	
expression of emotion	x		x	
flirting	x	x	x	x
friendly	x			x
hopeless		x		
humorous		x		
in agreement	x	x	x	x
irritated			x	
joking			x	
like		x		x
neverminded	x	x	x	x
oops	x			
playful		x	x	x
ponder	x	x	x	x
questioning	x	x	x	

remorse	x			x
sarcastic	x	x	x	x
sceptical	x	x	x	x
shy	x		x	
smiling	x			x
smirking	x	x	x	x
smuggish	x	x	x	x
surprised		x	x	
teasing	x	x		x
thinking	x	x	x	x
tired	x	x		
uncertain	x	x	x	x
unimpressed	x	x	x	x
winking				x
worried	x	x		

STANDARDISED RESIDUALS

Label	M	AW	T	ANW
affection	-1.07247	-0.94523	-0.92324	-0.87175
amazed	-0.56241	-0.49568	-0.48415	-0.45715
amused	0.96918	-0.89047	0.27998	0.39640
angry	0.08324	-0.84544	-0.82577	-0.77972
annoyed	-0.41478	-1.08289	0.83318	-0.99872
anxious	-0.66761	-0.58840	-0.57471	-0.54266
appreciative	-0.62305	-0.54913	-0.53635	-0.50644
astonished	-0.64571	-0.56910	-0.55586	-0.52486
awkward	-0.53624	-0.47261	-0.46162	-0.43588
blushing	-1.46854	-1.29430	-1.26420	-1.19369
cheeky	1.96666	2.41861	5.65004	2.72801
compassionate	-0.63448	-0.55920	-0.54620	-0.51573
concerned	2.27030	-0.59781	-0.58391	-0.55134
content	-0.58659	-1.53144	-0.82729	2.12768
crying	-2.04544	-1.80276	-1.76083	-1.66262
cute	-0.73915	-0.65145	0.93528	-0.60081
depressed	-0.77708	-0.68488	-0.66895	-0.63164
devastated	-0.84786	-0.74727	-0.72989	-0.68918
disappointed	-2.12474	-0.27064	-1.28237	-0.56905
disbelief	4.69458	-0.92129	2.43397	0.32724
discouraged	-0.93649	0.38617	-0.80619	-0.76122
disgusted	-0.53624	-0.47261	1.70466	-0.43588
disinterested	0.86590	6.33165	1.20339	-0.53384
embarrassed	-1.45378	-0.50084	-1.25149	-1.18170
emotional	-0.73915	-0.65145	-0.63630	-0.60081
excited	-1.06575	-0.93930	-0.91745	-0.86628
exhausted	-0.56241	-0.49568	-0.48415	-0.45715
expression of emotion	0.94161	-0.55920	1.28464	-0.51573

flirting	0.55786	5.80733	2.99615	4.34630
friendly	0.16475	-0.81174	-0.79286	0.58711
frustrated	-1.19305	-0.10047	-0.05337	-0.96976
funny	-1.24782	-0.95927	-0.26290	-0.10023
happy	-1.93538	-2.60152	-2.54101	-0.73214
hopeless	-0.65675	1.14879	-0.56537	-0.53384
humorous	-0.63448	1.22905	-0.54620	-0.51573
hurt	-0.69917	-0.61621	-0.60188	-0.56831
in agreement	2.20045	3.92988	1.62183	1.81171
in love	-1.57255	-1.38597	-1.35374	-1.27824
irritated	-0.07541	-0.91521	0.22474	-0.84407
joking	-0.60296	-1.18625	0.56747	-0.17999
joyful	-0.71943	-0.63408	-0.61933	-0.58479
kiss	-1.64407	-1.44900	-1.41530	-1.33637
laughing	-1.92224	-1.69417	-0.44614	-0.92247
laughing till you cry	-0.65675	-0.57883	-0.56537	-0.53384
like	-0.75835	0.82779	-0.65283	2.62812
love	-2.30332	-2.03004	-1.98282	-1.87223
nervous	-0.81324	-0.71675	-0.70008	-0.66104
neverminded	5.66987	13.74686	6.77717	3.36223
oops	3.59167	-0.61621	-0.60188	-0.56831
playful	-0.68881	1.04014	2.77993	3.01223
pleased	-0.87293	-0.76936	-0.75146	-0.70955
ponder	17.64963	3.64552	10.09735	4.03125
questioning	0.98196	1.27195	3.19252	-0.50644
relieved	-1.42380	-1.25487	-1.22569	-1.15733
remorse	0.21717	-0.79083	-0.77244	0.64171
romance	-0.54948	-0.48428	-0.47302	-0.44664
sad	-2.88519	-3.05193	-2.98094	-2.81469
sarcastic	5.65728	10.99597	5.31055	0.95153
scared	-0.73915	-0.65145	-0.63630	-0.60081
sceptical	2.32817	7.90924	6.38528	4.98566
shocked	-1.78656	-0.93950	-1.53797	-1.45219
shy	1.18669	-1.31570	1.04935	-1.21343
smiling	0.77336	-0.40589	-0.35797	1.53079
smirking	4.09378	6.59383	10.43885	20.81307
smuggish	5.05833	7.99097	1.70466	13.32953
stressed	-0.65675	-0.57883	-0.56537	-0.53384
surprised	-0.72898	0.32885	0.39595	-1.16143
sympathetic	-0.83934	-0.73976	-0.72255	-0.68225
teasing	2.81732	1.41382	-0.50568	1.61686
thankful	-1.01034	-0.89047	-0.86976	-0.82125
thinking	15.42705	3.09302	3.19252	9.36637
tired	0.63686	0.00605	-0.97379	-0.91948
uncertain	13.00890	7.57768	5.62239	1.44242
unhappy	-1.54952	-0.63344	-0.58424	-1.25952
unimpressed	3.59167	2.62942	2.72104	1.19129

upset	-1.28024	-1.12835	-1.10210	-1.04064
winking	-1.39833	-0.42102	-1.20376	0.62297
worried	1.27698	0.43766	-0.78611	-0.74227

EMOJI 13**DESCRIPTIVE LABELS**

Label	M	AW	T	ANW
amazed				x
angry	x	x	x	x
annoyed	x	x	x	x
concerned			x	
depressed		x		x
devastated	x			x
disappointed	x	x		x
disbelief	x	x		
discouraged	x	x		x
disgusted	x	x	x	x
disinterested	x	x	x	x
expression of emotion		x		
frustrated	x	x	x	x
hopeless				x
hurt				x
irritated	x	x	x	x
neverminded		x		x
ponder		x		
questioning		x		
remorse	x			x
sad				x
sarcastic	x	x		x
sceptical	x	x	x	x
smirking	x			
thinking		x	x	
tired		x		x
uncertain	x			x
unhappy	x	x	x	x
unimpressed	x	x	x	x
upset	x	x	x	
worried	x			

STANDARDISED RESIDUALS

Label	M	AW	T	ANW
affection	-1.08200	-1.08200	-1.05801	-1.06767
amazed	-0.56741	-0.56741	-0.55482	1.22617
amused	-1.01933	-1.01933	-0.99672	-0.01161

angry	3.16543	2.13213	18.07489	2.18656
annoyed	14.08805	13.28133	16.11317	10.22248
anxious	-0.67354	-0.67354	-0.65861	-0.66462
appreciative	-0.62859	-0.62859	-0.61465	-0.62026
astonished	-0.65145	-0.65145	-0.63701	-0.64282
awkward	-0.54100	-0.54100	-0.52900	-0.53384
blushing	-1.48159	-1.48159	-1.44874	-1.46197
cheeky	-0.74572	-0.74572	-0.72918	-0.73584
compassionate	-0.64012	-0.64012	-0.62593	-0.63164
concerned	-0.68432	-0.68432	0.82530	-0.67525
content	-1.75305	-1.75305	-1.71417	-1.72983
crying	-2.06362	-2.06362	-2.01786	-2.03629
cute	-0.74572	-0.74572	-0.72918	-0.73584
depressed	-0.78399	0.49155	-0.76660	0.51905
devastated	0.31365	-0.85540	-0.83643	0.34067
disappointed	4.38737	2.05487	-0.18777	6.39448
disbelief	0.84184	0.84184	-0.06149	-1.04064
discouraged	1.17199	1.17199	-0.92387	0.14031
disgusted	1.30742	10.54953	3.25168	10.70557
disinterested	6.88357	8.39280	0.89556	8.52313
embarrassed	-1.46670	-1.46670	-1.43418	-1.44728
emotional	-0.74572	-0.74572	-0.72918	-0.73584
excited	-1.07522	-1.07522	-1.05138	-1.06098
exhausted	-0.56741	-0.56741	-0.55482	-0.55989
expression of emotion	-0.64012	2.48428	-0.62593	-0.63164
flirting	-1.17286	-1.17286	-1.14685	-1.15733
friendly	-0.92920	-0.92920	-0.90860	-0.91689
frustrated	2.11956	2.11956	3.92091	1.33816
funny	-1.81860	-1.81860	-1.77827	-1.79451
happy	-2.97797	-2.97797	-2.56851	-2.59822
hopeless	-0.66259	-0.66259	-0.64790	0.87568
humorous	-0.64012	-0.64012	-0.62593	-0.63164
hurt	-0.70538	-0.70538	-0.68974	2.17737
in agreement	-0.96018	-0.96018	-0.93889	-0.94746
in love	-1.58653	-1.58653	-1.55135	-1.56551
irritated	11.36113	16.13374	11.66578	7.67224
joking	-1.35790	-1.35790	-1.32779	-1.33992
joyful	-0.72583	-0.72583	-0.70973	-0.71622
kiss	-1.65868	-1.65868	-1.62190	-1.63671
laughing	-1.93932	-1.93932	-1.89632	-1.91364
laughing till you cry	-0.66259	-0.66259	-0.64790	-0.65381
like	-0.76509	-0.76509	-0.74813	-0.75496
love	-2.32379	-2.32379	-2.27226	-2.29301
nervous	-0.82047	-0.82047	-0.80228	-0.80960
neverminded	-0.64012	10.29529	-0.62593	4.11787
oops	-0.70538	-0.70538	-0.68974	-0.69604

playful	-0.69493	-0.69493	-0.67952	-0.68572
pleased	-0.88069	-0.88069	-0.86116	-0.86902
ponder	-0.55436	1.24951	-0.54207	-0.54702
questioning	-0.62859	4.14402	-0.61465	-0.62026
relieved	-1.43646	-1.43646	-1.40460	-1.41743
remorse	0.19937	-0.90527	-0.88519	0.22619
romance	-0.55436	-0.55436	-0.54207	-0.54702
sad	-0.05864	-2.34858	-2.24514	0.03374
sarcastic	0.49155	1.76708	-0.76660	1.81171
scared	-0.74572	-0.74572	-0.72918	-0.73584
sceptical	6.74990	2.29584	8.45155	2.34462
shocked	-1.80244	-1.80244	-1.76247	-1.21631
shy	-1.50609	-1.50609	-1.47269	-0.81325
smiling	-1.40035	-1.40035	-1.36929	-1.38180
smirking	0.92208	-0.64012	-0.62593	-0.63164
smuggish	-0.54100	-0.54100	-0.52900	-0.53384
stressed	-0.66259	-0.66259	-0.64790	-0.65381
surprised	-1.44154	-0.05414	-0.70014	-0.71944
sympathetic	-0.84680	-0.84680	-0.82802	-0.83559
teasing	-0.59264	-0.59264	-0.57950	-0.58479
thankful	-1.01933	-1.01933	-0.99672	-1.00582
thinking	-0.62859	2.55315	2.63925	-0.62026
tired	-1.14124	0.61123	-1.11594	0.64987
uncertain	2.64495	-1.07522	-0.10024	0.82408
unhappy	6.75245	4.19376	6.32153	3.64349
unimpressed	6.38300	3.54765	9.45905	5.05079
upset	1.80525	1.03103	3.48768	-0.48990
winking	-1.41076	-1.41076	-0.65456	-1.39207
worried	0.16414	-0.92129	-0.90086	-0.90909

EMOJI 14**DESCRIPTIVE LABELS**

Label	M	AW	T	ANW
amazed		x		x
angry		x		
annoyed	x	x	x	x
anxious	x			
astonished	x	x		
concerned	x		x	
crying		x		
depressed	x	x	x	x
devastated		x		
disappointed	x	x	x	x
disbelief	x	x	x	x
discouraged	x	x	x	x
disgusted	x			x

disinterested	x			
emotional	x			x
exhausted	x	x	x	x
expression of emotion	x	x		x
frustrated	x	x	x	x
hopeless	x	x	x	x
humorous				x
hurt		x	x	
irritated	x	x		x
nervous	x			
questioning	x	x	x	
remorse	x			x
sad	x	x	x	x
shocked	x	x		x
stressed	x		x	x
sympathetic		x		x
tired	x	x	x	x
uncertain	x			
unhappy	x	x	x	x
unimpressed				x
upset	x	x	x	x
worried	x	x	x	

STANDARDISED RESIDUALS

Label	M	AW	T	ANW
affection	-1.18180	-1.14652	-1.07725	-1.12846
amazed	-0.61974	1.06199	-0.56491	1.09807
amused	-1.11335	-1.08010	-1.01484	-0.12244
angry	-1.05704	0.92483	-0.96352	-0.01857
annoyed	3.81622	1.73179	0.38642	1.80120
anxious	0.62364	-0.71370	-0.67058	-0.70246
appreciative	-0.68657	-0.66607	-0.62582	-0.65558
astonished	0.69386	0.75836	-0.64859	-0.67942
awkward	-0.59090	-0.57326	-0.53862	-0.56423
blushing	-1.61825	-1.56994	-1.47508	-1.54521
cheeky	-0.81450	-0.79018	-0.74244	-0.77774
compassionate	-0.69917	-0.67829	-0.63731	-0.66761
concerned	0.59046	-0.72512	2.25421	-0.71370
content	-1.91474	-1.85757	-1.74534	-1.82832
crying	-0.47932	0.55723	-1.56783	-0.29369
cute	-0.81450	-0.79018	-0.74244	-0.77774
depressed	0.31152	2.78054	1.78179	0.40537
devastated	-0.93430	0.19686	-0.85164	-0.89213
disappointed	4.49233	6.09330	2.08283	5.36833
disbelief	3.18885	0.67224	3.71207	0.71848
discouraged	2.84413	4.99193	3.31164	4.08876

disgusted	1.10142	-0.57326	-0.53862	2.98041
disinterested	0.65807	-0.70210	-0.65968	-0.69104
embarrassed	-1.60199	-1.55416	-1.46026	-1.52968
emotional	0.41324	-0.79018	-0.74244	3.07960
excited	-1.17440	-1.13933	-1.07049	-1.12139
exhausted	7.44811	2.72522	6.51582	6.16760
expression of emotion	2.16139	0.79601	-0.63731	3.82605
flirting	-1.28105	-1.24280	-1.16771	-1.22322
friendly	-1.01491	-0.98461	-0.92512	-0.96910
frustrated	6.29177	8.13323	7.14636	7.50726
funny	-1.98635	-1.92704	-1.81061	-1.89669
happy	-3.25265	-3.15553	-2.96488	-3.10584
hopeless	3.42163	7.84374	8.43569	6.54444
humorous	-0.69917	-0.67829	-0.63731	0.83028
hurt	-0.77044	0.59046	0.72166	-0.73567
in agreement	-1.04875	-1.01743	-0.95596	-1.00141
in love	-1.73287	-1.68113	-1.57955	-1.65465
irritated	1.47746	1.59232	-0.08430	0.73782
joking	-1.48315	-1.43887	-1.35193	-1.41621
joyful	-0.79278	-0.76911	-0.72264	-0.75700
kiss	-1.81167	-1.75758	-1.65139	-1.72990
laughing	-2.11820	-2.05496	-1.93080	-1.52818
laughing till you cry	-0.72370	-0.70210	-0.65968	-0.69104
like	-0.83566	-0.81071	-0.76173	-0.79794
love	-2.53813	-2.46235	-2.31358	-2.42357
nervous	0.21974	-0.86939	-0.81686	-0.85570
neverminded	-0.69917	-0.67829	-0.63731	-0.66761
oops	-0.77044	-0.74744	-0.70228	-0.73567
playful	-0.75903	-0.73637	-0.69187	-0.72477
pleased	-0.96192	-0.93320	-0.87682	-0.91850
ponder	-0.60549	-0.58742	-0.55193	-0.57816
questioning	0.76996	0.83528	0.97207	-0.65558
relieved	-1.56895	-1.52211	-1.43014	-1.49814
remorse	0.02259	-0.95925	-0.90129	0.11503
romance	-0.60549	-0.58742	-0.55193	-0.57816
sad	2.73595	1.97098	2.84693	1.84559
sarcastic	-0.85630	-0.83073	-0.78054	-0.81765
scared	-0.81450	-0.79018	-0.74244	-0.77774
sceptical	-0.73567	-0.71370	-0.67058	-0.70246
shocked	0.06312	2.27877	-0.12275	1.31195
shy	-1.64500	-1.59589	-1.49947	-1.57075
smiling	-1.52951	-1.48385	-1.39419	-1.46048
smirking	-0.69917	-0.67829	-0.63731	-0.66761
smuggish	-0.59090	-0.57326	-0.53862	-0.56423
stressed	0.65807	-0.70210	2.37211	0.75606
surprised	-0.93939	-0.87283	-1.43521	-1.50344

sympathetic	-0.92491	1.33163	-0.84308	0.24913
teasing	-0.64730	-0.62797	-0.59003	-0.61808
thankful	-1.11335	-1.08010	-1.01484	-1.06309
thinking	-0.68657	-0.66607	-0.62582	-0.65558
tired	10.78709	6.23308	5.90461	6.37121
uncertain	0.52861	-1.13933	-1.07049	-0.22963
unhappy	3.56339	3.17291	9.36603	3.88962
unimpressed	-0.77044	-0.74744	-0.70228	0.62364
upset	2.84227	3.01528	5.71279	3.84933
winking	-1.54088	-1.49488	-1.40456	-1.47134
worried	1.97504	1.07248	1.26320	-0.96085

EMOJI 15**DESCRIPTIVE LABELS**

Label	M	AW	T	ANW
affection			x	
appreciative	x			
awkward	x		x	
blushing	x	x	x	x
compassionate	x			
content	x	x		x
cute	x	x	x	x
embarrassed	x	x	x	x
excited	x			
flirting	x	x	x	
friendly	x	x	x	x
funny				x
happy	x	x	x	x
in agreement			x	
joyful	x		x	x
like	x	x	x	x
pleased	x	x	x	x
shy	x	x	x	x
smiling	x	x	x	x
smuggish	x	x		
thankful	x	x	x	x

STANDARDISED RESIDUALS

Label	M	AW	T	ANW
affection	-1.2033	-1.06285	0.71600	-0.2176
amazed	-0.6310	-0.55736	-0.57728	-0.5846
amused	-0.2515	-0.00256	-1.03705	-1.0502
angry	-1.0763	-0.95064	-0.98461	-0.9970
annoyed	-1.3786	-1.21765	-1.26115	-1.2771

anxious	-0.7491	-0.66162	-0.68526	-0.6939
appreciative	0.7314	-0.61746	-0.63952	-0.6476
astonished	-0.7245	-0.63992	-0.66278	-0.6712
awkward	1.0604	-0.53143	1.26641	-0.5574
blushing	7.4557	9.53840	20.38517	8.9557
cheeky	-0.8293	-0.73252	-0.75869	-0.7683
compassionate	0.6928	-0.62879	-0.65126	-0.6595
concerned	-0.7611	-0.67221	-0.69622	-0.7050
content	3.1796	2.34299	-0.10148	3.1771
crying	-2.2950	-2.02710	-2.09951	-2.1260
cute	0.3764	3.36293	4.51356	3.1366
depressed	-0.8719	-0.77011	-0.79762	-0.8077
devastated	-0.9513	-0.84026	-0.87028	-0.8813
disappointed	-2.3840	-2.10568	-2.18091	-2.2085
disbelief	-1.1729	-1.03594	-1.07295	-1.0865
discouraged	-1.0508	-0.92810	-0.96125	-0.9734
disgusted	-0.6017	-0.53143	-0.55041	-0.5574
disinterested	-0.7369	-0.65086	-0.67411	-0.6826
embarrassed	4.4994	3.41786	2.52866	1.7979
emotional	-0.8293	-0.73252	-0.75869	-0.7683
excited	0.4767	-1.05619	-0.17978	-0.2050
exhausted	-0.6310	-0.55736	-0.57728	-0.5846
expression of emotion	-0.7119	-0.62879	-0.65126	-0.6595
flirting	0.9956	0.58385	0.48281	-1.2083
friendly	3.8050	3.46959	0.11243	4.2657
frustrated	-1.3386	-1.18235	-1.22459	-1.2401
funny	-2.0225	-1.78641	-1.85023	0.2613
happy	11.4832	5.96285	4.23153	9.9696
hopeless	-0.7369	-0.65086	-0.67411	-0.6826
humorous	-0.7119	-0.62879	-0.65126	-0.6595
hurt	-0.7845	-0.69289	-0.71765	-0.7267
in agreement	-1.0679	-0.94319	0.04678	-0.9892
in love	-1.1977	-0.91678	-0.99459	-1.6345
irritated	-1.1651	-1.02910	-1.06587	-1.0793
joking	-1.5102	-0.58417	-1.38152	-1.3990
joyful	4.1481	-0.71298	1.96991	3.2641
kiss	-1.8447	-1.62932	-1.68753	-1.7088
laughing	-2.1568	-0.33019	-0.95940	-1.4975
laughing till you cry	-0.7369	-0.65086	-0.67411	-0.6826
like	0.3244	0.57903	0.50629	0.4804
love	-1.8105	-2.28266	-1.94123	-1.9764
nervous	-0.9125	-0.80595	-0.83474	-0.8453
neverminded	-0.7119	-0.62879	-0.65126	-0.6595
oops	-0.7845	-0.69289	-0.71765	-0.7267
playful	-0.7729	-0.68263	-0.70702	-0.7159
pleased	6.1675	4.91459	1.33613	1.2970

ponder	-0.6165	-0.54455	-0.56400	-0.5711
questioning	-0.6991	-0.61746	-0.63952	-0.6476
relieved	-1.5975	-1.41103	-1.46144	-1.4799
remorse	-1.0068	-0.88925	-0.92101	-0.9326
romance	-0.6165	-0.54455	-0.56400	-0.5711
sad	-3.8853	-3.43171	-3.55431	-3.5992
sarcastic	-0.8719	-0.77011	-0.79762	-0.8077
scared	-0.8293	-0.73252	-0.75869	-0.7683
sceptical	-0.7491	-0.66162	-0.68526	-0.6939
shocked	-2.0046	-1.77053	-1.83379	-1.8570
shy	4.8923	16.09495	12.17279	6.1821
smiling	6.1479	0.80537	0.68100	6.8750
smirking	-0.7119	-0.62879	-0.65126	-0.6595
smuggish	1.0604	1.35030	-0.55041	-0.5574
stressed	-0.7369	-0.65086	-0.67411	-0.6826
surprised	-1.6032	-1.41603	-1.46662	-1.4851
sympathetic	-0.9418	-0.83181	-0.86153	-0.8724
teasing	-0.6591	-0.58215	-0.60295	-0.6106
thankful	0.6306	1.99487	5.71283	1.8066
thinking	-0.6991	-0.61746	-0.63952	-0.6476
tired	-1.2692	-1.12104	-1.16109	-1.1758
uncertain	-1.1958	-1.05619	-1.09392	-1.1077
unhappy	-1.7386	-1.53563	-1.59049	-1.6106
unimpressed	-0.7845	-0.69289	-0.71765	-0.7267
upset	-1.4365	-1.26876	-1.31409	-1.3307
winking	-1.5690	-1.38579	-1.43530	-1.4534
worried	-1.0246	-0.90499	-0.93732	-0.9492

EMOJI 16**DESCRIPTIVE LABELS**

Label	M	AW	T	ANW
amused				x
appreciative	x		x	
cheeky	x	x	x	x
compassionate		x		
cute	x	x	x	x
excited		x		
flirting	x	x	x	x
friendly	x	x	x	x
funny	x	x		
happy			x	
humorous	x	x	x	x
in agreement	x	x	x	x
joking	x	x	x	x
joyful				x
like	x	x	x	x

nervous	x			
playful	x	x	x	x
pleased	x			
questioning		x		x
remorse	x			
sarcastic	x	x	x	x
sceptical	x	x		
sympathetic	x		x	
teasing	x	x	x	x
thankful	x			x
winking	x	x	x	x

STANDARDISED RESIDUALS

Label	M	AW	T	ANW
affection	-1.16430	-1.16870	-1.06767	-1.05801
amazed	-0.61056	-0.61287	-0.55989	-0.55482
amused	-1.09685	-1.10100	-1.00582	0.00657
angry	-1.04138	-1.04531	-0.95495	-0.94631
annoyed	-1.33387	-1.33891	-1.22317	-1.21210
anxious	-0.72477	-0.72751	-0.66462	-0.65861
appreciative	2.28046	-0.67895	0.99196	-0.61465
astonished	-0.70100	-0.70365	-0.64282	-0.63701
awkward	-0.58215	-0.58435	-0.53384	-0.52900
blushing	-1.59428	-1.60030	-1.46197	-1.44874
cheeky	6.67480	6.64361	1.98213	11.61340
compassionate	-0.68881	0.75491	-0.63164	-0.62593
concerned	-0.73637	-0.73915	-0.67525	-0.66914
content	-0.82614	-1.36539	-0.57364	-1.13080
crying	-2.22057	-2.22897	-2.03629	-2.01786
cute	0.44377	0.43604	0.62315	3.38501
depressed	-0.84361	-0.84680	-0.77360	-0.76660
devastated	-0.92046	-0.92394	-0.84407	-0.83643
disappointed	-2.30666	-2.31538	-2.11523	-2.09609
disbelief	-1.13481	-1.13911	-0.07969	-0.06149
discouraged	-1.01668	-1.02052	-0.93230	-0.92387
disgusted	-0.58215	-0.58435	-0.53384	-0.52900
disinterested	-0.71298	-0.71568	-0.65381	-0.64790
embarrassed	-1.57825	-1.58422	-1.44728	-1.43418
emotional	-0.80244	-0.80547	-0.73584	-0.72918
excited	-0.29269	2.28284	-0.11845	-1.05138
exhausted	-0.61056	-0.61287	-0.55989	-0.55482
expression of emotion	-0.68881	-0.69141	-0.63164	-0.62593
flirting	5.86910	9.78430	3.16297	7.57264
friendly	3.00064	2.98179	1.26439	0.19200
frustrated	-1.29520	-1.30009	-1.18771	-1.17696
funny	0.08711	0.58110	-0.12275	-0.65359

happy	-1.02000	-1.66212	0.12424	-0.50802
hopeless	-0.71298	-0.71568	-0.65381	-0.64790
humorous	3.66655	5.09386	4.11787	0.97170
hurt	-0.75903	-0.76190	-0.69604	-0.68974
in agreement	5.74179	4.74816	8.55157	4.38655
in love	-1.70719	-1.71365	-1.56551	-1.55135
irritated	-1.12732	-1.13159	-1.03377	-1.02441
joking	17.70142	20.35093	13.58638	12.22856
joyful	-0.78103	-0.78399	-0.71622	0.69924
kiss	-1.78483	-1.79158	-1.63671	-1.62190
laughing	-2.08682	-1.61732	-1.39107	-1.89632
laughing till you cry	-0.71298	-0.71568	-0.65381	-0.64790
like	0.39137	2.80384	0.56962	1.92522
love	-2.50053	-2.50998	-2.29301	-2.27226
nervous	0.24980	-0.88621	-0.80960	-0.80228
neverminded	-0.68881	-0.69141	-0.63164	-0.62593
oops	-0.75903	-0.76190	-0.69604	-0.68974
playful	8.61323	8.57514	3.68921	6.67863
pleased	0.10755	-0.95125	-0.86902	-0.86116
ponder	-0.59652	-0.59878	-0.54702	-0.54207
questioning	-0.67639	0.79391	-0.62026	1.01230
relieved	-1.54571	-1.55155	-1.41743	-1.40460
remorse	0.05245	-0.97780	-0.89328	-0.88519
romance	-0.59652	-0.59878	-0.54702	-0.54207
sad	-3.75925	-3.77346	-3.44727	-3.41608
sarcastic	5.08328	1.51503	0.51905	0.53786
scared	-0.80244	-0.80547	-0.73584	-0.72918
sceptical	0.65498	0.64705	-0.66462	-0.65861
shocked	-1.93952	-1.94685	-1.77856	-1.76247
shy	-1.62063	-1.62676	-1.48614	-1.47269
smiling	-1.50685	-1.51255	-0.65811	-1.36929
smirking	-0.68881	-0.69141	-0.63164	-0.62593
smuggish	-0.58215	-0.58435	-0.53384	-0.52900
stressed	-0.71298	-0.71568	-0.65381	-0.64790
surprised	-1.55118	-1.55705	-0.71944	-1.40958
sympathetic	0.18624	-0.91465	1.55795	-0.82802
teasing	7.20283	2.48428	4.54528	6.32306
thankful	0.72655	-1.10100	-0.01161	1.00986
thinking	-0.67639	-0.67895	-0.62026	-0.61465
tired	-1.22804	-1.23268	-1.12613	-1.11594
uncertain	-1.15700	-0.30032	-0.11845	-1.05138
unhappy	-1.68220	-1.68856	-1.54259	-1.52863
unimpressed	-0.75903	-0.76190	-0.69604	-0.68974
upset	-1.38986	-1.39511	-1.27452	-1.26298
winking	18.24407	17.50764	24.46863	19.64301
worried	-0.99136	-0.99511	-0.90909	-0.90086

ADDENDUM F

EMOJI LABELS AND STANDARDISED RESIDUALS FOR AGE GROUPS

EMOJI 1

DESCRIPTIVE LABELS

Label	< 25	25 - 39	40 - 54	55 >
anxious		x		
compassionate		x	x	
concerned		x	x	
crying	x	x	x	x
depressed			x	
devastated		x	x	
disappointed	x		x	x
discouraged				x
emotional	x	x	x	
exhausted	x			
frustrated			x	
hurt		x	x	x
remorse		x	x	x
sad	x	x	x	x
shocked				x
sympathetic	x	x	x	x
unhappy		x	x	x
upset	x		x	
worried		x		

STANDARDISED RESIDUALS

Label	< 25	25 - 39	40 - 54	55 >
affection	-0.7378	-1.7871	-1.2411	-0.7378
amazed	-0.3869	-0.9372	-0.6509	-0.3869
amused	-0.6950	-1.6836	-1.1692	-0.6950
angry	-0.6599	-1.5985	-0.2093	-0.6599
annoyed	-0.8452	-2.0474	-1.4219	-0.8452
anxious	-0.4593	0.6853	-0.7726	-0.4593
appreciative	-0.4286	-1.0382	-0.7210	-0.4286
astonished	-0.4442	-1.0760	-0.7473	-0.4442
awkward	-0.3689	-0.8936	-0.6206	-0.3689
blushing	-1.0102	-2.4471	-1.6995	-1.0102
cheeky	-0.5085	-1.2317	-0.8554	-0.5085
compassionate	-0.4365	1.7802	4.7133	-0.4365
concerned	-0.4666	0.6392	8.1326	-0.4666
content	-1.1953	-2.8955	-2.0109	-1.1953
crying	5.6999	10.9675	6.5043	5.6999

cute	-0.5085	-1.2317	-0.8554	-0.5085
depressed	-0.5346	-0.5226	0.2127	-0.5346
devastated	-0.5832	2.1261	2.0762	-0.5832
disappointed	4.0118	-0.1513	0.3879	1.2751
disbelief	-0.7191	-1.7419	-0.3831	-0.7191
discouraged	-0.6442	-0.2789	-1.0838	0.9080
disgusted	-0.3689	-0.8936	-0.6206	-0.3689
disinterested	-0.4518	-1.0944	-0.7600	-0.4518
embarrassed	-1.0001	-2.4225	-1.6824	-1.0001
emotional	3.4249	5.2634	1.4827	-0.5085
excited	-0.7331	-1.7759	-1.2334	-0.7331
exhausted	2.1979	-0.9372	-0.6509	-0.3869
expression of emotion	-0.4365	-1.0573	-0.7343	-0.4365
flirting	-0.7997	-1.9372	-1.3454	-0.7997
friendly	-0.6336	-1.5347	-1.0659	-0.6336
frustrated	-0.8207	-1.9881	0.0679	-0.8207
funny	-1.2400	-3.0038	-2.0861	-1.2400
happy	-2.0305	-4.9187	-3.4160	-2.0305
hopeless	-0.4518	-1.0944	-0.7600	-0.4518
humorous	-0.4365	-1.0573	-0.7343	-0.4365
hurt	-0.4810	4.8432	1.6627	5.7566
in agreement	-0.6547	-1.5859	-1.1014	-0.6547
in love	-1.0818	-2.6204	-1.8199	-1.0818
irritated	-0.7143	-1.7304	-1.2017	-0.7143
joking	-0.9259	-2.2428	-1.5576	-0.9259
joyful	-0.4949	-1.1988	-0.8326	-0.4949
kiss	-1.1310	-2.7396	-1.9026	-1.1310
laughing	-1.3223	-3.2032	-2.2246	-1.3223
laughing till you cry	-0.4518	-1.0944	-0.7600	-0.4518
like	-0.5217	-1.2637	-0.8776	-0.5217
love	-1.5845	-3.8382	-2.6656	-1.5845
nervous	-0.5594	-1.3552	-0.9411	-0.5594
neverminded	-0.4365	-1.0573	-0.7343	-0.4365
oops	-0.4810	-1.1651	-0.8091	-0.4810
playful	-0.4738	-1.1478	-0.7971	-0.4738
pleased	-0.6005	-1.4546	-1.0102	-0.6005
ponder	-0.3780	-0.9156	-0.6359	-0.3780
questioning	-0.4286	-1.0382	-0.7210	-0.4286
relieved	-0.9794	-2.3726	-1.6477	-0.9794
remorse	-0.6173	4.5240	1.8506	4.2430
romance	-0.3780	-0.9156	-0.6359	-0.3780
sad	8.1131	21.9582	15.4567	7.6933
sarcastic	-0.5346	-1.2949	-0.8993	-0.5346
scared	-0.5085	-0.4198	-0.8554	-0.5085
sceptical	-0.4593	-1.1125	-0.7726	-0.4593
shocked	-0.4153	-1.2976	-2.0675	0.3984

shy	-1.0269	-2.4876	-1.7276	-1.0269
smiling	-0.9548	-2.3129	-1.6063	-0.9548
smirking	-0.4365	-1.0573	-0.7343	-0.4365
smuggish	-0.3689	-0.8936	-0.6206	-0.3689
stressed	-0.4518	-1.0944	-0.7600	-0.4518
surprised	-0.9829	-1.1210	-1.6536	-0.9829
sympathetic	1.1546	5.0361	1.0876	4.6184
teasing	-0.4041	-0.9789	-0.6798	-0.4041
thankful	-0.6950	-1.6836	-1.1692	-0.6950
thinking	-0.4286	-1.0382	-0.7210	-0.4286
tired	-0.7782	-1.8850	-0.5452	-0.7782
uncertain	-0.7331	-1.7759	-1.2334	-0.7331
unhappy	-0.1278	3.2272	2.6680	1.7485
unimpressed	-0.4810	-0.3067	-0.8091	-0.4810
upset	3.6612	2.0853	1.2182	-0.8807
winking	-0.9619	-2.3301	-1.6183	-0.9619
worried	-0.6282	3.0785	-0.1105	-0.6282

EMOJI 2**DESCRIPTIVE LABELS**

Label	< 25	25 - 39	40 - 54	55 >
affection	x	x	x	x
appreciative	x	x	x	
cheeky	x	x		
compassionate	x	x	x	x
cute		x		
flirting	x	x	x	
friendly	x			x
funny				x
in agreement			x	x
in love	x			
joking	x			
kiss	x	x	x	x
like			x	x
love	x	x	x	x
playful			x	x
romance	x	x		x
sarcastic	x			
sympathetic		x		
teasing	x			
thankful	x	x	x	
winking				x

STANDARDISED RESIDUALS

Label	< 25	25 - 39	40 - 54	55 >
affection	7.04001	11.21869	9.50548	11.58509
amazed	-0.46329	-0.96392	-0.59177	-0.38322
amused	-0.83228	-1.73164	-1.06309	-0.68843
angry	-0.79018	-1.64407	-1.00933	-0.65362
annoyed	-1.01212	-2.10583	-1.29282	-0.83720
anxious	-0.54994	-1.14422	-0.70246	-0.45490
appreciative	3.38358	3.61444	10.02203	-0.42454
astonished	-0.53191	-1.10670	-0.67942	-0.43998
awkward	-0.44173	-0.91906	-0.56423	-0.36538
blushing	-1.20972	-2.51695	-1.54521	-1.00064
cheeky	1.03349	1.10126	-0.77774	-0.50365
compassionate	3.30394	3.51048	6.82182	1.88074
concerned	-0.55874	-1.16253	-0.71370	-0.46218
content	-1.43136	-2.97810	-1.82832	-1.18398
crying	-1.68494	-3.50571	-2.15223	-1.39373
cute	-0.60888	2.68000	-0.77774	-0.50365
depressed	-0.64012	-1.33185	-0.81765	-0.52949
devastated	-0.69843	-1.45316	-0.89213	-0.57772
disappointed	-1.75026	-3.64162	-2.23567	-1.44776
disbelief	-0.86108	-1.79158	-1.09989	-0.71226
discouraged	-0.77144	-1.60507	-0.98539	-0.63811
disgusted	-0.44173	-0.91906	-0.56423	-0.36538
disinterested	-0.54100	-1.12561	-0.69104	-0.44750
embarrassed	-1.19756	-2.49165	-1.52968	-0.99058
emotional	-0.60888	-1.26684	-0.77774	-0.50365
excited	-0.87791	-1.82660	-1.12139	-0.72618
exhausted	-0.46329	-0.96392	-0.59177	-0.38322
expression of emotion	-0.52266	-0.16786	-0.66761	-0.43233
flirting	6.35200	6.03773	1.22931	-0.79213
friendly	1.87744	-1.57854	-0.96910	0.96589
frustrated	-0.98278	-2.04478	-1.25534	-0.81293
funny	-1.48488	-1.79474	-1.89669	1.21425
happy	-0.78643	-4.26834	-1.81794	-1.51407
hopeless	-0.54100	-1.12561	-0.69104	-0.44750
humorous	-0.52266	-1.08745	-0.66761	-0.43233
hurt	-0.57594	-1.19831	-0.73567	-0.47640
in agreement	-0.78399	-1.01811	3.99154	0.89355
in love	0.24854	-0.46905	-1.65465	-1.07151
irritated	-0.85540	-1.77975	-1.09263	-0.70756
joking	0.69515	-1.43983	-0.00399	-0.91710
joyful	-0.59264	-1.23305	-0.75700	-0.49021
kiss	17.10532	42.60793	13.29987	6.91374
laughing	-1.58345	-3.29455	-2.02259	-1.30978
laughing till you	-0.54100	-1.12561	-0.69104	-0.44750

cry				
like	-0.62470	-0.53037	0.45528	1.41852
love	7.06242	20.11706	13.66841	8.62524
nervous	-0.66991	-1.39382	-0.85570	-0.55413
neverminded	-0.52266	-1.08745	-0.66761	-0.43233
oops	-0.57594	-1.19831	-0.73567	-0.47640
playful	-0.56741	-0.33350	2.03474	1.66130
pleased	-0.71908	-1.49612	-0.91850	-0.59480
ponder	-0.45263	-0.94176	-0.57816	-0.37441
questioning	-0.51324	-1.06785	-0.65558	-0.42454
relieved	-1.17286	-2.44028	-1.49814	-0.97016
remorse	-0.73915	-1.53788	-0.94414	-0.61140
romance	1.75665	7.55300	-0.57816	4.96739
sad	-2.85247	-5.93488	-3.64355	-2.35948
sarcastic	0.92208	-1.33185	-0.81765	-0.52949
scared	-0.60888	-1.26684	-0.77774	-0.50365
sceptical	-0.54994	-1.14422	-0.70246	-0.45490
shocked	-1.47168	-3.06200	-1.87983	-1.21733
shy	-1.22971	-2.55856	-1.57075	-0.03407
smiling	-1.14338	-2.37893	-1.46048	-0.94577
smirking	-0.52266	-1.08745	-0.66761	-0.43233
smuggish	-0.44173	-0.91906	-0.56423	-0.36538
stressed	-0.54100	-1.12561	-0.69104	-0.44750
surprised	-1.17702	-2.44891	-1.50344	-0.97359
sympathetic	-0.69141	1.34201	1.38143	-0.57191
teasing	1.58271	-1.00678	-0.61808	-0.40026
thankful	0.36925	4.04322	11.16538	-0.68843
thinking	-0.51324	-1.06785	-0.65558	-0.42454
tired	-0.93182	-1.93876	-1.19025	-0.77078
uncertain	-0.87791	-1.82660	-1.12139	-0.72618
unhappy	-1.27643	-2.65575	-1.63042	-1.05582
unimpressed	-0.57594	-1.19831	-0.73567	-0.47640
upset	-1.05461	-2.19423	-1.34708	-0.87234
winking	-0.28374	-0.31034	-1.47134	1.14627
worried	-0.75223	-1.56510	-0.96085	-0.62222

EMOJI 3**DESCRIPTIVE LABELS**

Label	< 25	25 - 39	40 - 54	55 >
amused	x	x	x	x
awkward		x		
disbelief		x		
excited			x	
funny	x	x	x	x
happy		x	x	x

humorous	x	x	x	x
joking	x		x	
joyful	x	x	x	x
laughing	x	x	x	x
laughing till you cry	x	x	x	x
pleased			x	
teasing	x	x	x	

STANDARDISED RESIDUALS

Label	< 25	25 - 39	40 - 54	55 >
affection	-0.67221	-1.6713	-1.19046	-0.61642
amazed	-0.35251	-0.8764	-0.62428	-0.32325
amused	0.94585	21.2898	7.79511	9.75142
angry	-0.60124	-1.4949	-1.06478	-0.55134
annoyed	-0.77011	-1.9147	-1.36385	-0.70620
anxious	-0.41845	-1.0404	-0.74106	-0.38372
appreciative	-0.39052	-0.9710	-0.69160	-0.35811
astonished	-0.40472	-1.0063	-0.71675	-0.37113
awkward	-0.33610	0.3610	-0.59523	-0.30821
blushing	-0.92046	-2.2886	-1.63011	-0.84407
cheeky	-0.46329	-1.1519	-0.82047	-0.42484
compassionate	-0.39768	-0.9888	-0.70429	-0.36468
concerned	-0.42514	-1.0570	-0.75291	-0.38986
content	-1.08910	-2.3386	-1.92877	-0.99872
crying	-0.50205	-2.8739	-2.27048	-1.17565
cute	-0.46329	-1.1519	-0.82047	-0.42484
depressed	-0.48706	-1.2110	-0.86257	-0.44664
devastated	-0.53143	-1.3213	-0.94114	-0.48732
disappointed	-1.33175	-3.3112	-2.35850	-1.22123
disbelief	-0.65519	0.2126	-1.16032	-0.60081
discouraged	-0.58698	-1.4594	-1.03953	-0.53827
disgusted	-0.33610	-0.8357	-0.59523	-0.30821
disinterested	-0.41164	-1.0235	-0.72901	-0.37748
embarrassed	-0.91121	-2.2656	-1.61372	-0.83559
emotional	-0.46329	-1.1519	-0.82047	-0.42484
excited	-0.66799	-1.6608	0.50762	-0.61256
exhausted	-0.35251	-0.8764	-0.62428	-0.32325
expression of emotion	-0.39768	-0.9888	-0.70429	-0.36468
flirting	-0.72865	-1.8117	-1.29043	-0.66818
friendly	-0.57728	-1.4353	-1.02234	-0.52937
frustrated	-0.74778	-1.8592	-1.32431	-0.68572
funny	10.37636	22.1097	22.48810	6.68547
happy	-0.22856	0.4001	0.08079	0.66116
hopeless	-0.41164	-1.0235	-0.72901	-0.37748
humorous	2.11689	1.0339	0.71559	5.11959

hurt	-0.43822	-1.0896	-0.77609	-0.40186
in agreement	-0.59652	-1.4832	-1.05643	-0.54702
in love	-0.98565	-2.4506	-1.74556	-0.90385
irritated	-0.65086	-1.6183	-1.15266	-0.59685
joking	0.34177	-0.1905	1.18332	-0.77360
joyful	8.41963	0.6627	5.46247	2.00483
kiss	-1.03047	-2.5621	-1.82494	-0.94495
laughing	12.90510	33.0574	18.48755	9.75648
laughing till you cry	4.44697	12.6554	8.87310	10.21914
like	-0.47532	-1.1818	-0.84178	-0.43588
love	-1.44368	-3.3109	-2.55672	-1.32387
nervous	-0.50973	-1.2673	-0.90271	-0.46742
neverminded	-0.39768	-0.9888	-0.70429	-0.36468
oops	-0.43822	-1.0896	-0.77609	-0.40186
playful	-0.43173	-0.1418	-0.76459	-0.39590
pleased	-0.54714	-1.3604	0.06306	-0.50173
ponder	-0.34440	-0.8563	-0.60993	-0.31582
questioning	-0.39052	-0.9710	-0.69160	-0.35811
relieved	-0.89242	-2.2188	-1.58045	-0.81835
remorse	-0.56241	-1.3983	-0.99601	-0.51573
romance	-0.34440	-0.8563	-0.60993	-0.31582
sad	-2.17040	-5.3963	-3.84374	-1.99028
sarcastic	-0.48706	-1.2110	-0.86257	-0.44664
scared	-0.46329	-1.1519	-0.82047	-0.42484
sceptical	-0.41845	-1.0404	-0.74106	-0.38372
shocked	-1.11978	-2.7841	-1.98311	-1.02685
shy	-0.93567	-2.3264	-1.65705	-0.85802
smiling	-0.86998	-1.7007	-0.89167	-0.79778
smirking	-0.39768	-0.9888	-0.70429	-0.36468
smuggish	-0.33610	-0.8357	-0.59523	-0.30821
stressed	-0.41164	-1.0235	-0.72901	-0.37748
surprised	-0.89557	-2.2267	-1.58604	-0.82125
sympathetic	-0.52608	-0.5435	-0.93168	-0.48243
teasing	2.34786	0.1770	0.88160	-0.33763
thankful	-0.63327	-1.5745	-1.12150	-0.58071
thinking	-0.39052	-0.9710	-0.69160	-0.35811
tired	-0.70901	-1.7628	-1.25564	-0.65017
uncertain	-0.66799	-1.6608	-1.18300	-0.61256
unhappy	-0.97122	-2.4148	-1.72000	-0.89062
unimpressed	-0.43822	-1.0896	-0.77609	-0.40186
upset	-0.80244	-1.9951	-1.42110	-0.73584
winking	-0.87645	-2.1791	-1.55217	-0.80371
worried	-0.57236	-1.4231	-1.01364	-0.52486

EMOJI 4**DESCRIPTIVE LABELS**

Label	< 25	25 - 39	40 - 54	55 >
amazed	x	x	x	x
anxious		x		x
astonished	x	x	x	
awkward		x	x	
blushing	x	x	x	x
concerned	x		x	
disbelief	x	x	x	x
embarrassed	x	x	x	x
expression of emotion			x	
nervous		x		
oops		x	x	x
questioning		x	x	x
remorse			x	x
scared	x	x	x	x
shocked	x	x	x	x
shy		x		
stressed	x		x	
surprised	x	x	x	x
sympathetic			x	
uncertain	x	x	x	x
unhappy				x
unimpressed			x	
worried	x	x	x	x

STANDARDISED RESIDUALS

Label	< 25	25 - 39	40 - 54	55 >
affection	-0.77840	-1.71080	-1.17745	-0.67980
amazed	4.49141	1.33213	1.00207	8.05886
amused	-0.73331	-1.61170	-1.10924	-0.64042
angry	-0.69622	-1.53018	-1.05314	-0.60803
annoyed	-0.89177	-1.44975	-1.34894	-0.77881
anxious	-0.48455	1.75204	-0.73296	4.30302
appreciative	-0.45221	-0.99388	-0.68404	-0.39493
astonished	1.66509	10.62003	7.75466	-0.40930
awkward	-0.38920	0.31365	1.10986	-0.33990
blushing	1.74874	0.21864	1.48888	0.14342
cheeky	-0.53647	-1.17909	-0.81150	-0.46852
compassionate	-0.46051	-1.01212	-0.69659	-0.40218
concerned	3.57024	-0.15779	4.62671	-0.42994
content	-1.26115	-2.77181	-1.90769	-1.10141

crying	-1.48458	-3.26287	-2.24566	-1.29653
cute	-0.53647	-1.17909	-0.81150	-0.46852
depressed	-0.56400	-1.23959	-0.85314	-0.49256
devastated	-0.61538	-1.35250	-0.93086	-0.53743
disappointed	-1.54213	-2.79929	-2.33272	-1.34680
disbelief	0.55937	7.32813	9.30862	2.35587
discouraged	-0.67971	-1.49389	-1.02817	-0.59361
disgusted	-0.38920	-0.85540	-0.58873	-0.33990
disinterested	-0.47667	-1.04765	-0.72104	-0.41629
embarrassed	4.63122	15.79171	9.05495	0.16368
emotional	-0.53647	-0.33097	-0.81150	-0.46852
excited	-0.77352	-1.70007	-1.17007	-0.67554
exhausted	-0.40820	-0.89715	-0.61746	-0.35649
expression of emotion	-0.46051	-1.01212	0.73897	-0.40218
flirting	-0.84376	-1.85446	-1.27633	-0.73689
friendly	-0.66847	-1.46920	-1.01117	-0.58380
frustrated	-0.86591	-1.90314	-1.30983	-0.75623
funny	-1.30831	-2.87546	-1.97903	-1.14259
happy	-2.14237	-4.70858	-3.24067	-1.87100
hopeless	-0.47667	-1.04765	-0.72104	-0.41629
humorous	-0.46051	-1.01212	-0.69659	-0.40218
hurt	-0.50745	-1.11530	-0.76760	-0.44318
in agreement	-0.69076	-1.51818	-1.04488	-0.60326
in love	-1.14136	-2.50852	-1.72648	-0.99679
irritated	-0.75368	-1.65647	-1.14006	-0.65822
joking	-0.97688	-2.14703	-1.47769	-0.85314
joyful	-0.52217	-1.14764	-0.78986	-0.45603
kiss	-1.19326	-2.62260	-1.80500	-1.04212
laughing	-1.39516	-3.06634	-2.11040	-1.21844
laughing till you cry	-0.47667	-1.04765	-0.72104	-0.41629
like	-0.55041	-1.20972	-0.83258	-0.48069
love	-1.67175	-3.67423	-2.52878	-1.45999
nervous	-0.59025	0.24441	-0.89285	-0.51549
neverminded	-0.46051	-1.01212	-0.69659	-0.40218
oops	-0.50745	4.26440	0.53515	4.06970
playful	-0.49994	-1.09878	-0.75623	-0.43661
pleased	-0.63357	-1.39249	-0.95838	-0.55332
ponder	-0.39881	-0.87652	-0.60326	-0.34829
questioning	-0.45221	1.01842	8.08741	4.66927
relieved	-1.03340	-2.27124	-1.56318	-0.90250
remorse	-0.65126	-0.73272	0.02997	1.18944
romance	-0.39881	-0.87652	-0.60326	-0.34829
sad	-2.51328	-5.16171	-3.27565	-2.19493
sarcastic	-0.56400	-1.23959	-0.85314	-0.49256
scared	6.91961	3.90960	5.34991	3.80023
sceptical	-0.48455	-1.06496	-0.73296	-0.42317

shocked	18.75448	34.34434	15.88261	9.46418
shy	-0.16054	0.97814	-1.63894	-0.94624
smiling	-1.00742	-2.21415	-1.52388	-0.87981
smirking	-0.46051	-1.01212	-0.69659	-0.40218
smuggish	-0.38920	-0.85540	-0.58873	-0.33990
stressed	1.62122	-1.04765	0.66585	-0.41629
surprised	8.60564	20.09620	15.64290	13.44793
sympathetic	-0.60919	-1.33891	1.24887	-0.53203
teasing	-0.42635	-0.93704	-0.64492	-0.37234
thankful	-0.73331	-1.61170	-1.10924	-0.64042
thinking	-0.45221	-0.99388	-0.68404	-0.39493
tired	-0.82102	-1.25029	-1.24192	-0.71702
uncertain	0.51927	0.06456	1.39388	0.80476
unhappy	-1.12465	-2.47179	-1.70120	0.03594
unimpressed	-0.50745	-1.11530	0.53515	-0.44318
upset	-0.92920	-2.04224	-0.69411	-0.81150
winking	-1.01491	-2.23061	-1.53521	-0.88635
worried	0.84601	5.40818	0.99232	1.14879

EMOJI 5**DESCRIPTIVE LABELS**

Label	< 25	25 - 39	40 - 54	55 >
amazed		x		
angry		x	x	x
annoyed			x	
anxious	x	x		x
astonished		x		
awkward	x	x	x	
concerned		x		
disbelief			x	
disgusted			x	
embarrassed		x	x	
excited	x	x	x	
expression of emotion		x		
frustrated	x	x	x	x
irritated		x	x	x
nervous	x	x	x	
oops	x	x	x	
questioning	x		x	
remorse	x		x	x
sarcastic	x	x		x
scared	x	x	x	x
shocked		x		x
smiling	x	x	x	x
stressed	x	x	x	

surprised	x	x	x	x
uncertain	x	x	x	
worried		x	x	x

STANDARDISED RESIDUALS

Label	< 25	25 - 39	40 - 54	55 >
affection	-0.66452	-1.55350	-0.99291	-0.57326
amazed	-0.34848	0.41285	-0.52069	-0.30062
amused	-0.62603	-0.78021	-0.93540	-0.54005
angry	-0.59437	2.20896	11.49805	15.08974
annoyed	-0.76131	-0.65600	4.13708	-0.65675
anxious	4.42119	14.54415	-0.61808	8.05002
appreciative	-0.38605	-0.90250	-0.57683	-0.33303
astonished	-0.40010	1.20296	-0.59781	-0.34515
awkward	5.68709	9.52260	5.54636	-0.28663
blushing	-0.90994	-2.12721	-1.35960	-0.78497
cheeky	-0.45799	-1.07067	-0.68432	-0.39509
compassionate	-0.39314	-0.91906	-0.58742	-0.33914
concerned	-0.42028	3.08866	-0.62797	-0.36256
content	-0.14785	-2.51695	-1.60871	-0.92879
crying	-1.26740	-2.96286	-1.89371	-1.09333
cute	-0.45799	-1.07067	-0.68432	-0.39509
depressed	-0.48149	-1.12561	-0.71943	-0.41537
devastated	-0.52535	-1.22815	-0.78497	-0.45320
disappointed	-1.31653	-2.75281	-0.95041	-1.13572
disbelief	-0.64770	-0.19330	3.16543	-0.55874
discouraged	-0.58027	-1.35653	-0.86703	-0.50058
disgusted	-0.33226	-0.77675	1.51781	-0.28663
disinterested	-0.40694	-0.95132	-0.60803	-0.35105
embarrassed	-0.90079	0.26852	1.62596	-0.77708
emotional	-0.45799	-1.07067	-0.68432	-0.39509
excited	12.96863	18.53713	0.02680	-0.56967
exhausted	-0.34848	-0.81466	-0.52069	-0.30062
expression of emotion	-0.39314	0.16901	-0.58742	-0.33914
flirting	-0.72033	-1.68395	-1.07629	-0.62140
friendly	-0.57068	-1.33411	-0.85269	-0.49230
frustrated	0.61351	1.16510	13.38102	4.06661
funny	-1.11691	-1.84511	-1.66886	-0.96352
happy	-1.28219	-1.70293	-1.63498	-1.57777
hopeless	-0.40694	-0.95132	-0.60803	-0.35105
humorous	-0.39314	-0.91906	-0.58742	-0.33914
hurt	-0.43322	-1.01276	-0.64730	-0.37372
in agreement	-0.58971	-1.37859	-0.88112	-0.50872
in love	-0.97438	-2.27787	-1.45590	-0.84056
irritated	-0.64342	1.15511	1.11895	3.04818
joking	-0.83397	-1.94962	-1.24610	-0.71943

joyful	-0.44578	-0.08253	-0.66607	-0.38455
kiss	-1.01870	-2.38146	-1.52211	-0.87879
laughing	-1.19106	-2.78440	-1.21774	-0.05422
laughing till you cry	-0.40694	-0.95132	-0.60803	-0.35105
like	-0.46989	-1.09849	-0.70210	-0.40536
love	-1.42718	-3.33640	-2.13246	-1.23117
nervous	11.40322	15.79998	3.23160	-0.43470
neverminded	-0.39314	-0.91906	-0.58742	-0.33914
oops	1.87510	13.79832	2.44245	-0.37372
playful	-0.42680	-0.99775	-0.63771	-0.36818
pleased	-0.54088	-1.26445	-0.80817	-0.46660
ponder	-0.34047	-0.79593	-0.50872	-0.29371
questioning	2.20426	-0.90250	1.15678	-0.33303
relieved	-0.88222	-2.06241	-1.31819	-0.76105
remorse	1.24264	-0.53037	1.57678	1.60535
romance	-0.34047	-0.79593	-0.50872	-0.29371
sad	-2.14560	-4.61716	-3.20590	-1.85093
sarcastic	1.59538	2.42800	-0.71943	1.99215
scared	3.90890	10.13723	2.23829	9.72914
sceptical	-0.41366	-0.96704	-0.61808	-0.35685
shocked	-1.10699	0.50349	-1.04945	0.09222
shy	-0.92498	-1.69992	-1.38208	-0.79794
smiling	3.79092	6.94216	2.60586	4.64947
smirking	-0.39314	-0.91906	-0.58742	-0.33914
smuggish	-0.33226	-0.77675	-0.49646	-0.28663
stressed	14.33740	7.45807	2.68126	-0.35105
surprised	1.37368	3.72821	2.45686	0.54558
sympathetic	-0.52007	-1.21580	-0.77708	-0.44865
teasing	-0.36397	-0.85088	-0.54384	-0.31399
thankful	-0.62603	-1.46351	-0.93540	-0.54005
thinking	-0.38605	-0.90250	-0.57683	-0.33303
tired	-0.70091	-1.63855	-1.04728	-0.60465
uncertain	2.36831	8.82057	2.05378	-0.56967
unhappy	-0.96012	-1.35346	1.35369	-0.82826
unimpressed	-0.43322	-1.01276	-0.64730	-0.37372
upset	-0.79326	-1.85446	2.18947	-0.68432
winking	-0.86643	-2.02551	-1.29460	-0.74744
worried	-0.56582	4.72523	5.06867	5.65801

EMOJI 6**DESCRIPTIVE LABELS**

Label	< 25	25 - 39	40 - 54	55 >
angry			x	
anxious	x			
crying	x	x	x	x

depressed	x	x		
devastated	x	x	x	x
disappointed			x	
disbelief				x
emotional	x	x	x	x
exhausted		x		
frustrated		x	x	
hopeless			x	
hurt		x	x	
irritated			x	
joyful	x			
remorse			x	x
sad	x	x	x	x
stressed	x			
sympathetic			x	x
tired			x	
unhappy		x	x	x
upset		x	x	x

STANDARDISED RESIDUALS

Label	< 25	25 - 39	40 - 54	55 >
affection	-0.7378	-1.8986	-1.1465	-0.6798
amazed	-0.3869	-0.9956	-0.6012	-0.3565
amused	-0.6950	-1.7886	-0.1543	-0.6404
angry	-0.6599	-0.5204	1.9000	-0.6080
annoyed	-0.8452	-2.1751	-1.3135	-0.7788
anxious	1.7182	-1.1819	-0.7137	-0.4232
appreciative	-0.4286	-1.1030	-0.6661	-0.3949
astonished	-0.4442	-1.1431	-0.6903	-0.4093
awkward	-0.3689	-0.9493	-0.5733	-0.3399
blushing	-1.0102	-2.5997	-1.5699	-0.9309
cheeky	-0.5085	-1.3085	-0.7902	-0.4685
compassionate	-0.4365	-0.2329	-0.6783	-0.4022
concerned	-0.4666	-1.2008	-0.7251	-0.4299
content	-1.1953	-3.0761	-1.8576	-1.1014
crying	11.3855	30.0711	11.5328	9.5015
cute	-0.5085	-0.5443	-0.7902	-0.4685
depressed	6.9483	3.7128	-0.8307	-0.4926
devastated	6.2749	11.1576	12.3327	3.1840
disappointed	-0.0933	-1.1028	0.3701	-0.6043
disbelief	-0.7191	-1.3101	-1.1175	0.8466
discouraged	-0.6442	-1.0547	-1.0012	-0.5936
disgusted	-0.3689	-0.9493	-0.5733	-0.3399
disinterested	-0.4518	-1.1626	-0.7021	-0.4163
embarrassed	-1.0001	-2.5736	-0.9107	-0.9215
emotional	3.4249	7.0980	3.0064	1.6659
excited	-0.7331	-1.8867	-1.1393	-0.6755

exhausted	-0.3869	0.0088	-0.6012	-0.3565
expression of emotion	-0.4365	-1.1232	-0.6783	-0.4022
flirting	-0.7997	-2.0580	-1.2428	-0.7369
friendly	-0.6336	-1.6305	-0.9846	-0.5838
frustrated	-0.8207	0.2553	0.2927	-0.7562
funny	-1.2400	-2.8777	-1.9270	-1.1426
happy	-1.5380	-5.0340	-3.1555	-1.8710
hopeless	-0.4518	-0.3025	0.7222	-0.4163
humorous	-0.4365	-1.1232	-0.6783	-0.4022
hurt	-0.4810	7.6495	1.9284	-0.4432
in agreement	-0.6547	-1.6848	-1.0174	-0.6033
in love	-1.0818	-2.7839	-1.6811	-0.9968
irritated	-0.7143	-1.8383	0.6915	-0.6582
joking	-0.9259	-2.3827	-1.4389	-0.8531
joyful	1.5257	-1.2736	-0.7691	-0.4560
kiss	-1.1310	-2.9105	-1.7576	-1.0421
laughing	-1.3223	-3.4029	-1.5683	-1.2184
laughing till you cry	-0.4518	-1.1626	-0.7021	-0.4163
like	-0.5217	-1.3425	-0.8107	-0.4807
love	-1.5845	-4.0775	-2.4623	-1.4600
nervous	-0.5594	-1.4397	-0.8694	-0.5155
neverminded	-0.4365	-1.1232	-0.6783	-0.4022
oops	-0.4810	-1.2377	-0.7474	-0.4432
playful	-0.4738	-1.2194	-0.7364	-0.4366
pleased	-0.6005	-1.5453	-0.9332	-0.5533
ponder	-0.3780	-0.9727	-0.5874	-0.3483
questioning	-0.4286	-0.1963	-0.6661	-0.3949
relieved	-0.9794	-2.5205	-1.5221	-0.9025
remorse	-0.6173	-0.9589	0.0832	2.9476
romance	-0.3780	-0.9727	-0.5874	-0.3483
sad	5.5942	12.7929	8.1841	6.0058
sarcastic	-0.5346	-1.3757	-0.8307	-0.4926
scared	-0.5085	-1.3085	-0.7902	-0.4685
sceptical	-0.4593	-1.1819	-0.7137	-0.4232
shocked	-1.2290	-2.8465	-1.9099	-1.1324
shy	-1.0269	-2.6427	-1.5959	-0.9462
smiling	-0.9548	-2.4572	-1.4838	-0.8798
smirking	-0.4365	-1.1232	-0.6783	-0.4022
smuggish	-0.3689	-0.9493	-0.5733	-0.3399
stressed	1.7617	-1.1626	-0.7021	-0.4163
surprised	-0.9829	-2.5295	-1.5275	-0.9057
sympathetic	-0.5774	-0.1399	1.3316	3.2272
teasing	-0.4041	-1.0399	-0.6280	-0.3723
thankful	-0.6950	-1.7886	-1.0801	-0.6404
thinking	-0.4286	-1.1030	-0.6661	-0.3949
tired	-0.7782	-2.0025	0.4446	-0.7170

uncertain	-0.7331	-1.8867	-1.1393	-0.6755
unhappy	-1.0659	0.1733	1.9656	2.0722
unimpressed	-0.4810	-1.2377	-0.7474	-0.4432
upset	-0.8807	8.7643	4.4766	0.4208
winking	-0.9619	-2.4755	-1.4949	-0.8864
worried	-0.6282	-1.6166	-0.9762	-0.5788

EMOJI 7**DESCRIPTIVE LABELS**

Label	< 25	25 - 39	40 - 54	55 >
angry				x
annoyed	x			
concerned	x	x	x	x
depressed	x	x	x	
devastated	x			
disappointed	x	x	x	
discouraged	x	x	x	x
disinterested	x		x	
embarrassed				x
emotional	x		x	x
exhausted		x	x	
expression of emotion		x	x	
hopeless		x	x	x
hurt	x	x		
remorse	x	x	x	x
sad	x	x	x	x
shy				x
surprised				x
sympathetic	x	x		x
thinking			x	
tired	x	x	x	x
unhappy	x	x	x	x
unimpressed		x		
upset	x	x	x	
worried	x	x	x	

STANDARDISED RESIDUALS

Label	< 25	25 - 39	40 - 54	55 >
affection	-0.73776	-1.7727	-1.1861	-0.56423
amazed	-0.38688	-0.9296	-0.6220	-0.29589
amused	-0.69502	-1.6700	-1.1174	-0.53155
angry	-0.65987	-1.5856	-0.1183	1.47685
annoyed	0.33793	-1.5385	-1.3589	-0.64641
anxious	-0.45925	-1.1035	-0.7384	-0.35123

appreciative	-0.42860	-1.0298	-0.6891	-0.32779
astonished	-0.44419	-1.0673	-0.7142	-0.33971
awkward	-0.36888	-0.8864	-0.5931	-0.28212
blushing	-1.01022	-2.4274	-1.6242	-0.77261
cheeky	-0.50846	-1.2218	-0.8175	-0.38887
compassionate	-0.43646	-0.0952	-0.7017	-0.33380
concerned	1.67657	0.6627	0.5828	2.44544
content	-1.19531	-2.8721	-1.9218	-0.91416
crying	-1.40707	-3.3809	-2.2622	-1.07611
cute	-0.50846	-1.2218	-0.8175	-0.38887
depressed	1.33615	11.1723	2.6312	-0.40882
devastated	2.84582	-1.4014	-0.9377	-0.44606
disappointed	8.11680	20.4059	11.6930	-0.22325
disbelief	-0.71908	-1.1491	-1.1561	-0.54994
discouraged	0.90805	11.3724	2.8262	1.53696
disgusted	-0.36888	-0.8864	-0.5931	-0.28212
disinterested	1.76167	-0.1644	0.6504	-0.34552
embarrassed	-1.00006	-2.4030	-1.6079	0.54262
emotional	1.45824	-1.2218	0.4058	2.18269
excited	-0.73313	-1.7616	-1.1787	-0.56069
exhausted	-0.38688	0.1461	0.9857	-0.29589
expression of emotion	-0.43646	0.8583	2.1484	-0.33380
flirting	-0.79971	-1.9216	-1.2857	-0.61161
friendly	-0.63357	-1.5224	-1.0186	-0.48455
frustrated	-0.82070	-0.9578	-1.3195	-0.62767
funny	-1.24000	-2.9795	-1.9936	-0.94834
happy	-2.03051	-4.8790	-2.9583	-1.55292
hopeless	-0.45178	0.7568	2.0271	2.54867
humorous	-0.43646	-1.0487	-0.7017	-0.33380
hurt	5.75657	0.5749	-0.7733	-0.36783
in agreement	-0.65470	-1.5731	-0.1026	-0.50071
in love	-1.08177	-2.5993	-1.7392	-0.82733
irritated	-0.71433	-1.7164	-1.1485	-0.54631
joking	-0.92588	-2.2247	-1.4886	-0.70810
joyful	-0.49490	-1.1892	-0.7957	-0.37850
kiss	-1.13096	-2.7175	-1.8183	-0.86495
laughing	-1.32232	-3.1773	-2.1260	-1.01130
laughing till you cry	-0.45178	-1.0856	-0.7264	-0.34552
like	-0.52167	-1.2535	-0.8387	-0.39897
love	-1.58446	-3.8072	-2.5474	-1.21178
nervous	-0.55943	-1.3442	-0.8994	-0.42785
neverminded	-0.43646	-1.0487	-0.7017	-0.33380
oops	-0.48096	-1.1557	-0.7733	-0.36783
playful	-0.47383	-1.1385	-0.7618	-0.36238
pleased	-0.60049	-1.4429	-0.9654	-0.45925
ponder	-0.37799	-0.9082	-0.6077	-0.28908

questioning	-0.42860	-1.0298	-0.6891	-0.32779
relieved	-0.97944	-2.3534	-1.5747	-0.74907
remorse	1.00283	2.5623	3.0382	3.76459
romance	-0.37799	-0.9082	-0.6077	-0.28908
sad	3.91502	15.2419	9.7480	4.21628
sarcastic	-0.53456	-1.2844	-0.8594	-0.40882
scared	-0.50846	-1.2218	-0.8175	-0.38887
sceptical	-0.45925	-1.1035	-0.7384	-0.35123
shocked	-1.22898	-2.6144	-1.9759	-0.93992
shy	-1.02692	-2.4675	-1.0454	0.48790
smiling	-0.95482	-2.2943	-1.5351	-0.73024
smirking	-0.43646	-1.0487	-0.7017	-0.33380
smuggish	-0.36888	-0.8864	-0.5931	-0.28212
stressed	-0.45178	-0.1644	-0.7264	-0.34552
surprised	-0.98291	-2.3618	-1.5803	0.57856
sympathetic	1.15455	3.6582	-0.9283	6.35219
teasing	-0.40409	-0.9710	-0.6497	-0.30904
thankful	-0.69502	-1.6700	-1.1174	-0.53155
thinking	-0.42860	-1.0298	2.2133	-0.32779
tired	4.36224	1.8740	5.1434	1.08520
uncertain	-0.73313	-1.1939	-1.1787	-0.56069
unhappy	0.81037	0.5622	5.8719	4.09149
unimpressed	-0.48096	1.4402	-0.7733	-0.36783
upset	3.66122	2.1369	0.7028	-0.67354
winking	-0.96192	-2.3113	-1.5465	-0.73567
worried	0.96373	1.1406	0.9703	-0.48043

EMOJI 8**DESCRIPTIVE LABELS**

Label	< 25	25 - 39	40 - 54	55 >
annoyed	x			
content	x	x	x	x
disappointed	x		x	
discouraged	x	x	x	
disinterested		x	x	
embarrassed			x	
emotional				x
expression of emotion	x	x		
friendly		x	x	
funny				x
happy	x	x	x	x
hopeless		x		
in agreement			x	x
in love				x
like			x	

joyful	x			
pleased	x	x	x	
relieved	x	x	x	
remorse		x	x	
sarcastic	x			
sad			x	
shy	x	x	x	x
smiling			x	x
smirking				x
smuggish		x		x
sympathetic			x	x
teasing		x		
thankful	x		x	x
thinking		x	x	
tired	x	x		x
unhappy			x	
unimpressed		x		

STANDARDISED RESIDUALS

Label	< 25	25 - 39	40 - 54	55 >
affection	-0.59090	-1.5335	-0.9560	-0.55506
amazed	-0.30987	-0.8042	-0.5013	-0.29107
amused	-0.55667	-1.4447	-0.9006	-0.52290
angry	-0.52852	-1.3716	-0.8551	-0.49646
annoyed	0.80022	-1.7569	-1.0953	-0.63590
anxious	-0.36783	-0.9546	-0.5951	-0.34552
appreciative	-0.34328	-0.8909	-0.5554	-0.32246
astonished	-0.35577	-0.9233	-0.5756	-0.33419
awkward	-0.29545	-0.7668	-0.4780	-0.27753
blushing	-0.80913	-0.6712	-1.3091	-0.76004
cheeky	-0.40725	-1.0569	-0.6589	-0.38255
compassionate	-0.34958	-0.9073	-0.5656	-0.32838
concerned	-0.37372	-0.9699	-0.6046	-0.35105
content	10.53242	28.1037	10.7175	7.99658
crying	-1.12698	-2.9248	-1.8234	-1.05862
cute	-0.40725	-1.0569	-0.6589	-0.38255
depressed	-0.42815	-1.1112	-0.6927	-0.40218
devastated	-0.46715	-1.2124	-0.7558	-0.43881
disappointed	0.53775	-0.0759	0.2178	-1.09966
disbelief	-0.57594	-1.4947	-0.9318	-0.54100
discouraged	1.42206	1.6480	0.3631	-0.48468
disgusted	-0.29545	-0.7668	-0.4780	-0.27753
disinterested	-0.36185	0.1258	1.1227	-0.33990
embarrassed	-0.80099	-1.1167	0.2473	-0.75240
emotional	-0.40725	-1.0569	-0.6589	2.23152
excited	-0.58720	-0.8677	-0.9500	-0.55158
exhausted	-0.30987	-0.8042	-0.5013	-0.29107

expression of emotion	2.51097	1.2972	-0.5656	-0.32838
flirting	-0.64052	-1.6623	-1.0363	-0.60167
friendly	-0.50745	1.7203	0.3970	-0.47667
frustrated	-0.65734	-1.1198	-1.0635	-0.61746
funny	-0.99317	-2.5775	-1.6069	0.13898
happy	1.44809	7.1518	6.4899	0.43612
hopeless	-0.36185	0.1258	-0.5854	-0.33990
humorous	-0.34958	-0.9073	-0.5656	-0.32838
hurt	-0.38522	-0.9997	-0.6233	-0.36185
in agreement	-0.52437	-0.6261	1.5090	1.53763
in love	-0.86643	-2.2486	-1.4018	0.41482
irritated	-0.57214	-1.4848	-0.9257	-0.53743
joking	-0.74158	-1.9246	-1.1998	-0.69659
joyful	2.12638	-0.0567	-0.6413	-0.37234
kiss	-0.90584	-2.3509	-1.4656	-0.85088
laughing	-1.05910	-2.7486	-1.7135	-0.99485
laughing till you cry	-0.36185	-0.9391	-0.5854	-0.33990
like	-0.41783	-1.0844	0.8032	-0.39248
love	-1.26907	-3.2935	-2.0532	-1.19208
nervous	-0.44807	-1.1629	-0.7249	-0.42089
neverminded	-0.34958	-0.9073	-0.5656	-0.32838
oops	-0.38522	-0.9997	-0.6233	-0.36185
playful	-0.37951	-0.9849	-0.6140	-0.35649
pleased	5.75657	10.7690	0.5069	-0.45178
ponder	-0.30275	-0.7857	-0.4898	-0.28438
questioning	-0.34328	-0.8909	-0.5554	-0.32246
relieved	0.49026	0.9112	1.8823	-0.73689
remorse	-0.49438	1.0551	1.7005	-0.46439
romance	-0.30275	-0.7857	-0.4898	-0.28438
sad	-1.90789	-2.5279	0.1528	-0.67618
sarcastic	4.24312	-1.1112	-0.6927	-0.40218
scared	-0.40725	-1.0569	-0.6589	-0.38255
sceptical	-0.36783	-0.9546	-0.5951	-0.34552
shocked	-0.98434	-2.5546	-1.5926	-0.92463
shy	0.39330	3.0186	2.4266	5.69900
smiling	-0.76476	-0.9770	1.1873	0.67369
smirking	-0.34958	-0.9073	-0.5656	2.71692
smuggish	-0.29545	1.8416	-0.4780	3.32571
stressed	-0.36185	-0.9391	-0.5854	-0.33990
surprised	-0.78725	-1.5537	-0.4886	-0.73950
sympathetic	-0.46245	-1.2002	0.5883	1.86763
teasing	-0.32365	0.3506	-0.5236	-0.30402
thankful	3.03610	-0.0603	1.3200	1.38950
thinking	-0.34328	0.2316	1.2451	-0.32246
tired	4.19018	2.0919	-1.0084	2.83075
uncertain	-0.58720	-0.8677	-0.9500	-0.55158

unhappy	-0.85375	-2.2157	0.0666	-0.80196
unimpressed	-0.38522	0.0005	-0.6233	-0.36185
upset	-0.70538	-1.8306	-1.1412	-0.66259
winking	-0.77044	-1.9995	-1.2465	-0.72370
worried	-0.50314	-1.3058	-0.8140	-0.47261

EMOJI 9**DESCRIPTIVE LABELS**

Label	< 25	25 - 39	40 - 54	55 >
affection	x	x	x	x
amazed	x	x	x	x
appreciative	x	x	x	
astonished		x		
compassionate			x	
cute	x	x	x	
excited	x	x	x	
flirting	x			
funny				x
happy		x	x	x
humorous			x	
in agreement			x	
in love	x	x	x	x
like	x	x	x	x
love	x	x	x	x
romance		x	x	
smirking			x	
teasing			x	
thankful			x	

STANDARDISED RESIDUALS

Label	< 25	25 - 39	40 - 54	55 >
affection	3.99272	5.11019	4.2215	1.57159
amazed	4.16281	4.53290	0.8290	3.66882
amused	-0.78144	-1.64804	-1.2000	-0.45785
angry	-0.74192	-1.56469	-1.1393	-0.43470
annoyed	-0.95031	-1.50521	-1.4593	-0.55679
anxious	-0.51636	-1.08898	-0.7929	-0.30254
appreciative	1.59326	1.93559	0.6113	-0.28234
astonished	-0.49942	4.64330	-0.7669	-0.29261
awkward	-0.41475	-0.87469	-0.6369	-0.24300
blushing	-1.13583	-1.97798	-1.7442	-0.66549
cheeky	-0.57169	-1.20568	-0.8779	-0.33496
compassionate	-0.49074	-0.06872	1.9003	-0.28752
concerned	-0.52462	-1.10641	-0.8056	-0.30738

content	-1.34394	-2.83432	-2.0638	-0.78742
crying	-1.58203	-3.33646	-2.4294	-0.92692
cute	4.67591	0.45314	0.2612	-0.33496
depressed	-0.60103	-1.26755	-0.9230	-0.35214
devastated	-0.65577	-1.38301	-1.0070	-0.38422
disappointed	-1.64336	-3.46581	-2.5236	-0.96285
disbelief	-0.80849	-1.70509	-1.2416	-0.47370
discouraged	-0.72433	-1.52758	-1.1123	-0.42439
disgusted	-0.41475	-0.87469	-0.6369	-0.24300
disinterested	-0.50796	-1.07127	-0.7800	-0.29762
embarrassed	-1.12442	-2.37136	-1.7267	-0.65880
emotional	-0.57169	-1.20568	-0.8779	-0.33496
excited	0.38887	5.73967	1.1042	-0.48296
exhausted	-0.43499	-0.91738	-0.6680	-0.25486
expression of emotion	-0.49074	-1.03495	-0.7536	-0.28752
flirting	0.21301	-1.89628	-1.3808	-0.52682
friendly	-0.71235	-1.50233	-1.0939	-0.41737
frustrated	-0.92275	-1.94606	-1.4170	-0.54065
funny	-1.39419	-2.26011	-1.6739	1.63153
happy	-0.53091	0.58528	3.6250	0.90518
hopeless	-0.50796	-1.07127	-0.7800	-0.29762
humorous	-0.49074	-1.03495	0.5734	-0.28752
hurt	-0.54076	-1.14046	-0.8304	-0.31684
in agreement	-0.73610	-0.90827	0.6389	-0.43129
in love	16.87169	38.75889	12.0526	4.90045
irritated	-0.80315	-1.69383	-1.2334	-0.47057
joking	-1.04101	-2.19546	-1.5986	-0.60993
joyful	-0.55644	-0.32138	-0.8545	-0.32602
kiss	-1.27159	-2.68175	-1.9527	-0.74503
laughing	-1.48674	-3.13549	-1.4071	-0.87109
laughing till you cry	-0.50796	-1.07127	-0.7800	-0.29762
like	7.93801	6.84708	4.6504	5.47610
love	10.00644	20.46372	22.1205	8.53680
nervous	-0.62900	-1.32653	-0.9659	-0.36853
neverminded	-0.49074	-1.03495	-0.7536	-0.28752
oops	-0.54076	-1.14046	-0.8304	-0.31684
playful	-0.53275	-1.12356	-0.8181	-0.31214
pleased	-0.67516	-1.42389	-1.0368	-0.39558
ponder	-0.42499	-0.89629	-0.6526	-0.24900
questioning	-0.48189	-1.01630	-0.7400	-0.28234
relieved	-1.10123	-2.32246	-1.6911	-0.64522
remorse	-0.69401	-1.46364	-1.0657	-0.40662
romance	-0.42499	9.14509	0.8796	-0.24900
sad	-2.67825	-5.64836	-4.1128	-1.56920
sarcastic	-0.60103	-1.26755	-0.9230	-0.35214
scared	-0.57169	-1.20568	-0.8779	-0.33496

sceptical	-0.51636	-1.08898	-0.7929	-0.30254
shocked	-1.38180	-2.91418	-2.1220	-0.80960
shy	-1.15461	-2.43504	-1.7731	-0.67649
smiling	-1.07355	-2.26408	-0.4354	-0.62900
smirking	-0.49074	-0.06872	0.5734	-0.28752
smuggish	-0.41475	-0.87469	-0.6369	-0.24300
stressed	-0.50796	-1.07127	-0.7800	-0.29762
surprised	-1.10513	-2.33068	-1.6971	-0.64750
sympathetic	-0.64918	-1.36911	-0.9969	-0.38036
teasing	-0.45433	-0.95818	0.7356	-0.26620
thankful	-0.78144	-0.43448	2.1333	-0.45785
thinking	-0.48189	-1.01630	-0.7400	-0.28234
tired	-0.87491	-1.84516	-1.3436	-0.51261
uncertain	-0.82429	-1.73841	-1.2658	-0.48296
unhappy	-1.19847	-2.52754	-1.8404	-0.70219
unimpressed	-0.54076	-1.14046	-0.8304	-0.31684
upset	-0.99020	-2.08829	-1.5206	-0.58016
winking	-1.08153	-2.28091	-1.6608	-0.63367
worried	-0.70629	-1.48954	-1.0846	-0.41382

EMOJI 10**DESCRIPTIVE LABELS**

Label	< 25	25 - 39	40 - 54	55 >
amused	x		x	
anxious	x			
awkward		x		
concerned			x	
disbelief			x	
embarrassed	x	x		x
exhausted	x			
expression of emotion		x		
friendly	x			
funny	x	x	x	x
happy		x	x	x
humorous	x	x		x
joking				x
joyful	x			
laughing	x	x	x	x
laughing till you cry		x		x
nervous	x	x		
oops	x	x		
playful			x	
ponder				x
questioning				x

relieved	x	x	x	x
remorse	x			
shy	x			x
stressed	x	x	x	
surprised				x
tired	x		x	
uncertain	x		x	
worried	x			

STANDARDISED RESIDUALS

Label	< 25	25 - 39	40 - 54	55 >
affection	-0.88345	-1.42956	-0.9981	-0.59090
amazed	-0.46329	-0.74967	-0.5234	-0.30987
amused	0.36925	-0.60422	1.1868	-0.55667
angry	-0.79018	-1.27864	-0.8927	-0.52852
annoyed	-1.01212	-1.63777	-1.1434	-0.67696
anxious	3.08679	-0.88989	-0.6213	-0.36783
appreciative	-0.51324	-0.83050	-0.5798	-0.34328
astonished	-0.53191	-0.86071	-0.6009	-0.35577
awkward	-0.44173	2.08328	-0.4990	-0.29545
blushing	-1.20972	-1.95751	-1.3667	-0.80913
cheeky	-0.60888	-0.98526	-0.6879	-0.40725
compassionate	-0.52266	-0.84574	-0.5905	-0.34958
concerned	-0.55874	-0.90413	0.9530	-0.37372
content	-1.43136	-1.88440	-1.6171	-0.95737
crying	-1.68494	-2.72649	-1.9035	-1.12698
cute	-0.60888	-0.98526	-0.6879	-0.40725
depressed	-0.64012	-1.03582	-0.7232	-0.42815
devastated	-0.69843	-1.13017	-0.7890	-0.46715
disappointed	-1.75026	-2.83219	-1.9773	-1.17067
disbelief	-0.86108	-0.67568	0.0552	-0.57594
discouraged	-0.77144	-1.24831	-0.8715	-0.51598
disgusted	-0.44173	-0.71478	-0.4990	-0.29545
disinterested	-0.54100	-0.87542	-0.6112	-0.36185
embarrassed	4.64767	3.73861	-1.3529	0.44745
emotional	-0.60888	-0.98526	-0.6879	-0.40725
excited	-0.87791	-0.71667	-0.9918	-0.58720
exhausted	1.69521	1.91818	-0.5234	-0.30987
expression of emotion	-0.52266	8.61343	-0.5905	-0.34958
flirting	-0.95764	-1.54961	-1.0819	-0.64052
friendly	0.55937	-1.22768	-0.8571	-0.50745
frustrated	-0.98278	-1.59029	-1.1103	-0.65734
funny	1.20893	4.25621	7.8603	4.04120
happy	-1.19769	2.16528	3.0776	2.67786
hopeless	-0.54100	-0.87542	-0.6112	-0.36185
humorous	12.87044	0.33666	-0.5905	-0.34958

hurt	-0.57594	-0.93196	-0.6507	-0.38522
in agreement	-0.78399	-1.26861	-0.8857	-0.52437
in love	-1.29540	-2.09615	-1.4635	-0.86643
irritated	-0.85540	-0.66171	-0.9664	-0.57214
joking	-0.20679	-0.12192	-0.4542	0.60690
joyful	4.46948	-0.95898	-0.6695	-0.39639
kiss	-1.35431	-2.19148	-1.5300	-0.90584
laughing	6.62647	6.80444	7.1552	4.60608
laughing till you cry	-0.54100	1.40918	-0.6112	2.40171
like	-0.62470	-1.01085	-0.7057	-0.41783
love	-1.89737	-3.07023	-2.1435	-1.26907
nervous	6.79377	6.29593	-0.7568	-0.44807
neverminded	-0.52266	-0.84574	-0.5905	-0.34958
oops	1.16035	1.21405	-0.6507	-0.38522
playful	-0.56741	-0.91815	0.9190	-0.37951
pleased	-0.71908	-0.30416	-0.8124	-0.48096
ponder	-0.45263	-0.73243	-0.5114	3.00034
questioning	-0.51324	-0.83050	-0.5798	5.48281
relieved	12.46896	37.62003	24.3347	5.58919
remorse	0.61376	-0.35998	-0.8350	-0.49438
romance	-0.45263	-0.73243	-0.5114	-0.30275
sad	-2.85247	-4.61573	-3.2226	-1.90789
sarcastic	-0.64012	-0.07039	-0.7232	-0.42815
scared	-0.60888	-0.98526	-0.6879	-0.40725
sceptical	-0.54994	-0.88989	-0.6213	-0.36783
shocked	-1.47168	-2.38141	-1.6626	-0.98434
shy	0.39668	-1.48732	-1.3893	0.39330
smiling	-0.26878	-1.85016	-0.5176	-0.76476
smirking	-0.52266	-0.84574	-0.5905	-0.34958
smuggish	-0.44173	-0.71478	-0.4990	-0.29545
stressed	3.15584	2.55149	1.0250	-0.36185
surprised	-1.17702	-1.90459	-1.3297	1.75322
sympathetic	-0.69141	-1.11881	-0.7811	-0.46245
teasing	-0.48389	-0.78300	-0.5467	-0.32365
thankful	-0.83228	-1.34675	-0.9403	-0.55667
thinking	-0.51324	-0.83050	-0.5798	-0.34328
tired	0.14134	-0.18142	1.7970	-0.62325
uncertain	2.53928	-0.71667	0.0164	-0.58720
unhappy	-1.27643	-2.06546	-1.4420	-0.85375
unimpressed	-0.57594	-0.93196	-0.6507	-0.38522
upset	-1.05461	-1.70652	-1.1914	-0.70538
winking	-1.15188	-1.86392	-1.3013	-0.77044
worried	0.57714	-0.39569	-0.8498	-0.50314

EMOJI 11**DESCRIPTIVE LABELS**

Label	< 25	25 - 39	40 - 54	55 >
amazed			x	
amused				x
appreciative		x	x	
blushing	x	x	x	x
cheeky	x			
compassionate		x		
content	x	x	x	x
cute		x	x	x
embarrassed		x	x	
excited		x		
flirting	x			
friendly	x	x	x	x
happy	x	x	x	x
in agreement		x		
joyful		x	x	
oops				x
pleased	x	x	x	x
remorse				x
shy	x	x	x	x
smiling	x	x	x	x
smuggish				x
thankful	x	x	x	

STANDARDISED RESIDUALS

Label	< 25	25 - 39	40 - 54	55 >
affection	-0.76509	-1.6682	-0.3578	-0.60803
amazed	-0.40122	-0.8748	0.9695	-0.31886
amused	-0.72077	-0.9353	-0.2371	1.17296
angry	-0.68432	-1.4921	-1.0686	-0.54384
annoyed	-0.87652	-1.9112	-1.3688	-0.69659
anxious	-0.47627	-1.0385	-0.7437	-0.37850
appreciative	-0.44448	1.0945	2.1873	-0.35324
astonished	-0.46065	-1.0044	-0.7193	-0.36608
awkward	-0.38255	-0.8341	-0.5974	-0.30402
blushing	4.67948	13.0373	3.8652	0.36850
cheeky	1.36914	-1.1498	-0.8234	-0.41906
compassionate	-0.45263	0.0263	-0.7068	-0.35972
concerned	-0.48389	-1.0551	-0.7556	-0.38455
content	1.98728	5.8066	7.8796	3.07526
crying	-1.45920	-3.1817	-2.2787	-1.15966
cute	-0.52730	3.1990	1.6054	1.96725

depressed	-0.55436	-1.2088	-0.8657	-0.44056
devastated	-0.60486	-1.3189	-0.9445	-0.48069
disappointed	-1.51577	-3.3051	-2.3670	-1.20461
disbelief	-0.74572	-1.6260	-1.1645	-0.59264
discouraged	-0.66809	-1.4567	-1.0433	-0.53094
disgusted	-0.38255	-0.8341	-0.5974	-0.30402
disinterested	-0.46852	-1.0216	-0.7316	-0.37234
embarrassed	-1.03712	1.2763	4.5550	-0.82422
emotional	-0.52730	-1.1498	-0.8234	-0.41906
excited	-0.76030	2.5647	-1.1873	-0.60422
exhausted	-0.40122	-0.8748	-0.6265	-0.31886
expression of emotion	-0.45263	-0.9869	-0.7068	-0.35972
flirting	1.58222	-1.2553	-0.5230	-0.65909
friendly	6.95279	5.5474	4.8217	1.39293
frustrated	-0.85111	-1.8558	-1.3291	-0.67639
funny	-1.28595	-2.4473	-0.5142	-0.04346
happy	6.91721	14.7923	11.0047	8.48504
hopeless	-0.46852	-1.0216	-0.7316	-0.37234
humorous	-0.45263	-0.9869	-0.7068	-0.35972
hurt	-0.49878	-1.0876	-0.7789	-0.39639
in agreement	-0.67895	3.9234	-0.1171	-0.53958
in love	-1.12185	-2.0373	-1.1811	-0.89155
irritated	-0.74080	-1.6153	-1.1568	-0.58873
joking	-0.96018	-2.0936	-0.1656	-0.76308
joyful	-0.51324	1.5616	2.9416	-0.40788
kiss	-1.17286	-2.5574	-1.8315	-0.93210
laughing	-1.37131	-2.9901	-2.1414	-1.08981
laughing till you cry	-0.46852	-1.0216	-0.7316	-0.37234
like	-0.54100	-1.1796	-0.8448	-0.42994
love	-0.42601	-2.7455	-1.7865	-1.30586
nervous	-0.58016	-1.2650	-0.9060	-0.46106
neverminded	-0.45263	-0.9869	-0.7068	-0.35972
oops	-0.49878	-1.0876	-0.7789	2.12638
playful	-0.49139	-1.0715	-0.7674	-0.39052
pleased	0.98307	5.2702	3.1408	1.52569
ponder	-0.39199	-0.8547	-0.6121	-0.31152
questioning	-0.44448	-0.9692	-0.6941	-0.35324
relieved	-1.01573	-2.2148	-1.5862	-0.80722
remorse	-0.64012	-0.6793	-0.9996	1.45701
romance	-0.39199	-0.8547	-0.6121	-0.31152
sad	-2.47031	-5.3864	-3.8576	-1.96320
sarcastic	-0.55436	-1.2088	-0.8657	-0.44056
scared	-0.52730	-1.1498	-0.8234	-0.41906
sceptical	-0.47627	-1.0385	-0.7437	-0.37850
shocked	-1.27452	-2.7790	-1.9903	-1.01288
shy	4.56904	7.1521	3.7487	0.33520

smiling	9.10882	11.2726	4.2741	4.29613
smirking	-0.45263	-0.9869	-0.7068	-0.35972
smuggish	-0.38255	-0.8341	-0.5974	2.98528
stressed	-0.46852	-1.0216	-0.7316	-0.37234
surprised	-1.01933	-2.2226	-0.9636	-0.81008
sympathetic	-0.59878	-1.3056	-0.9351	-0.47586
teasing	-0.41906	-0.9137	-0.6544	-0.33303
thankful	0.66663	3.5187	3.3167	-0.57281
thinking	-0.44448	-0.9692	-0.6941	-0.35324
tired	-0.80698	-1.7596	-1.2602	-0.64132
uncertain	-0.76030	-1.6578	-1.1873	-0.60422
unhappy	-1.10542	-2.4103	-1.7262	-0.87850
unimpressed	-0.49878	-1.0876	-0.7789	-0.39639
upset	-0.91332	-1.9914	-1.4262	-0.72583
winking	-0.99756	-2.1751	-1.5578	-0.79278
worried	-0.65145	-1.4205	-1.0173	-0.51772

EMOJI 12**DESCRIPTIVE LABELS**

Label	< 25	25 - 39	40 - 54	55 >
angry			x	
annoyed				x
amused		x		
cheeky	x	x	x	
concerned	x	x		
content	x			
cute		x		
disappointed			x	
disbelief		x	x	x
disgusted		x		
disinterested		x	x	
expression of emotion		x		
flirting	x	x		
friendly			x	x
funny	x			
hopeless			x	
humorous		x		
in agreement		x	x	x
irritated				x
joking	x			
like		x		
neverminded		x	x	x
oops		x		x
playful	x	x		
ponder		x	x	x

questioning	x		x	x
remorse			x	x
sarcastic	x	x	x	
sceptical		x	x	x
shy			x	x
smiling			x	x
smirking	x	x	x	
smuggish	x	x		
surprised			x	
teasing		x		
thinking	x	x	x	x
tired				x
uncertain	x	x	x	x
unimpressed		x	x	
winking	x		x	

STANDARDISED RESIDUALS

Label	< 25	25 - 39	40 - 54	55 >
affection	-0.59953	-1.38949	-0.98773	-0.62470
amazed	-0.31440	-0.72865	-0.51797	-0.32759
amused	-0.56480	1.74677	-0.93051	-0.58851
angry	-0.53624	-1.24280	0.24847	-0.55874
annoyed	-0.68685	-0.33547	-1.13159	0.68160
anxious	-0.37320	-0.86495	-0.61486	-0.38887
appreciative	-0.34829	-0.80722	-0.57382	-0.36292
astonished	-0.36096	-0.83658	-0.59469	-0.37612
awkward	-0.29976	-0.69474	-0.49386	-0.31235
blushing	-0.82094	-1.90264	-1.35250	-0.85540
cheeky	2.00696	7.39624	0.78823	-0.43054
compassionate	-0.35469	-0.82203	-0.58435	-0.36957
concerned	2.25813	0.25914	-0.62470	-0.39509
content	0.05815	-0.03022	-0.35054	-1.01212
crying	-1.14344	-2.65007	-1.88382	-1.19143
cute	-0.41320	0.08660	-0.68075	-0.43054
depressed	-0.43440	-1.00678	-0.71568	-0.45263
devastated	-0.47397	-1.09849	-0.78087	-0.49386
disappointed	-0.34585	-2.38954	0.08725	-1.23762
disbelief	-0.58435	1.59923	3.19218	2.67586
discouraged	-0.52352	-0.38913	-0.86250	-0.54549
disgusted	-0.29976	0.74463	-0.49386	-0.31235
disinterested	-0.36714	3.85010	2.70170	-0.38255
embarrassed	-0.81269	-1.88351	-0.59204	-0.84680
emotional	-0.41320	-0.95764	-0.68075	-0.43054
excited	-0.59577	-1.38078	-0.98154	-0.62078
exhausted	-0.31440	-0.72865	-0.51797	-0.32759
expression of emotion	-0.35469	1.61096	-0.58435	-0.36957

flirting	8.58268	6.46106	-1.07067	-0.67715
friendly	-0.51486	-1.19326	0.33067	1.32755
frustrated	-0.66693	-0.25180	-1.09878	-0.69493
funny	0.97710	-1.47904	-1.05779	-0.09756
happy	-1.04403	-2.25532	-2.71850	-1.71933
hopeless	-0.36714	-0.85088	1.04842	-0.38255
humorous	-0.35469	0.39446	-0.58435	-0.36957
hurt	-0.39085	-0.90584	-0.64392	-0.40725
in agreement	-0.53203	3.63294	2.54609	3.05339
in love	-0.87908	-2.03739	-1.44830	-0.91598
irritated	-0.58049	-0.60208	-0.95637	1.04842
joking	1.90575	-1.17033	-0.43287	-0.78399
joyful	-0.40218	-0.93210	-0.66259	-0.41906
kiss	-0.91906	-2.13005	-1.51416	-0.95764
laughing	-1.07456	-2.49044	-0.64063	-0.22655
laughing till you cry	-0.36714	-0.85088	-0.60486	-0.38255
like	-0.42393	2.07086	-0.69843	-0.44173
love	-1.28759	-2.98417	-2.12132	-1.34164
nervous	-0.45462	-1.05363	-0.74898	-0.47370
neverminded	-0.35469	12.55943	7.97219	5.04205
oops	-0.39085	0.19812	-0.64392	4.50372
playful	2.21198	3.58980	-0.63438	-0.40122
pleased	-0.48798	-1.13096	-0.80395	-0.50846
ponder	-0.30717	7.71623	19.25441	9.05315
questioning	2.52283	-0.80722	2.91160	2.39255
relieved	-0.79593	-1.84467	-1.31130	-0.82934
remorse	-0.50160	-1.16253	0.38368	1.39064
romance	-0.30717	-0.71190	-0.50606	-0.32006
sad	-1.93575	-4.26345	-2.87560	-2.01700
sarcastic	11.07573	9.91914	2.07887	-0.45263
scared	-0.41320	-0.95764	-0.68075	-0.43054
sceptical	-0.37320	6.07187	9.14351	4.75424
shocked	-0.99872	-2.31466	-1.03764	-1.04064
shy	-0.83451	-0.90001	0.80718	1.43053
smiling	-0.77592	-0.13006	1.85073	0.42838
smirking	10.92289	19.85840	4.54957	-0.36957
smuggish	13.04404	13.69903	-0.49386	-0.31235
stressed	-0.36714	-0.85088	-0.60486	-0.38255
surprised	-0.79875	-0.77083	0.96379	-0.83228
sympathetic	-0.46921	-1.08745	-0.77302	-0.48890
teasing	-0.32838	4.49481	-0.54100	-0.34216
thankful	-0.56480	-1.30900	-0.93051	-0.58851
thinking	8.26509	7.86451	6.39702	13.41441
tired	-0.63235	-0.78323	-0.08194	0.85879
uncertain	1.08273	7.30998	13.28181	5.82274
unhappy	-0.86621	-1.50944	-0.72636	-0.90257
unimpressed	-0.39085	4.61393	4.01504	-0.40725

upset	-0.71568	-1.65868	-1.17909	-0.74572
winking	0.49759	-0.70772	-1.28784	-0.81450
worried	-0.51048	-1.18311	2.72607	-0.53191

EMOJI 13**DESCRIPTIVE LABELS**

Label	< 25	25 - 39	40 - 54	55 >
amazed		x		
angry	x	x	x	x
annoyed	x	x	x	
concerned			x	
depressed			x	
devastated				x
disappointed	x	x	x	x
disbelief			x	x
discouraged	x	x		
disgusted	x	x	x	
disinterested	x	x	x	x
expression of emotion		x		
frustrated	x	x		x
hopeless		x		
hurt		x	x	
irritated	x	x	x	x
neverminded		x	x	
ponder		x		
questioning		x	x	x
remorse			x	x
sad				x
sarcastic	x	x		
sceptical		x	x	
smirking		x		
thinking		x	x	x
tired		x		
uncertain			x	x
unhappy	x	x	x	x
unimpressed	x	x	x	
upset		x	x	x
worried			x	

STANDARDISED RESIDUALS

Label	< 25	25 - 39	40 - 54	55 >
affection	-0.82949	-1.52346	-1.08674	-0.64092
amazed	-0.43499	0.45280	-0.56989	-0.33610

amused	-0.78144	-0.73844	-1.02379	-0.60380
angry	1.95378	8.91169	10.34476	1.17115
annoyed	16.93868	22.89169	8.39342	-0.73427
anxious	-0.51636	-0.94834	-0.67649	-0.39897
appreciative	-0.48189	-0.88505	-0.63134	-0.37234
astonished	-0.49942	-0.91724	-0.65430	-0.38589
awkward	-0.41475	-0.76173	-0.54337	-0.32046
blushing	-1.13583	-2.08608	-1.48808	-0.87762
cheeky	-0.57169	-1.04997	-0.74898	-0.44173
compassionate	-0.49074	-0.90129	-0.64292	-0.37918
concerned	-0.52462	-0.96352	0.76763	-0.40536
content	-1.34394	-2.46828	-1.76072	-1.03841
crying	-1.58203	-2.90557	-2.07265	-1.22238
cute	-0.57169	-1.04997	-0.74898	-0.44173
depressed	-0.60103	-1.10385	0.48256	1.68895
devastated	-0.65577	-1.20440	-0.85914	3.44046
disappointed	5.05023	2.61425	2.49167	4.24302
disbelief	-0.80849	-0.13798	0.82896	0.97609
discouraged	0.65627	1.67653	-0.94895	-0.55966
disgusted	11.64078	3.17668	12.33921	-0.32046
disinterested	7.36668	10.85797	0.83717	4.70327
embarrassed	-1.12442	-2.06511	-1.47312	-0.86880
emotional	-0.57169	-1.04997	-0.74898	-0.44173
excited	-0.82429	-1.51391	-1.07993	-0.63691
exhausted	-0.43499	-0.79891	-0.56989	-0.33610
expression of emotion	-0.49074	1.31775	-0.64292	-0.37918
flirting	-0.89915	-1.65139	-1.17800	-0.69474
friendly	-0.71235	-1.30831	-0.93327	-0.55041
frustrated	3.41209	4.79593	-0.38174	0.68958
funny	-1.39419	-2.56059	-1.82656	-1.07725
happy	-2.28300	-4.19297	-2.32233	-1.76400
hopeless	-0.50796	0.13898	-0.66549	-0.39248
humorous	-0.49074	-0.90129	-0.64292	-0.37918
hurt	-0.54076	0.01370	0.70303	-0.41783
in agreement	-0.73610	-1.35193	-0.96439	-0.56876
in love	-1.21628	-2.23383	-1.59347	-0.93978
irritated	10.40265	21.57449	7.50103	0.99085
joking	-1.04101	-1.91192	-1.36385	-0.80435
joyful	-0.55644	-1.02197	-0.72901	-0.42994
kiss	-1.27159	-2.33542	-1.66594	-0.98252
laughing	-1.48674	-2.73056	-1.94781	-1.14876
laughing till you cry	-0.50796	-0.93292	-0.66549	-0.39248
like	-0.58654	-1.07725	-0.76844	-0.45320
love	-1.78148	-3.27189	-2.33396	-1.37649
nervous	-0.62900	-1.15522	-0.82406	-0.48600
neverminded	-0.49074	7.97488	2.46787	-0.37918

oops	-0.54076	-0.99317	-0.70847	-0.41783
playful	-0.53275	-0.97846	-0.69797	-0.41164
pleased	-0.67516	-1.24000	-0.88454	-0.52167
ponder	-0.42499	0.50062	-0.55679	-0.32838
questioning	-0.48189	0.24483	0.95260	2.31335
relieved	-1.10123	-2.02253	-1.44275	-0.85088
remorse	-0.69401	-1.27462	0.19060	1.32862
romance	-0.42499	-0.78054	-0.55679	-0.32838
sad	-1.93150	-2.88593	-0.08890	1.79646
sarcastic	1.06280	2.51983	-0.78742	-0.46439
scared	-0.57169	-1.04997	-0.74898	-0.44173
sceptical	-0.51636	8.54187	8.19283	-0.39897
shocked	-1.38180	-2.14379	-1.81033	-1.06767
shy	-1.15461	-2.12056	-0.85160	-0.89213
smiling	-1.07355	-1.97169	-1.40648	-0.82949
smirking	-0.49074	0.20823	-0.64292	-0.37918
smuggish	-0.41475	-0.76173	-0.54337	-0.32046
stressed	-0.50796	-0.93292	-0.66549	-0.39248
surprised	-0.20026	-0.55163	-1.44785	-0.85390
sympathetic	-0.64918	-1.19229	-0.85051	-0.50160
teasing	-0.45433	-0.83443	-0.59523	-0.35105
thankful	-0.78144	-1.43521	-1.02379	-0.60380
thinking	-0.48189	0.24483	0.95260	4.99905
tired	-0.87491	0.88244	-1.14624	-0.67601
uncertain	-0.82429	-0.19282	1.69804	2.50328
unhappy	2.13912	4.15928	7.98315	8.79301
unimpressed	6.85617	12.09619	2.11453	-0.41783
upset	-0.99020	0.38089	5.64033	0.54194
winking	-1.08153	-1.48291	-1.41693	-0.83566
worried	-0.70629	-1.29718	0.15538	-0.54573

EMOJI 14**DESCRIPTIVE LABELS**

Label	< 25	25 - 39	40 - 54	55 >
angry			x	
amazed	x			
annoyed	x	x	x	x
astonished	x			
concerned	x			
depressed	x	x	x	
disappointed	x	x	x	x
disbelief		x	x	x
discouraged	x	x	x	
disgusted		x		x
disinterested			x	
emotional	x		x	

exhausted	x	x	x	
expression of emotion	x	x		
frustrated	x	x	x	x
hopeless	x	x	x	
humorous	x			
hurt		x		
irritated	x	x		x
questioning		x		
remorse			x	
sad	x	x	x	x
shocked	x	x	x	x
stressed	x	x		
sympathetic		x		
tired	x	x	x	
uncertain				x
unhappy	x	x	x	x
upset	x	x	x	x
worried		x	x	

STANDARDISED RESIDUALS

Label	< 25	25 - 39	40 - 54	55 >
affection	-0.82949	-1.70478	-1.11011	-0.56423
amazed	4.16281	-0.89400	-0.58215	-0.29589
amused	-0.78144	-0.98338	-1.04581	-0.53155
angry	-0.74192	-0.21316	0.01422	-0.50466
annoyed	1.15428	4.19108	0.30079	0.90060
anxious	-0.51636	-0.11891	-0.69104	-0.35123
appreciative	-0.48189	-0.99039	-0.64492	-0.32779
astonished	3.50521	-1.02642	-0.66838	-0.33971
awkward	-0.41475	-0.85239	-0.55506	-0.28212
blushing	-1.13583	-2.33437	-1.52008	-0.77261
cheeky	-0.57169	-1.17494	-0.76509	-0.38887
compassionate	-0.49074	-1.00856	-0.65675	-0.33380
concerned	3.28767	-1.07820	0.72221	-0.35685
content	-1.34394	-2.76207	-1.79859	-0.91416
crying	-0.31783	-0.48337	-0.22797	-1.07611
cute	-0.57169	-1.17494	-0.76509	-0.38887
depressed	2.72662	2.00302	0.43888	-0.40882
devastated	-0.65577	-0.60577	-0.87762	-0.44606
disappointed	3.22470	5.20890	6.89444	2.46052
disbelief	-0.80849	1.94932	4.46326	3.08679
discouraged	3.41746	6.57242	3.15705	-0.49269
disgusted	-0.41475	1.49395	-0.55506	3.26253
disinterested	-0.50796	-1.04396	0.79121	-0.34552
embarrassed	-1.12442	-2.31091	-1.50481	-0.76484
emotional	1.17751	-0.32384	1.84897	-0.38887

excited	-0.82429	-1.69410	-1.10315	-0.56069
exhausted	6.46171	11.41030	1.13563	-0.29589
expression of emotion	1.54702	3.94898	-0.65675	-0.33380
flirting	-0.89915	-1.84794	-1.20333	-0.61161
friendly	-0.71235	-1.46403	-0.95334	-0.48455
frustrated	3.41209	13.92255	2.81392	5.74513
funny	-1.39419	-2.86536	-1.86585	-0.94834
happy	-2.28300	-4.69203	-3.05533	-1.55292
hopeless	3.42936	10.45070	8.14630	-0.34552
humorous	1.54702	-1.00856	-0.65675	-0.33380
hurt	-0.54076	0.68818	-0.72370	-0.36783
in agreement	-0.73610	-1.51285	-0.98513	-0.50071
in love	-1.21628	-2.49970	-1.62774	-0.82733
irritated	1.68702	0.77264	-0.14451	3.11458
joking	-1.04101	-2.13949	-1.39318	-0.70810
joyful	-0.55644	-1.14360	-0.74469	-0.37850
kiss	-1.27159	-2.61339	-1.70177	-0.86495
laughing	-0.81413	-3.05556	-1.98970	-1.01130
laughing till you cry	-0.50796	-1.04396	-0.67980	-0.34552
like	-0.58654	-1.20546	-0.78497	-0.39897
love	-1.78148	-3.66132	-2.38416	-1.21178
nervous	-0.62900	-0.51915	-0.84178	-0.42785
neverminded	-0.49074	-1.00856	-0.65675	-0.33380
oops	-0.54076	-1.11138	-0.72370	-0.36783
playful	-0.53275	-1.09492	-0.71298	-0.36238
pleased	-0.67516	-1.38759	-0.90357	-0.45925
ponder	-0.42499	-0.87344	-0.56876	-0.28908
questioning	-0.48189	2.03872	-0.64492	-0.32779
relieved	-1.10123	-2.26326	-1.47378	-0.74907
remorse	-0.69401	-1.42633	1.22456	-0.47207
romance	-0.42499	-0.87344	-0.56876	-0.28908
sad	0.30877	3.76100	2.27457	2.56954
sarcastic	-0.60103	-1.23523	-0.80435	-0.40882
scared	-0.57169	-1.17494	-0.76509	-0.38887
sceptical	-0.51636	-1.06122	-0.69104	-0.35123
shocked	0.06559	0.68138	1.39528	2.25186
shy	-1.15461	-2.37296	-1.54521	-0.78538
smiling	-1.07355	-2.20636	-1.43673	-0.73024
smirking	-0.49074	-1.00856	-0.65675	-0.33380
smuggish	-0.41475	-0.85239	-0.55506	-0.28212
stressed	1.46070	1.82970	-0.67980	-0.34552
surprised	-0.20026	-2.27127	-0.80286	-0.75172
sympathetic	-0.64918	0.91433	-0.86880	-0.44158
teasing	-0.45433	-0.93375	-0.60803	-0.30904
thankful	-0.78144	-1.60603	-1.04581	-0.53155
thinking	-0.48189	-0.99039	-0.64492	-0.32779

tired	11.69780	10.43685	5.66150	-0.59512
uncertain	-0.82429	-1.10381	-0.19666	1.22281
unhappy	2.97352	4.84475	8.37171	4.09149
unimpressed	-0.54076	-0.21160	-0.72370	-0.36783
upset	0.01971	7.30128	3.95713	0.81115
winking	-1.08153	-2.22277	-1.44741	-0.73567
worried	-0.70629	2.68188	0.11272	-0.48043

EMOJI 15**DESCRIPTIVE LABELS**

Label	< 25	25 - 39	40 - 54	55 >
affection		x		
amused				x
appreciative				x
awkward	x			
blushing	x	x	x	x
compassionate	x			
content		x	x	x
cute	x	x		x
embarrassed		x	x	x
excited	x			
flirting	x	x		
friendly	x	x	x	x
happy	x	x	x	x
in love	x			
joyful	x	x		x
laughing			x	
like		x	x	
pleased		x	x	
shy	x	x	x	x
smiling	x	x	x	x
smuggish		x		x
thankful	x	x	x	

STANDARDISED RESIDUALS

Label	< 25	25 - 39	40 - 54	55 >
affection	-0.82949	0.2356	-1.1465	-0.64092
amazed	-0.43499	-0.8486	-0.6012	-0.33610
amused	-0.78144	-0.8686	-1.0801	1.05239
angry	-0.74192	-1.4474	-1.0255	-0.57326
annoyed	-0.95031	-1.8539	-1.3135	-0.73427
anxious	-0.51636	-1.0074	-0.7137	-0.39897
appreciative	-0.48189	-0.9401	-0.6661	2.31335
astonished	-0.49942	-0.9743	-0.6903	-0.38589

awkward	4.40746	-0.8091	-0.5733	-0.32046
blushing	9.42911	18.9946	9.8955	2.54071
cheeky	-0.57169	-1.1153	-0.7902	-0.44173
compassionate	1.54702	-0.9574	-0.6783	-0.37918
concerned	-0.52462	-1.0235	-0.7251	-0.40536
content	-1.34394	1.9550	4.0641	4.73962
crying	-1.58203	-3.0864	-2.1867	-1.22238
cute	1.17751	5.1610	0.4753	4.08597
depressed	-0.60103	-1.1725	-0.8307	-0.46439
devastated	-0.65577	-1.2793	-0.9064	-0.50669
disappointed	-1.64336	-3.2060	-2.2714	-1.26977
disbelief	-0.80849	-1.5773	-1.1175	-0.62470
discouraged	-0.72433	-1.4131	-1.0012	-0.55966
disgusted	-0.41475	-0.8091	-0.5733	-0.32046
disinterested	-0.50796	-0.9910	-0.7021	-0.39248
embarrassed	-0.23507	5.5562	3.5933	1.43322
emotional	-0.57169	-1.1153	-0.7902	-0.44173
excited	1.60202	-0.9863	-0.2616	-0.63691
exhausted	-0.43499	-0.8486	-0.6012	-0.33610
expression of emotion	-0.49074	-0.9574	-0.6783	-0.37918
flirting	2.43733	0.5262	-1.2428	-0.69474
friendly	6.30665	2.9277	1.0467	3.08324
frustrated	-0.92275	-1.8002	-1.2754	-0.71298
funny	-1.39419	-1.6169	-1.4081	-1.07725
happy	5.60138	11.4873	8.2530	5.03874
hopeless	-0.50796	-0.9910	-0.7021	-0.39248
humorous	-0.49074	-0.9574	-0.6783	-0.37918
hurt	-0.54076	-1.0550	-0.7474	-0.41783
in agreement	-0.73610	-1.4361	-0.0346	-0.56876
in love	0.42808	-2.3728	-1.0863	-0.93978
irritated	-0.80315	-1.5669	-1.1101	-0.62057
joking	-0.08040	-2.0309	-1.4389	-0.80435
joyful	1.24069	5.3627	-0.7691	1.89594
kiss	-1.27159	-2.4807	-1.7576	-0.98252
laughing	-1.48674	-2.9005	0.8648	-1.14876
laughing till you cry	-0.50796	-0.9910	-0.7021	-0.39248
like	-0.58654	0.6036	1.6563	-0.45320
love	-1.22015	-2.9000	-2.0562	-1.37649
nervous	-0.62900	-1.2271	-0.8694	-0.48600
neverminded	-0.49074	-0.9574	-0.6783	-0.37918
oops	-0.54076	-1.0550	-0.7474	-0.41783
playful	-0.53275	-1.0393	-0.7364	-0.41164
pleased	-0.67516	6.2749	5.4963	-0.52167
ponder	-0.42499	-0.8291	-0.5874	-0.32838
questioning	-0.48189	-0.9401	-0.6661	-0.37234
relieved	-1.10123	-2.1484	-1.5221	-0.85088

remorse	-0.69401	-1.3539	-0.9592	-0.53624
romance	-0.42499	-0.8291	-0.5874	-0.32838
sad	-2.67825	-5.2250	-3.7019	-2.06940
sarcastic	-0.60103	-1.1725	-0.8307	-0.46439
scared	-0.57169	-1.1153	-0.7902	-0.44173
sceptical	-0.51636	-1.0074	-0.7137	-0.39897
shocked	-1.38180	-2.6957	-1.9099	-1.06767
shy	7.50634	13.7296	9.6831	5.83337
smiling	3.58391	5.0677	3.9076	1.58161
smirking	-0.49074	-0.9574	-0.6783	-0.37918
smuggish	-0.41475	0.4268	-0.5733	2.80003
stressed	-0.50796	-0.9910	-0.7021	-0.39248
surprised	-1.10513	-2.1560	-1.5275	-0.85390
sympathetic	-0.64918	-1.2665	-0.8973	-0.50160
teasing	-0.45433	-0.8864	-0.6280	-0.35105
thankful	1.77792	3.7231	3.5491	-0.60380
thinking	-0.48189	-0.9401	-0.6661	-0.37234
tired	-0.87491	-1.7069	-1.2093	-0.67601
uncertain	-0.82429	-1.6081	-1.1393	-0.63691
unhappy	-1.19847	-2.3381	-1.6565	-0.92602
unimpressed	-0.54076	-1.0550	-0.7474	-0.41783
upset	-0.99020	-1.9318	-1.3686	-0.76509
winking	-1.08153	-2.1099	-1.4949	-0.83566
worried	-0.70629	-1.3779	-0.9762	-0.54573

EMOJI 16

DESCRIPTIVE LABELS

Label	< 25	25 - 39	40 - 54	55 >
appreciative		x		
cheeky	x	x	x	x
compassionate		x		
content			x	
cute		x		
disbelief				x
excited	x			
flirting	x	x	x	
friendly	x		x	x
funny	x			x
happy	x			
humorous	x	x	x	
in agreement	x	x	x	x
joking	x	x	x	x
like		x	x	
playful	x	x	x	x
pleased	x			
questioning		x	x	

remorse				x
sarcastic	x	x		
sceptical			x	x
surprised				x
sympathetic			x	
teasing	x	x	x	
thankful		x	x	
uncertain				x
winking	x	x	x	x

STANDARDISED RESIDUALS

Label	< 25	25 - 39	40 - 54	55 >
affection	-0.92324	-1.64031	-1.03346	-0.60803
amazed	-0.48415	-0.86019	-0.54195	-0.31886
amused	-0.86976	-0.89817	-0.97359	-0.57281
angry	-0.82577	-1.46714	-0.92435	-0.54384
annoyed	-1.05771	-1.87922	-1.18398	-0.69659
anxious	-0.57471	-1.02109	-0.64332	-0.37850
appreciative	-0.53635	2.19523	-0.60038	-0.35324
astonished	-0.55586	-0.98760	-0.62222	-0.36608
awkward	-0.46162	-0.82016	-0.51673	-0.30402
blushing	-1.26420	-2.24609	-1.41512	-0.83258
cheeky	11.93638	6.83051	4.90365	4.35355
compassionate	-0.54620	0.06006	-0.61140	-0.35972
concerned	-0.58391	-1.03743	-0.65362	-0.38455
content	-0.82729	-2.28133	0.71453	-0.98513
crying	-1.76083	-3.12844	-1.97104	-1.15966
cute	-0.63630	4.17684	-0.71226	-0.41906
depressed	-0.66895	-1.18852	-0.74881	-0.44056
devastated	-0.72989	-1.29678	-0.81702	-0.48069
disappointed	-1.82909	-3.24973	-2.04745	-1.20461
disbelief	-0.89986	-1.59878	-0.01453	1.09473
discouraged	-0.80619	-1.43234	-0.90243	-0.53094
disgusted	-0.46162	-0.82016	-0.51673	-0.30402
disinterested	-0.56537	-1.00448	-0.63286	-0.37234
embarrassed	-1.25149	-2.22352	-1.40090	-0.82422
emotional	-0.63630	-1.13051	-0.71226	-0.41906
excited	2.35247	-0.40306	-0.05325	-0.60422
exhausted	-0.48415	-0.86019	-0.54195	-0.31886
expression of emotion	-0.54620	-0.97042	-0.61140	-0.35972
flirting	8.99154	12.84464	0.66509	-0.65909
friendly	5.51343	-0.69877	3.61947	1.39293
frustrated	-1.02704	-1.82473	-1.14965	-0.67639
funny	1.02596	-0.21800	-1.16131	0.93504
happy	0.21380	-1.19203	-1.43807	-0.47835
hopeless	-0.56537	-1.00448	-0.63286	-0.37234

humorous	4.94633	5.21245	2.65977	-0.35972
hurt	-0.60188	-1.06935	-0.67373	-0.39639
in agreement	4.06295	5.41422	7.80602	8.72696
in love	-1.35374	-2.40517	-1.51535	-0.89155
irritated	-0.89392	-1.58823	-1.00064	-0.58873
joking	10.06121	24.17313	16.43653	9.72081
joyful	-0.61933	-0.19156	-0.69326	-0.40788
kiss	-1.41530	-2.51455	-1.58426	-0.93210
laughing	-1.05045	-2.59987	-1.85231	-1.08981
laughing till you cry	-0.56537	-1.00448	-0.63286	-0.37234
like	-0.65283	4.01309	0.63766	-0.42994
love	-1.98282	-3.52286	-2.21953	-1.30586
nervous	-0.70008	-0.43986	-0.78366	-0.46106
neverminded	-0.54620	-0.97042	-0.61140	-0.35972
oops	-0.60188	-1.06935	-0.67373	-0.39639
playful	7.83927	6.54015	6.86920	9.85233
pleased	0.57927	-1.33512	-0.84117	-0.49490
ponder	-0.47302	-0.84041	-0.52949	-0.31152
questioning	-0.53635	0.09645	1.06521	-0.35324
relieved	-1.22569	-2.17767	-1.37201	-0.80722
remorse	-0.77244	-1.37238	-0.86465	1.45701
romance	-0.47302	-0.84041	-0.52949	-0.31152
sad	-2.98094	-5.29621	-3.33681	-1.96320
sarcastic	0.82592	5.54254	-0.74881	-0.44056
scared	-0.63630	-1.13051	-0.71226	-0.41906
sceptical	-0.57471	-1.02109	0.91111	2.26353
shocked	-1.53797	-2.73249	-1.72157	-1.01288
shy	-1.28510	-2.28322	-1.43851	-0.84635
smiling	-0.35797	-2.12292	-1.33752	-0.78693
smirking	-0.54620	-0.97042	-0.61140	-0.35972
smuggish	-0.46162	-0.82016	-0.51673	-0.30402
stressed	-0.56537	-1.00448	-0.63286	-0.37234
surprised	-1.23003	-2.18538	-1.37687	0.42437
sympathetic	-0.72255	-0.50478	1.66396	-0.47586
teasing	5.42692	9.11896	2.96722	-0.33303
thankful	-0.86976	1.04321	0.05353	-0.57281
thinking	-0.53635	-0.95294	-0.60038	-0.35324
tired	-0.97379	-1.73012	-1.09004	-0.64132
uncertain	-0.91745	-1.63003	-0.05325	1.05080
unhappy	-1.33392	-2.36996	-1.49316	-0.87850
unimpressed	-0.60188	-1.06935	-0.67373	-0.39639
upset	-1.10210	-1.95810	-1.23367	-0.72583
winking	9.59574	34.33192	19.43230	5.51415
worried	-0.78611	-1.39668	-0.87996	-0.51772

ADDENDUM G**EMOJI LABELS AND STANDARDISED RESIDUALS FOR GENDER****EMOJI 1****DESCRIPTIVE LABELS**

Label	Males	Females
anxious		x
compassionate	x	x
concerned	x	x
crying	x	x
devastated		x
disappointed	x	x
emotional	x	x
exhausted	x	
hurt	x	x
remorse	x	x
sad	x	x
sympathetic	x	x
unhappy	x	x
upset	x	x
worried	x	x

STANDARDISED RESIDUALS

Label	Males	Females
affection	-1.1687	-2.1112
amazed	-0.6129	-1.1071
amused	-1.1010	-1.9889
angry	-1.0453	-1.3587
annoyed	-1.3389	-2.4186
anxious	-0.7275	0.2077
appreciative	-0.6790	-1.2265
astonished	-0.7036	-1.2711
awkward	-0.5843	-1.0556
blushing	-1.6003	-2.8908
cheeky	-0.8055	-1.4550
compassionate	0.7549	3.5549
concerned	6.0254	1.6606
content	-1.8935	-3.4205
crying	8.9870	12.1168
cute	-0.8055	-1.4550
depressed	-0.8468	-0.2222
devastated	-0.9239	3.1242
disappointed	0.2760	1.7947

disbelief	-1.1391	-1.5717
discouraged	-1.0205	-0.2161
disgusted	-0.5843	-1.0556
disinterested	-0.7157	-1.2928
embarrassed	-1.5842	-2.8618
emotional	1.6776	5.4178
excited	-1.1614	-2.0979
exhausted	1.0188	-1.1071
expression of emotion	-0.6914	-1.2490
flirting	-1.2668	-2.2884
friendly	-1.0037	-1.8130
frustrated	-1.3001	-1.4969
funny	-1.9643	-3.5484
happy	-3.2166	-5.8105
hopeless	-0.7157	-1.2928
humorous	-0.6914	-1.2490
hurt	0.5506	6.6161
in agreement	-1.0371	-1.8735
in love	-1.7136	-3.0956
irritated	-1.1316	-2.0441
joking	-1.4667	-2.6495
joyful	-0.7840	-1.4162
kiss	-1.7916	-3.2363
laughing	-2.0947	-3.7839
laughing till you cry	-0.7157	-1.2928
like	-0.8264	-1.4928
love	-2.5100	-4.5341
nervous	-0.8862	-1.6009
neverminded	-0.6914	-1.2490
oops	-0.7619	-1.3763
playful	-0.7506	-1.3559
pleased	-0.9513	-1.7184
ponder	-0.5988	-1.0816
questioning	-0.6790	-1.2265
relieved	-1.5516	-2.8028
remorse	4.1357	3.8952
romance	-0.5988	-1.0816
sad	15.3072	24.7248
sarcastic	-0.8468	-1.5297
scared	-0.8055	-0.7677
sceptical	-0.7275	-1.3142
shocked	-1.9469	-1.2421
shy	-1.6268	-2.9386
smiling	-1.5125	-2.7323
smirking	-0.6914	-1.2490
smuggish	-0.5843	-1.0556
stressed	-0.7157	-1.2928
surprised	-1.5570	-1.7461

sympathetic	1.2720	6.2158
teasing	-0.6401	-1.1563
thankful	-1.1010	-1.9889
thinking	-0.6790	-1.2265
tired	-0.4214	-2.2267
uncertain	-1.1614	-2.0979
unhappy	1.2726	4.1623
unimpressed	-0.7619	-0.6497
upset	1.4720	2.6382
winking	-1.5238	-2.7526
worried	1.0147	1.5402

EMOJI 2**DESCRIPTIVE LABELS**

Label	Males	Females
affection	x	x
appreciative	x	x
cheeky		x
compassionate	x	x
cute	x	x
expression of emotion	x	
flirting	x	x
in agreement		x
in love	x	
kiss	x	x
like	x	
love	x	x
playful	x	x
romance	x	x
sympathetic		x
thankful	x	x
winking	x	

STANDARDISED RESIDUALS

Label	Males	Females
affection	6.56570	17.87751
amazed	-0.61056	-1.12607
amused	-1.09685	-2.02294
angry	-1.04138	-1.92063
annoyed	-1.33387	-2.46008
anxious	-0.72477	-1.33670
appreciative	2.28046	8.37184
astonished	-0.70100	-1.29287
awkward	-0.58215	-1.07367

blushing	-1.59428	-2.94036
cheeky	-0.80244	1.22285
compassionate	3.66655	6.60128
concerned	-0.73637	-1.35809
content	-1.88637	-3.47908
crying	-2.22057	-4.09544
cute	1.68998	0.54715
depressed	-0.84361	-1.55589
devastated	-0.92046	-1.69762
disappointed	-2.30666	-4.25421
disbelief	-1.13481	-2.09296
discouraged	-1.01668	-1.87508
disgusted	-0.58215	-1.07367
disinterested	-0.71298	-1.31497
embarrassed	-1.57825	-2.91080
emotional	-0.80244	-1.47995
excited	-1.15700	-2.13387
exhausted	-0.61056	-1.12607
expression of emotion	0.76298	-1.27038
flirting	3.49204	6.26469
friendly	-0.99987	-0.21726
frustrated	-1.29520	-2.38876
funny	-1.44591	-1.94675
happy	-2.26826	-4.21801
hopeless	-0.71298	-1.31497
humorous	-0.68881	-1.27038
hurt	-0.75903	-1.39989
in agreement	-0.06535	1.24310
in love	0.63584	-1.87821
irritated	-1.12732	-2.07915
joking	-0.09242	-1.21059
joyful	-0.78103	-1.44047
kiss	20.62625	41.66841
laughing	-2.08682	-3.84876
laughing till you cry	-0.71298	-1.31497
like	0.39137	-0.20121
love	11.49653	24.01065
nervous	-0.88287	-1.62830
neverminded	-0.68881	-1.27038
oops	-0.75903	-1.39989
playful	1.92679	0.07102
pleased	-0.94767	-1.74780
ponder	-0.59652	-1.10018
questioning	-0.67639	-1.24749
relieved	-1.54571	-2.85078
remorse	-0.97412	-1.79659
romance	12.81451	1.62664
sad	-3.75925	-6.93326

sarcastic	-0.84361	-0.91317
scared	-0.80244	-1.47995
sceptical	-0.72477	-1.33670
shocked	-1.93952	-3.57710
shy	-1.62063	-2.65440
smiling	-1.50685	-2.77912
smirking	-0.68881	-1.27038
smuggish	-0.58215	-1.07367
stressed	-0.71298	-1.31497
surprised	-1.55118	-2.86087
sympathetic	-0.91121	1.88970
teasing	-0.63771	-0.32591
thankful	5.28506	6.38066
thinking	-0.67639	-1.24749
tired	-1.22804	-2.26490
uncertain	-1.15700	-2.13387
unhappy	-1.68220	-3.10251
unimpressed	-0.75903	-1.39989
upset	-1.38986	-2.56334
winking	0.45816	-1.01393
worried	-0.99136	-1.82839

EMOJI 3**DESCRIPTIVE LABELS**

Label	Males	Females
amused	x	x
awkward		x
funny	x	x
happy	x	x
humorous	x	x
joking	x	
joyful	x	x
laughing	x	x
laughing till you cry	x	x
playful	x	
teasing		x

STANDARDISED RESIDUALS

Label	Males	Females
affection	-1.9858	-1.0483
amazed	-1.0414	-0.5497
amused	18.9760	13.1892
angry	-1.7762	-0.9376
annoyed	-2.2751	-1.2009

anxious	-1.2362	-0.6525
appreciative	-1.1537	-0.6090
astonished	-1.1956	-0.6311
awkward	0.0142	-0.5241
blushing	-2.7192	-1.4354
cheeky	-1.3686	-0.7225
compassionate	-1.1748	-0.6202
concerned	-1.2559	-0.6630
content	-2.9066	-1.6984
crying	-3.2594	-1.9993
cute	-1.3686	-0.7225
depressed	-1.4389	-0.7595
devastated	-1.5699	-0.8287
disappointed	-3.9342	-2.0768
disbelief	-0.3856	-1.0217
discouraged	-1.7341	-0.9154
disgusted	-0.9929	-0.5241
disinterested	-1.2161	-0.6419
embarrassed	-2.6919	-1.4210
emotional	-1.3686	-0.7225
excited	-0.9599	-1.0417
exhausted	-1.0414	-0.5497
expression of emotion	-1.1748	-0.6202
flirting	-2.1526	-1.1363
friendly	-1.7054	-0.9002
frustrated	-2.2091	-1.1661
funny	32.0156	10.7247
happy	0.2064	0.5810
hopeless	-1.2161	-0.6419
humorous	3.0811	0.9923
hurt	-1.2946	-0.6834
in agreement	-1.7622	-0.9302
in love	-2.9118	-1.5370
irritated	-1.9228	-1.0150
joking	-0.4859	1.7250
joyful	6.1746	2.1410
kiss	-3.0442	-1.6069
laughing	33.2458	24.7333
laughing till you cry	19.3420	2.4737
like	-1.4042	-0.7412
love	-4.2649	-1.8071
nervous	-1.5058	-0.7949
neverminded	-1.1748	-0.6202
oops	-1.2946	-0.6834
playful	-1.2754	0.8121
pleased	-0.9977	-0.8532
ponder	-1.0174	-0.5371
questioning	-1.1537	-0.6090

relieved	-2.6364	-1.3917
remorse	-1.6615	-0.8770
romance	-1.0174	-0.5371
sad	-6.4118	-3.3846
sarcastic	-1.4389	-0.7595
scared	-1.3686	-0.7225
sceptical	-1.2362	-0.6525
shocked	-3.3081	-1.7462
shy	-2.7642	-1.4591
smiling	-1.7919	-1.3567
smirking	-1.1748	-0.6202
smuggish	-0.9929	-0.5241
stressed	-1.2161	-0.6419
surprised	-2.6457	-1.3966
sympathetic	-0.9107	-0.8204
teasing	1.6705	-0.5742
thankful	-1.8708	-0.9875
thinking	-1.1537	-0.6090
tired	-2.0946	-1.1057
uncertain	-1.9734	-1.0417
unhappy	-2.8692	-1.5145
unimpressed	-1.2946	-0.6834
upset	-2.3706	-1.2513
winking	-2.5892	-1.3668
worried	-1.6909	-0.8926

EMOJI 4

DESCRIPTIVE LABELS

Label	Males	Females
amazed	x	x
anxious	x	x
astonished	x	x
awkward	x	
blushing	x	x
concerned		x
disbelief	x	x
embarrassed	x	x
emotional	x	
oops		x
questioning		x
remorse	x	
scared	x	x
shocked	x	x
shy		x
stressed		x
surprised	x	x

sympathetic	x	
uncertain	x	x
unimpressed	x	
worried	x	x

STANDARDISED RESIDUALS

Label	Males	Females
affection	-1.10548	-2.03941
amazed	4.59522	3.60572
amused	-1.04144	-1.92127
angry	-0.98877	-1.82410
annoyed	-1.26648	-1.90843
anxious	3.67134	0.30588
appreciative	-0.64222	-1.18479
astonished	0.83685	13.43147
awkward	3.06561	-1.01970
blushing	2.44996	0.43026
cheeky	-0.76190	-1.40556
compassionate	-0.65401	-1.20653
concerned	-0.69917	4.13722
content	-1.79108	-3.30422
crying	-2.10839	-3.88960
cute	-0.76190	-1.40556
depressed	-0.80099	-1.47769
devastated	-0.87396	-1.61229
disappointed	-1.73353	-3.79289
disbelief	1.70677	11.59531
discouraged	-0.96532	-1.78084
disgusted	-0.55274	-1.01970
disinterested	-0.67696	-1.24888
embarrassed	5.84204	17.13055
emotional	0.55062	-1.40556
excited	-1.09855	-2.02662
exhausted	-0.57972	-1.06947
expression of emotion	-0.65401	-0.37771
flirting	-1.19831	-2.21066
friendly	-0.94936	-1.75140
frustrated	-1.22977	-2.26870
funny	-1.85806	-3.42778
happy	-3.04257	-5.61300
hopeless	-0.67696	-1.24888
humorous	-0.65401	-1.20653
hurt	-0.72068	-1.32953
in agreement	-0.98101	-1.80979
in love	-1.62095	-2.99036
irritated	-1.07037	-1.97465
joking	-1.38736	-2.55943

joyful	-0.74158	-1.36808
kiss	-1.69466	-3.12635
laughing	-1.98140	-3.65532
laughing till you cry	-0.67696	-1.24888
like	-0.78169	-1.44208
love	-2.37420	-4.37998
nervous	-0.83827	-0.25318
neverminded	-0.65401	-1.20653
oops	-0.72068	5.43978
playful	-0.71001	-1.30983
pleased	-0.89979	-1.65996
ponder	-0.56639	-1.04488
questioning	-0.64222	7.25554
relieved	-1.46762	-2.70750
remorse	0.15628	-0.53416
romance	-0.56639	-1.04488
sad	-3.00901	-6.28106
sarcastic	-0.80099	-1.47769
scared	8.42569	5.70902
sceptical	-0.68815	-1.26952
shocked	20.42243	37.22305
shy	-1.53876	0.33169
smiling	-1.43073	-2.63944
smirking	-0.65401	-1.20653
smuggish	-0.55274	-1.01970
stressed	-0.67696	0.35256
surprised	17.53836	24.14996
sympathetic	0.29067	-0.96956
teasing	-0.60549	-1.11703
thankful	-1.04144	-1.92127
thinking	-0.64222	-1.18479
tired	-1.16600	-1.68618
uncertain	1.63234	0.44054
unhappy	-1.59721	-2.60719
unimpressed	0.66689	-1.32953
upset	-1.31965	-2.02375
winking	-1.44137	-2.65906
worried	3.30825	4.02224

EMOJI 5**DESCRIPTIVE LABELS**

Label	Males	Females
amazed	x	
angry	x	x
annoyed		x
anxious	x	x

astonished	x	
awkward	x	x
concerned	x	x
disbelief	x	x
disgusted	x	
embarrassed		x
excited	x	x
frustrated	x	x
irritated	x	x
nervous	x	x
oops	x	x
questioning		x
remorse	x	x
sarcastic	x	x
scared	x	x
shocked	x	
smiling	x	x
stressed		x
surprised	x	x
uncertain		x
worried	x	x

STANDARDISED RESIDUALS

Label	Males	Females
affection	-1.76400	-1.02848
amazed	-0.92505	1.31479
amused	-1.06006	-0.96890
angry	6.66173	11.03794
annoyed	1.44287	-0.32957
anxious	11.65146	8.73152
appreciative	-1.02479	-0.59749
astonished	-1.06207	2.61062
awkward	8.18832	9.20887
blushing	-2.41545	-1.40830
cheeky	-1.21575	-0.70883
compassionate	-1.04359	-0.60846
concerned	1.57337	0.88689
content	-2.85800	-1.06620
crying	-3.36433	-1.96154
cute	-1.21575	-0.70883
depressed	-1.27814	-0.74520
devastated	-1.39456	-0.81308
disappointed	-2.63633	-2.03758
disbelief	0.60716	0.99270
discouraged	-1.54034	-0.89808
disgusted	-0.88200	1.43038
disinterested	-1.08022	-0.62981

embarrassed	1.37267	-1.39415
emotional	-1.21575	-0.70883
excited	15.36121	9.74087
exhausted	-0.92505	-0.53934
expression of emotion	-0.08537	-0.60846
flirting	-1.91213	-1.11484
friendly	-1.51488	-0.88323
frustrated	7.21049	4.97419
funny	-2.62760	-1.15015
happy	-2.38332	-1.77082
hopeless	-1.08022	-0.62981
humorous	-1.04359	-0.60846
hurt	-1.14998	-0.67049
in agreement	-1.56539	-0.91268
in love	-2.58653	-1.50804
irritated	2.39042	0.00838
joking	-2.21380	-1.29073
joyful	-0.33825	-0.68992
kiss	-2.70415	-1.57663
laughing	-2.84540	-1.30091
laughing till you cry	-1.08022	-0.62981
like	-1.24733	-0.72724
love	-3.78849	-2.20883
nervous	14.36196	9.47808
neverminded	-1.04359	-0.60846
oops	11.02409	5.29534
playful	-1.13295	-0.66055
pleased	-1.43579	-0.83712
ponder	-0.90378	-0.52694
questioning	0.92683	-0.59749
relieved	-2.34187	-1.36540
remorse	0.55684	1.46378
romance	-0.90378	-0.52694
sad	-5.69555	-2.71845
sarcastic	2.63381	0.59671
scared	10.29977	7.75583
sceptical	-1.09808	-0.64022
shocked	-0.55637	0.03776
shy	-2.04811	-1.43158
smiling	6.47743	6.93293
smirking	-1.04359	-0.60846
smuggish	-0.88200	-0.51424
stressed	13.73154	-0.62981
surprised	4.88340	0.81918
sympathetic	-1.38055	-0.80491
teasing	-0.96618	-0.56332
thankful	-1.66181	-0.96890
thinking	-1.02479	-0.59749

tired	-1.86058	-1.08479
uncertain	9.65649	-0.04358
unhappy	-0.58683	-0.81300
unimpressed	-1.14998	-0.67049
upset	-0.68106	-0.41322
winking	-2.29997	-1.34097
worried	7.15320	2.55005

EMOJI 6**DESCRIPTIVE LABELS**

Label	Males	Females
angry		x
crying	x	x
depressed	x	x
devastated	x	x
emotional	x	x
frustrated		x
hopeless	x	
hurt	x	x
questioning	x	
remorse	x	
sad	x	x
sympathetic	x	x
unhappy	x	x
upset	x	x

STANDARDISED RESIDUALS

Label	Males	Females
affection	-1.2328	-2.0990
amazed	-0.6465	-1.1007
amused	-1.1614	-1.4717
angry	-1.1027	0.7859
annoyed	-1.4124	-2.4047
anxious	-0.7674	-0.5412
appreciative	-0.7162	-1.2194
astonished	-0.7423	-1.2637
awkward	-0.6164	-1.0495
blushing	-1.6881	-2.8741
cheeky	-0.8497	-1.4466
compassionate	-0.7294	-0.4365
concerned	-0.7797	-1.3275
content	-1.9974	-3.4007
crying	21.0400	28.2211
cute	-0.8497	-0.7553

depressed	2.4651	3.7394
devastated	4.1554	17.6250
disappointed	-0.8048	-0.5512
disbelief	-0.3694	-1.5570
discouraged	-1.0765	-1.2872
disgusted	-0.6164	-1.0495
disinterested	-0.7550	-1.2853
embarrassed	-1.6712	-2.4938
emotional	2.6811	8.2312
excited	-1.2251	-2.0858
exhausted	-0.6465	-0.1922
expression of emotion	-0.7294	-1.2418
flirting	-1.3364	-2.2752
friendly	-1.0587	-1.8025
frustrated	-0.6423	0.2347
funny	-1.5895	-3.5279
happy	-3.3931	-5.4307
hopeless	0.5696	-0.5073
humorous	-0.7294	-1.2418
hurt	2.9290	5.9397
in agreement	-1.0940	-1.8626
in love	-1.8077	-3.0777
irritated	-1.1937	-1.0482
joking	-1.5472	-2.6342
joyful	-0.8270	-0.6978
kiss	-1.8899	-3.2177
laughing	-2.2097	-3.4963
laughing till you cry	-0.7550	-1.2853
like	-0.8718	-1.4842
love	-2.6477	-4.5079
nervous	-0.9348	-1.5916
neverminded	-0.7294	-1.2418
oops	-0.8037	-1.3684
playful	-0.7918	-1.3481
pleased	-1.0035	-1.7084
ponder	-0.6316	-1.0754
questioning	0.6800	-1.2194
relieved	-1.6367	-2.7866
remorse	1.8770	-1.1867
romance	-0.6316	-1.0754
sad	8.8317	14.7661
sarcastic	-0.8933	-1.5208
scared	-0.8497	-1.4466
sceptical	-0.7674	-1.3066
shocked	-2.0537	-3.2105
shy	-1.7160	-2.9216
smiling	-1.5956	-2.7165
smirking	-0.7294	-1.2418

smuggish	-0.6164	-1.0495
stressed	-0.7550	-0.5073
surprised	-1.6425	-2.7964
sympathetic	1.1080	0.7923
teasing	-0.6753	-1.1496
thankful	-1.1614	-1.9774
thinking	-0.7162	-1.2194
tired	-1.3003	-1.3105
uncertain	-1.2251	-2.0858
unhappy	0.4644	1.2541
unimpressed	-0.8037	-1.3684
upset	4.6438	7.4720
winking	-1.6074	-2.7367
worried	-1.0497	-1.7872

EMOJI 7**DESCRIPTIVE LABELS**

Label	Males	Females
angry	x	
concerned	x	x
depressed	x	x
disappointed	x	x
discouraged	x	x
disinterested		x
emotional	x	
exhausted		x
expression of emotion	x	x
hopeless	x	x
hurt		x
in agreement	x	
remorse		x
sad	x	x
stressed	x	
sympathetic	x	x
thinking	x	
tired	x	x
unhappy	x	x
unimpressed		x
upset	x	x
worried	x	x

STANDARDISED RESIDUALS

Label	Males	Females
affection	-1.0629	-2.0694

amazed	-0.5574	-1.0852
amused	-1.0013	-1.9495
angry	0.1013	-1.3107
annoyed	-1.2176	-1.5272
anxious	-0.6616	-1.2882
appreciative	-0.6175	-1.2022
astonished	-0.6399	-1.2459
awkward	-0.5314	-1.0347
blushing	-1.4554	-2.8336
cheeky	-0.7325	-1.4262
compassionate	-0.6288	-0.4075
concerned	3.7907	0.2193
content	-1.7220	-3.3528
crying	-2.0271	-3.9468
cute	-0.7325	-1.4262
depressed	8.3195	7.1706
devastated	-0.8403	-0.4135
disappointed	8.8172	22.4868
disbelief	-1.0359	-1.5212
discouraged	5.5368	9.2609
disgusted	-0.5314	-1.0347
disinterested	-0.6509	1.1001
embarrassed	-0.7467	-2.8052
emotional	0.6326	-0.0239
excited	-1.0562	-2.0564
exhausted	-0.5574	0.7578
expression of emotion	2.5519	0.4093
flirting	-1.1521	-2.2432
friendly	-0.9128	-1.7772
frustrated	-0.3366	-1.8677
funny	-1.7864	-3.4782
happy	-2.9253	-5.5200
hopeless	2.4220	1.1001
humorous	-0.6288	-1.2243
hurt	-0.6929	2.3571
in agreement	0.1170	-1.8364
in love	-1.5584	-3.0343
irritated	-1.0291	-2.0037
joking	-1.3339	-2.5971
joyful	-0.7130	-1.3882
kiss	-1.6293	-3.1723
laughing	-1.9050	-3.7091
laughing till you cry	-0.6509	-1.2672
like	-0.7515	-1.4633
love	-2.2827	-4.4444
nervous	-0.8059	-1.5692
neverminded	-0.6288	-1.2243
oops	-0.6929	-1.3491

playful	-0.6826	-1.3291
pleased	-0.8651	-1.6844
ponder	-0.5445	-1.0603
questioning	-0.6175	-1.2022
relieved	-1.4110	-2.7473
remorse	-0.8892	5.7771
romance	-0.5445	-1.0603
sad	8.8071	16.6660
sarcastic	-0.7701	-1.4994
scared	-0.7325	-1.4262
sceptical	-0.6616	-1.2882
shocked	-1.7705	-3.1572
shy	-0.8035	-2.5333
smiling	-1.3756	-2.6783
smirking	-0.6288	-1.2243
smuggish	-0.5314	-1.0347
stressed	0.8856	-1.2672
surprised	-1.4160	-2.3943
sympathetic	2.7748	3.3200
teasing	-0.5821	-1.1335
thankful	-1.0013	-1.9495
thinking	1.0021	-0.3704
tired	1.5550	5.6058
uncertain	-1.0562	-1.5701
unhappy	2.3716	4.0337
unimpressed	-0.6929	0.8746
upset	1.0957	2.7922
winking	-1.3858	-2.6982
worried	0.2000	1.6431

EMOJI 8**DESCRIPTIVE LABELS**

Label	Males	Females
content	x	x
disappointed		x
discouraged	x	x
disinterested		x
excited	x	
expression of emotion		x
friendly		x
happy	x	x
in agreement	x	x
joyful		x
pleased	x	x
relieved	x	x
remorse		x

sarcastic	x	
shy	x	x
smiling		x
smirking	x	
smuggish	x	x
sympathetic		x
teasing		x
thankful		x
thinking		x
tired	x	x

STANDARDISED RESIDUALS

Label	Males	Females
affection	-0.92324	-1.7523
amazed	-0.48415	-0.9189
amused	-0.86976	-1.6508
angry	-0.82577	-1.5673
annoyed	-1.05771	-1.5094
anxious	-0.57471	-1.0908
appreciative	-0.53635	-1.0180
astonished	-0.55586	-1.0550
awkward	-0.46162	-0.8762
blushing	-0.47319	-1.5659
cheeky	-0.63630	-1.2077
compassionate	-0.54620	-1.0367
concerned	-0.58391	-1.1083
content	15.88592	28.1570
crying	-1.76083	-3.3421
cute	-0.63630	-1.2077
depressed	-0.66895	-1.2697
devastated	-0.72989	-1.3853
disappointed	-1.82909	0.8491
disbelief	-0.89986	-1.7079
discouraged	0.43422	1.7375
disgusted	-0.46162	-0.8762
disinterested	-0.56537	0.7907
embarrassed	-1.25149	-0.6914
emotional	-0.63630	-0.3797
excited	0.17252	-1.7413
exhausted	-0.48415	-0.9189
expression of emotion	-0.54620	1.8572
flirting	-1.00077	-1.8995
friendly	-0.79286	1.8177
frustrated	-0.05337	-1.9493
funny	-1.55176	-2.6057
happy	4.54278	8.0326
hopeless	-0.56537	-0.1412

humorous	-0.54620	-1.0367
hurt	-0.60188	-1.1424
in agreement	0.40127	0.3742
in love	-1.35374	-2.1802
irritated	-0.89392	-1.6967
joking	-1.15866	-2.1991
joyful	-0.61933	0.5259
kiss	-1.41530	-2.6862
laughing	-1.65477	-3.1408
laughing till you cry	-0.56537	-1.0731
like	-0.65283	-0.4320
love	-1.98282	-3.7634
nervous	-0.70008	-1.3288
neverminded	-0.54620	-1.0367
oops	-0.60188	-1.1424
playful	-0.59296	-1.1254
pleased	7.23295	7.6883
ponder	-0.47302	-0.8978
questioning	-0.53635	-1.0180
relieved	1.22192	1.1125
remorse	-0.77244	1.9443
romance	-0.47302	-0.8978
sad	-0.96815	-2.4764
sarcastic	2.32080	-1.2697
scared	-0.63630	-1.2077
sceptical	-0.57471	-1.0908
shocked	-1.53797	-2.9191
shy	1.82751	4.9406
smiling	-1.19488	0.3778
smirking	1.28464	-1.0367
smuggish	3.87094	0.2652
stressed	-0.56537	-1.0731
surprised	-1.23003	-1.4779
sympathetic	-0.72255	0.0870
teasing	-0.50568	0.0821
thankful	-0.86976	2.5895
thinking	-0.53635	0.9466
tired	1.08004	3.0212
uncertain	-0.91745	-1.1671
unhappy	-1.33392	-1.7418
unimpressed	-0.60188	-0.2670
upset	-1.10210	-2.0918
winking	-1.20376	-2.2847
worried	-0.78611	-1.4920

EMOJI 9**DESCRIPTIVE LABELS**

Label	Males	Females
affection	x	x
amazed	x	x
appreciative	x	x
astonished	x	x
compassionate		x
cute	x	x
excited	x	x
happy	x	x
in love	x	x
like	x	x
love	x	x
romance	x	x
smirking		x
thankful		x

STANDARDISED RESIDUALS

Label	Males	Females
affection	6.63379	5.1903
amazed	1.04447	6.2969
amused	-1.08851	-1.9472
angry	-1.03346	-1.8487
annoyed	-1.32372	-1.9456
anxious	-0.71926	-1.2866
appreciative	0.81851	2.1304
astonished	0.74180	2.7734
awkward	-0.57772	-1.0335
blushing	-0.95010	-2.8302
cheeky	-0.79633	-1.4245
compassionate	-0.68357	1.2306
concerned	-0.73077	-1.3072
content	-1.87203	-3.3488
crying	-2.20368	-3.9421
cute	1.71518	1.3834
depressed	-0.83720	-1.4976
devastated	-0.91346	-1.6340
disappointed	-2.28912	-4.0949
disbelief	-1.12619	-2.0146
discouraged	-1.00895	-1.8049
disgusted	-0.57772	-1.0335
disinterested	-0.70756	-1.2657
embarrassed	-1.56625	-2.8018

emotional	-0.79633	-1.4245
excited	1.46459	4.7622
exhausted	-0.60592	-1.0839
expression of emotion	-0.68357	-1.2228
flirting	-1.25247	-1.7942
friendly	-0.99227	-1.7750
frustrated	-1.28535	-2.2993
funny	-1.42711	-2.3226
happy	1.22230	2.0459
hopeless	-0.70756	-1.2657
humorous	-0.68357	-0.4050
hurt	-0.75326	-1.3475
in agreement	-1.02535	-0.1986
in love	18.96439	37.5541
irritated	-1.11875	-2.0013
joking	-1.45007	-2.5940
joyful	-0.77509	-0.6653
kiss	-1.77126	-3.1685
laughing	-1.58808	-3.4347
laughing till you cry	-0.70756	-1.2657
like	4.07882	10.8543
love	15.65261	28.2255
nervous	-0.87616	-1.5673
neverminded	-0.68357	-1.2228
oops	-0.75326	-1.3475
playful	-0.74210	-1.3275
pleased	-0.94046	-1.6823
ponder	-0.59199	-1.0590
questioning	-0.67125	-1.2008
relieved	-1.53395	-2.7440
remorse	-0.96671	-1.7293
romance	9.54336	2.7182
sad	-3.73066	-6.6736
sarcastic	-0.83720	-1.4976
scared	-0.79633	-1.4245
sceptical	-0.71926	-1.2866
shocked	-1.92477	-3.4431
shy	-1.60831	-2.8770
smiling	-0.15795	-2.6750
smirking	-0.68357	0.4128
smuggish	-0.57772	-1.0335
stressed	-0.70756	-1.2657
surprised	-1.53938	-2.7537
sympathetic	-0.90428	-1.6176
teasing	-0.63286	-0.2488
thankful	-0.16982	0.6206
thinking	-0.67125	-1.2008
tired	-1.21870	-2.1801

uncertain	-1.14820	-2.0540
unhappy	-1.66940	-2.9863
unimpressed	-0.75326	-1.3475
upset	-1.37929	-2.4673
winking	-1.50651	-2.6949
worried	-0.98382	-1.7599

EMOJI 10**DESCRIPTIVE LABELS**

Label	Males	Females
amused		x
anxious		x
awkward		x
concerned	x	
disbelief	x	
embarrassed	x	x
exhausted		x
expression of emotion		x
friendly	x	
funny	x	x
happy	x	x
humorous	x	x
joking		x
joyful	x	
laughing	x	x
laughing till you cry		x
nervous		x
oops	x	
ponder		x
questioning		x
relieved	x	x
remorse	x	
stressed	x	x
tired	x	
uncertain		x
worried	x	

STANDARDISED RESIDUALS

Label	Males	Females
affection	-0.96671	-1.79859
amazed	-0.50695	-0.94319
amused	-0.91071	0.66632
angry	-0.86465	-1.60871
annoyed	-1.10751	-2.06054
anxious	-0.60177	0.66672

appreciative	-0.56161	-1.04488
astonished	-0.58204	-1.08289
awkward	-0.48336	1.32467
blushing	-1.32372	-2.46282
cheeky	-0.66626	-1.23959
compassionate	-0.57191	-1.06406
concerned	1.02418	-1.13753
content	-0.92779	-2.91404
crying	-1.84373	-3.43031
cute	-0.66626	-1.23959
depressed	-0.70045	-1.30320
devastated	-0.76425	-1.42191
disappointed	-1.91521	-3.56329
disbelief	0.11907	-1.18261
discouraged	-0.84414	-1.57055
disgusted	-0.48336	-0.89929
disinterested	-0.59199	-1.10141
embarrassed	2.50515	3.30419
emotional	-0.66626	-1.23959
excited	-0.96065	-1.22781
exhausted	-0.50695	2.23752
expression of emotion	-0.57191	6.45432
flirting	-1.04789	-1.94962
friendly	0.37435	-1.54459
frustrated	-1.07540	-2.00080
funny	3.29879	7.89322
happy	3.35291	1.91821
hopeless	-0.59199	-1.10141
humorous	4.67363	3.63493
hurt	-0.63022	-1.17254
in agreement	-0.85787	-1.59609
in love	-1.41748	-2.63725
irritated	-0.93601	-1.16725
joking	-1.21321	0.40094
joyful	3.97764	-1.20653
kiss	-1.48194	-2.75718
laughing	6.92443	10.42527
laughing till you cry	-0.59199	1.62239
like	-0.68357	-1.27179
love	-2.07618	-3.86278
nervous	-0.73305	8.16802
neverminded	-0.57191	-1.06406
oops	2.54328	-0.31968
playful	-0.62088	-0.28949
pleased	-0.78685	-0.78086
ponder	-0.49529	0.16368
questioning	-0.56161	0.86920
relieved	19.75449	40.74833

remorse	0.42758	-0.84027
romance	-0.49529	-0.92150
sad	-3.12130	-5.80724
sarcastic	-0.70045	-0.53586
scared	-0.66626	-1.23959
sceptical	-0.60177	-1.11961
shocked	-1.61038	-2.99615
shy	-0.60245	-1.30522
smiling	-1.25114	-1.46857
smirking	-0.57191	-1.06406
smuggish	-0.48336	-0.89929
stressed	1.09724	3.43825
surprised	-1.28794	-1.56160
sympathetic	-0.75657	-1.40762
teasing	-0.52949	-0.98513
thankful	-0.91071	-1.69440
thinking	-0.56161	-1.04488
tired	1.92257	-0.31567
uncertain	-0.96065	1.01019
unhappy	-1.39672	-2.59863
unimpressed	-0.63022	-1.17254
upset	-1.15400	-2.14703
winking	-1.26044	-2.34507
worried	0.39176	-0.87846

EMOJI 11

DESCRIPTIVE LABELS

Label	Males	Females
appreciative	x	x
blushing	x	x
cheeky	x	
compassionate	x	
content	x	x
cute	x	x
embarrassed	x	x
excited	x	x
friendly	x	x
happy	x	x
in agreement	x	x
joking	x	
joyful		x
pleased	x	x
shy	x	x
smiling	x	x
smuggish	x	
thankful	x	x

STANDARDISED RESIDUALS

Label	Males	Females
affection	-1.1147	-1.4758
amazed	-0.5846	-0.0759
amused	-0.0979	-0.7941
angry	-0.9970	-1.7715
annoyed	-1.2771	-2.2691
anxious	-0.6939	-1.2329
appreciative	0.8966	1.4566
astonished	-0.6712	-1.1925
awkward	-0.5574	-0.9903
blushing	8.3006	10.5616
cheeky	0.5333	-1.3651
compassionate	0.8569	-1.1718
concerned	-0.7050	-1.2527
content	3.7308	9.2558
crying	-2.1260	-3.7775
cute	0.5333	3.7629
depressed	-0.8077	-1.4351
devastated	-0.8813	-1.5658
disappointed	-2.2085	-3.9240
disbelief	-1.0865	-1.9305
discouraged	-0.9734	-1.7295
disgusted	-0.5574	-0.9903
disinterested	-0.6826	-1.2129
embarrassed	1.7979	2.1571
emotional	-0.7683	-1.3651
excited	1.6005	0.0640
exhausted	-0.5846	-1.0387
expression of emotion	-0.6595	-1.1718
flirting	-1.2083	-0.2839
friendly	0.0873	10.6452
frustrated	-1.2401	-2.2033
funny	-0.8061	-2.4279
happy	10.6215	18.3963
hopeless	-0.6826	-1.2129
humorous	-0.6595	-1.1718
hurt	-0.7267	-1.2912
in agreement	0.0217	2.7939
in love	-1.6345	-2.2155
irritated	-1.0793	-1.9178
joking	0.0306	-2.4857
joyful	-0.7478	3.1872
kiss	-1.7088	-3.0363
laughing	-1.9980	-3.5500
laughing till you cry	-0.6826	-1.2129
like	-0.7882	-1.4005

love	-1.5587	-3.0784
nervous	-0.8453	-1.5019
neverminded	-0.6595	-1.1718
oops	-0.7267	-0.5168
playful	-0.7159	-1.2721
pleased	0.1948	7.0720
ponder	-0.5711	-1.0148
questioning	-0.6476	-1.1507
relieved	-1.4799	-2.6295
remorse	-0.9326	-0.4502
romance	-0.5711	-1.0148
sad	-3.5992	-6.3951
sarcastic	-0.8077	-1.4351
scared	-0.7683	-1.3651
sceptical	-0.6939	-1.2329
shocked	-1.8570	-3.2994
shy	5.5377	7.0365
smiling	9.6476	11.4805
smirking	-0.6595	-1.1718
smuggish	1.2368	-0.9903
stressed	-0.6826	-1.2129
surprised	-1.4851	-2.2598
sympathetic	-0.8724	-1.5501
teasing	-0.6106	-1.0848
thankful	0.8543	4.5652
thinking	-0.6476	-1.1507
tired	-1.1758	-2.0891
uncertain	-1.1077	-1.9682
unhappy	-1.6106	-2.8617
unimpressed	-0.7267	-1.2912
upset	-1.3307	-2.3644
winking	-1.4534	-2.5825
worried	-0.9492	-1.6865

EMOJI 12**DESCRIPTIVE LABELS**

Label	Males	Females
amused		x
angry	x	
cheeky	x	x
concerned		x
content	x	
disbelief	x	x
disgusted	x	
disinterested		x
expression of emotion		x

flirting	x	x
frustrated	x	
humorous		x
in agreement	x	x
like	x	x
neverminded	x	x
oops	x	x
playful	x	x
ponder	x	x
questioning		x
remorse		x
sarcastic	x	x
sceptical	x	x
shy		x
smiling	x	x
smirking	x	x
smuggish	x	x
surprised		x
teasing	x	x
thinking	x	x
uncertain	x	x
unimpressed	x	x
worried	x	

STANDARDISED RESIDUALS

Label	Males	Females
affection	-0.92879	-1.67132
amazed	-0.48706	-0.87645
amused	-0.87498	0.96597
angry	0.37303	-1.49488
annoyed	-0.12426	-0.87022
anxious	-0.57816	-1.04039
appreciative	-0.53958	-0.97095
astonished	-0.55920	-1.00627
awkward	-0.46439	-0.83566
blushing	-1.27179	-2.28855
cheeky	4.04649	4.92514
compassionate	-0.54948	-0.98877
concerned	-0.58742	0.83504
content	1.15334	-1.23067
crying	-1.77140	-3.18759
cute	-0.64012	-0.28374
depressed	-0.67297	-1.21099
devastated	-0.73427	-1.32130
disappointed	-1.29662	-1.80112
disbelief	3.51331	2.05422
discouraged	-0.81103	-0.77422

disgusted	1.68895	-0.83566
disinterested	-0.56876	4.83892
embarrassed	-1.25901	-1.82416
emotional	-0.64012	-1.15188
excited	-0.92296	-1.66085
exhausted	-0.48706	-0.87645
expression of emotion	-0.54948	1.03395
flirting	1.97301	6.46797
friendly	-0.79762	-0.04186
frustrated	0.90251	-1.85923
funny	-0.92050	-1.02920
happy	-1.77388	-3.51297
hopeless	-0.56876	-0.04641
humorous	-0.54948	0.02259
hurt	-0.60549	-1.08957
in agreement	5.24215	2.56228
in love	-1.36187	-2.45064
irritated	-0.89929	-0.38235
joking	-1.16562	-0.19046
joyful	-0.62305	-1.12116
kiss	-1.42380	-2.56209
laughing	-1.66471	-1.99412
laughing till you cry	-0.56876	-1.02347
like	0.86590	0.51052
love	-1.99473	-3.58946
nervous	-0.70429	-1.26734
neverminded	12.18990	10.13618
oops	1.04605	0.74602
playful	2.75623	1.72136
pleased	-0.75598	-1.36036
ponder	5.82849	17.82877
questioning	-0.53958	3.14872
relieved	-1.23305	-2.21884
remorse	-0.77708	0.03195
romance	-0.47586	-0.85630
sad	-2.99884	-5.02571
sarcastic	2.29893	12.00135
scared	-0.64012	-1.15188
sceptical	4.61067	9.53256
shocked	-1.54720	-2.42497
shy	-0.51931	0.25272
smiling	0.46177	0.61079
smirking	6.73017	19.23841
smuggish	5.99565	12.32755
stressed	-0.56876	-1.02347
surprised	-1.23741	0.01879
sympathetic	-0.72689	-1.30802
teasing	1.45701	2.36176

thankful	-0.87498	-1.57451
thinking	10.58026	12.41797
tired	-0.97964	-0.06102
uncertain	8.82824	11.58542
unhappy	-0.59673	-2.00064
unimpressed	2.69759	4.41719
upset	-1.10872	-1.99512
winking	-0.38522	-1.26135
worried	0.47366	-0.01768

EMOJI 13**DESCRIPTIVE LABELS**

Label	Males	Females
amazed		x
angry	x	x
annoyed	x	x
depressed	x	
disappointed	x	x
disbelief	x	
discouraged	x	x
disgusted	x	x
disinterested	x	x
expression of emotion		x
frustrated	x	x
hurt	x	
irritated	x	x
neverminded	x	x
ponder		x
questioning	x	
sarcastic	x	x
sceptical	x	x
thinking	x	x
uncertain	x	x
unhappy	x	x
unimpressed	x	x
upset	x	x

STANDARDISED RESIDUALS

Label	Males	Females
affection	-0.99807	-1.89858
amazed	-0.52339	0.00877
amused	-0.94026	-1.22951
angry	4.70826	11.84604
annoyed	10.22581	24.95007

anxious	-0.62130	-1.18186
appreciative	-0.57983	-1.10298
astonished	-0.60092	-1.14310
awkward	-0.49904	-0.94929
blushing	-1.36667	-2.59974
cheeky	-0.68787	-1.30851
compassionate	-0.59047	-1.12322
concerned	-0.63124	-0.36797
content	-1.61706	-3.07606
crying	-1.90355	-3.62102
cute	-0.68787	-1.30851
depressed	0.65962	-0.64873
devastated	-0.78905	-0.16848
disappointed	3.58568	5.27778
disbelief	1.08312	-0.22934
discouraged	0.27588	0.75487
disgusted	5.51255	11.69171
disinterested	12.47798	7.43847
embarrassed	-1.35293	-2.57361
emotional	-0.68787	-1.30851
excited	-0.99182	-1.88668
exhausted	-0.52339	-0.99563
expression of emotion	-0.59047	0.65738
flirting	-1.08188	-2.05802
friendly	-0.85712	-1.63046
frustrated	3.39306	3.56967
funny	-1.67753	-3.19109
happy	-2.74697	-4.84267
hopeless	-0.61119	-0.30253
humorous	-0.59047	-1.12322
hurt	0.88623	-0.42979
in agreement	-0.88570	-1.68483
in love	-1.46346	-2.78387
irritated	6.27715	23.18488
joking	-1.25257	-2.38270
joyful	-0.66953	-1.27361
kiss	-1.53002	-2.91047
laughing	-1.78889	-3.40292
laughing till you cry	-0.61119	-1.16264
like	-0.70574	-1.34250
love	-2.14353	-4.07754
nervous	-0.75683	-1.43967
neverminded	2.79668	5.99918
oops	-0.65066	-1.23773
playful	-0.64102	-1.21939
pleased	-0.81237	-1.54534
ponder	-0.51136	0.05529
questioning	2.86947	-0.19634

relieved	-1.32503	-2.52054
remorse	-0.83505	-0.32940
romance	-0.51136	-0.97273
sad	-0.74005	-2.21500
sarcastic	2.04242	0.80512
scared	-0.68787	-1.30851
sceptical	5.81687	8.12551
shocked	-1.66262	-2.84654
shy	-1.38926	-2.26432
smiling	-1.29172	-2.45718
smirking	-0.59047	-0.23292
smuggish	-0.49904	-0.94929
stressed	-0.61119	-1.16264
surprised	-0.57769	-1.34345
sympathetic	-0.78112	-1.48588
teasing	-0.54667	-1.03990
thankful	-0.94026	-1.78860
thinking	2.86947	0.71030
tired	-1.05272	-0.00506
uncertain	0.01644	1.29351
unhappy	2.71876	10.38069
unimpressed	5.49691	10.88128
upset	2.16587	2.14587
winking	-0.53288	-2.47545
worried	-0.84983	-0.99800

EMOJI 14**DESCRIPTIVE LABELS**

Label	Males	Females
amazed		x
angry	x	
annoyed	x	x
astonished		x
concerned	x	
depressed	x	x
disappointed	x	x
disbelief	x	x
discouraged	x	x
disgusted	x	x
disinterested	x	
emotional		x
exhausted		x
expression of emotion	x	x
frustrated	x	x
hopeless	x	x
hurt		x

irritated	x	x
questioning		x
sad	x	x
shocked		x
stressed	x	x
sympathetic		x
tired	x	x
unhappy	x	x
upset	x	x
worried		x

STANDARDISED RESIDUALS

Label	Males	Females
affection	-1.03346	-2.01916
amazed	-0.54195	0.82997
amused	-0.97359	-1.37649
angry	0.15748	-0.69857
annoyed	0.50525	4.17116
anxious	-0.64332	-0.46132
appreciative	-0.60038	-1.17303
astonished	-0.62222	0.42945
awkward	-0.51673	-1.00958
blushing	-1.41512	-2.76485
cheeky	-0.71226	-1.39161
compassionate	-0.61140	-1.19455
concerned	2.40628	-0.49397
content	-1.67439	-3.27142
crying	-0.95634	-0.47525
cute	-0.71226	-1.39161
depressed	1.92209	1.95456
devastated	-0.81702	-0.96984
disappointed	5.76716	7.24890
disbelief	0.97823	4.12941
discouraged	2.42193	7.31146
disgusted	1.41852	0.97144
disinterested	0.94726	-1.23648
embarrassed	-1.40090	-2.73707
emotional	-0.71226	1.48275
excited	-1.02698	-2.00650
exhausted	-0.54195	13.10734
expression of emotion	1.02418	2.99111
flirting	-1.12024	-2.18872
friendly	-0.88751	-1.73401
frustrated	7.54865	12.44545
funny	-1.73701	-3.39376
happy	-2.84436	-5.55729
hopeless	2.52739	13.32097

humorous	-0.61140	-0.35742
hurt	-0.67373	0.20304
in agreement	-0.91710	-1.79183
in love	-1.51535	-2.96068
irritated	1.99743	1.11393
joking	-1.29698	-2.53403
joyful	-0.69326	-1.35450
kiss	-1.58426	-3.09532
laughing	-1.85231	-3.34272
laughing till you cry	-0.63286	-1.23648
like	-0.73077	-1.42776
love	-2.21953	-4.33650
nervous	-0.78366	-0.87798
neverminded	-0.61140	-1.19455
oops	-0.67373	-1.31633
playful	-0.66375	-1.29683
pleased	-0.84117	-1.64348
ponder	-0.52949	-1.03451
questioning	-0.60038	1.38446
relieved	-1.37201	-2.68063
remorse	-0.86465	-0.50547
romance	-0.52949	-1.03451
sad	4.45508	2.99061
sarcastic	-0.74881	-1.46302
scared	-0.71226	-1.39161
sceptical	-0.64332	-1.25692
shocked	-1.72157	2.87974
shy	-1.43851	-2.81056
smiling	-1.33752	-2.61324
smirking	-0.61140	-1.19455
smuggish	-0.51673	-1.00958
stressed	0.94726	1.18976
surprised	-1.37687	-1.94665
sympathetic	-0.80881	0.31819
teasing	-0.56605	-1.10594
thankful	-0.97359	-1.90220
thinking	-0.60038	-1.17303
tired	9.00132	11.95668
uncertain	-0.05325	-1.00975
unhappy	6.54349	7.70885
unimpressed	-0.67373	-0.55665
upset	2.81926	7.13186
winking	-1.34746	-2.63267
worried	-0.87996	2.35227

EMOJI 15**DESCRIPTIVE LABELS**

Label	Males	Females
amused	x	
appreciative	x	
awkward	x	
blushing	x	x
content	x	x
cute	x	x
embarrassed	x	x
flirting		x
friendly	x	x
happy	x	x
joyful	x	x
like	x	x
pleased	x	x
shy	x	x
smiling	x	x
smuggish	x	x
thankful		x

STANDARDISED RESIDUALS

Label	Males	Females
affection	-0.18386	-0.9353
amazed	-0.57482	-1.0264
amused	0.90411	-1.8438
angry	-0.98042	-1.7506
annoyed	-1.25580	-2.2422
anxious	-0.68235	-1.2183
appreciative	0.93354	-1.1370
astonished	-0.65997	-1.1784
awkward	3.10107	-0.9786
blushing	8.49263	21.5739
cheeky	-0.75547	-1.3489
compassionate	-0.64849	-0.2942
concerned	-0.69326	-1.2378
content	2.72864	3.4515
crying	-2.09060	-3.7328
cute	1.89190	5.3232
depressed	-0.79423	-1.4181
devastated	-0.86658	-1.5473
disappointed	-2.17165	-3.8775
disbelief	-1.06839	-1.9076
discouraged	-0.95717	-1.7090

disgusted	-0.54807	-0.9786
disinterested	-0.67125	-1.1985
embarrassed	0.53313	6.7701
emotional	-0.75547	-1.3489
excited	-0.17123	-0.4024
exhausted	-0.57482	-1.0264
expression of emotion	-0.64849	-1.1579
flirting	-1.18820	1.1780
friendly	3.30788	4.8638
frustrated	-1.21939	-2.1772
funny	-1.84238	-2.0736
happy	11.23616	12.0637
hopeless	-0.67125	-1.1985
humorous	-0.64849	-1.1579
hurt	-0.71460	-1.2759
in agreement	-0.97273	-1.1611
in love	-1.60727	-1.8244
irritated	-1.06134	-1.8950
joking	-1.37565	-2.0491
joyful	4.70450	2.4954
kiss	-1.68036	-3.0003
laughing	-1.45569	-2.0826
laughing till you cry	-0.67125	-1.1985
like	0.51507	0.7838
love	-1.92939	-3.4897
nervous	-0.83120	-1.4841
neverminded	-0.64849	-1.1579
oops	-0.71460	-1.2759
playful	-0.70401	-1.2570
pleased	2.47028	6.5675
ponder	-0.56161	-1.0028
questioning	-0.63680	-1.1370
relieved	-1.45524	-2.5983
remorse	-0.91710	-1.6375
romance	-0.56161	-1.0028
sad	-3.53922	-6.3193
sarcastic	-0.79423	-1.4181
scared	-0.75547	-1.3489
sceptical	-0.68235	-1.2183
shocked	-1.82600	-3.2603
shy	9.61612	16.7304
smiling	2.81071	6.9419
smirking	-0.64849	-1.1579
smuggish	1.27650	0.0433
stressed	-0.67125	-1.1985
surprised	-1.46039	-2.6075
sympathetic	-0.85787	-1.5317
teasing	-0.60038	-1.0720

thankful	-0.06427	5.7492
thinking	-0.63680	-1.1370
tired	-1.15616	-2.0643
uncertain	-1.08928	-1.9449
unhappy	-1.58373	-2.8278
unimpressed	-0.71460	-1.2759
upset	-1.30851	-2.3364
winking	-1.42920	-2.5518
worried	-0.93334	-1.6665

EMOJI 16**DESCRIPTIVE LABELS**

Label	Males	Females
amused	x	
appreciative		x
cheeky	x	x
cute	x	x
excited	x	x
flirting	x	x
friendly	x	x
funny	x	
humorous		x
in agreement	x	x
joking	x	x
like	x	x
playful	x	x
pleased	x	
questioning		x
sarcastic	x	x
sceptical	x	
sympathetic		x
teasing	x	x
thankful		x
winking	x	x

STANDARDISED RESIDUALS

Label	Males	Females
affection	-1.04826	-1.97025
amazed	-0.54971	-1.03321
amused	0.02509	-1.85612
angry	-0.93759	-1.76225
annoyed	-1.20093	-2.25721
anxious	-0.65254	-1.22647
appreciative	-0.60898	1.47636

astonished	-0.63113	-1.18625
awkward	-0.52413	-0.98513
blushing	-1.43539	-2.69788
cheeky	7.58247	11.16139
compassionate	-0.62016	-0.30770
concerned	-0.66298	-1.24610
content	-1.10957	-1.62585
crying	-1.99926	-3.75771
cute	0.66169	2.32424
depressed	-0.75954	-1.42758
devastated	-0.82872	-1.55762
disappointed	-2.07677	-3.90339
disbelief	-0.04297	-1.39963
discouraged	-0.91535	-1.72045
disgusted	-0.52413	-0.98513
disinterested	-0.64192	-1.20653
embarrassed	-1.42096	-2.67077
emotional	-0.72246	-1.35790
excited	0.87828	0.08510
exhausted	-0.54971	-1.03321
expression of emotion	-0.62016	-1.16562
flirting	5.02414	12.37941
friendly	2.43229	3.03609
frustrated	-1.16611	-2.19177
funny	0.50841	-0.29182
happy	-0.11221	-1.73446
hopeless	-0.64192	-1.20653
humorous	-0.62016	8.27144
hurt	-0.68338	-1.28445
in agreement	6.59473	9.69043
in love	-1.53705	-2.88896
irritated	-1.01497	-1.90769
joking	13.88718	29.07247
joyful	-0.70319	-0.56508
kiss	-1.60695	-3.02034
laughing	-1.87884	-2.96502
laughing till you cry	-0.64192	-1.20653
like	4.65520	0.76017
love	-2.25132	-4.23146
nervous	-0.79488	-0.82468
neverminded	-0.62016	-1.16562
oops	-0.68338	-1.28445
playful	8.23866	11.37862
pleased	0.31881	-1.60367
ponder	-0.53707	-1.00945
questioning	-0.60898	0.60270
relieved	-1.39166	-2.61569
remorse	-0.87704	-1.04180

romance	-0.53707	-1.00945
sad	-3.38459	-6.36151
sarcastic	3.19025	2.77532
scared	-0.72246	-1.35790
sceptical	0.87995	-0.41113
shocked	-1.74622	-3.28211
shy	-1.45911	-2.74248
smiling	-1.35667	-2.15777
smirking	-0.62016	-1.16562
smuggish	-0.52413	-0.98513
stressed	-0.64192	-1.20653
surprised	-1.39658	-2.24399
sympathetic	-0.82039	0.40360
teasing	2.90923	10.04069
thankful	-0.98753	0.83767
thinking	-0.60898	-1.14461
tired	-1.10565	-2.07813
uncertain	-0.08170	-1.44715
unhappy	-1.51454	-2.84666
unimpressed	-0.68338	-1.28445
upset	-1.25134	-2.35196
winking	14.72969	37.13687
worried	-0.89256	-1.67761

ADDENDUM H

EMOJI LABELS AND STANDARDISED RESIDUALS FOR RACIAL GROUPS

EMOJI 1**DESCRIPTIVE LABELS**

Label	African	Coloured	White
compassionate	x		x
concerned		x	x
crying	x	x	x
depressed		x	
devastated		x	x
disappointed	x		x
emotional		x	x
hurt		x	x
remorse			x
sad	x	x	x
surprised		x	
sympathetic	x		x
tired		x	
unhappy	x	x	x
upset			x
worried	x		x

STANDARDISED RESIDUALS

Label	African	Coloured	White
affection	-0.4791	-0.7341	-2.1215
amazed	-0.2612	-0.4003	-1.1568
amused	-0.4593	-0.7037	-2.0337
angry	-0.4421	-0.6773	-1.4467
annoyed	-0.5513	-0.8448	-2.4414
anxious	-0.2947	-0.4516	-0.5387
appreciative	-0.2894	-0.4434	-1.2815
astonished	-0.2894	-0.4434	-1.2815
awkward	-0.2157	-0.3305	-0.9552
blushing	-0.6637	-1.0169	-2.9388
cheeky	-0.3388	-0.5191	-1.5001
compassionate	3.0985	-0.4516	3.2927
concerned	-0.3151	5.7317	2.9056
content	-0.7935	-1.2159	-3.5138
crying	3.4754	5.0452	13.0529
cute	-0.3388	-0.5191	-1.5001

depressed	-0.3388	1.4074	-0.8335
devastated	-0.3818	2.8335	1.8579
disappointed	3.1566	-0.1391	1.2977
disbelief	-0.4823	-0.7390	-1.6676
discouraged	-0.4242	-0.6499	-1.3458
disgusted	-0.2428	-0.3720	-1.0750
disinterested	-0.2947	-0.4516	-1.3050
embarrassed	-0.6447	-0.9879	-2.8549
emotional	-0.3247	7.5410	3.4297
excited	-0.4823	-0.7390	-2.1358
exhausted	-0.2612	-0.4003	-0.2923
expression of emotion	-0.2785	-0.4267	-1.2331
flirting	-0.5313	-0.8141	-2.3526
friendly	-0.4278	-0.6555	-1.8943
frustrated	-0.5513	-0.8448	-1.6222
funny	-0.8242	-1.2629	-3.6497
happy	-1.3436	-2.0587	-5.9497
hopeless	-0.2894	-0.4434	-1.2815
humorous	-0.2947	-0.4516	-1.3050
hurt	-0.2999	1.7164	6.2014
in agreement	-0.4314	-0.6610	-1.9103
in love	-0.7132	-1.0929	-3.1583
irritated	-0.4726	-0.7241	-2.0927
joking	-0.6101	-0.9348	-2.7016
joyful	-0.3151	-0.4827	-1.3951
kiss	-0.7368	-1.1289	-3.2625
laughing	-0.8753	-1.3412	-3.8760
laughing till you cry	-0.2947	-0.4516	-1.3050
like	-0.3522	-0.5397	-1.5598
love	-1.0434	-1.5988	-4.6205
nervous	-0.3694	-0.5661	-1.6359
neverminded	-0.2894	-0.4434	-1.2815
oops	-0.3199	-0.4902	-1.4167
playful	-0.3151	-0.4827	-1.3951
pleased	-0.3859	-0.5912	-1.7087
ponder	-0.2552	-0.3911	-1.1302
questioning	-0.2840	-0.4351	-1.2575
relieved	-0.6543	-1.0025	-2.8972
remorse	-0.4055	-0.6213	4.8882
romance	-0.2491	-0.3816	-1.1029
sad	5.4454	8.4161	27.0366
sarcastic	-0.3478	-0.5329	-1.5402
scared	-0.3388	-0.5191	-0.8335
sceptical	-0.3101	-0.4751	-1.3731
shocked	-0.8013	-0.4133	-1.8573
shy	-0.6844	-1.0486	-3.0305
smiling	-0.6326	-0.9693	-2.8011

smirking	-0.2728	-0.4181	-1.2082
smuggish	-0.2491	-0.3816	-1.1029
stressed	-0.3050	-0.4674	-1.3508
surprised	-0.6326	0.0625	-2.0871
sympathetic	2.2696	-0.5788	5.5015
teasing	-0.2671	-0.4093	-1.1828
thankful	-0.4559	-0.6985	-2.0187
thinking	-0.2894	-0.4434	-1.2815
tired	-0.5165	0.4722	-2.2871
uncertain	-0.4919	-0.7537	-2.1781
unhappy	0.6824	1.6406	4.0924
unimpressed	-0.3199	-0.4902	-0.7109
upset	-0.5707	-0.8745	3.0128
winking	-0.6326	-0.9693	-2.8011
worried	1.9826	-0.6386	1.4055

EMOJI 2**DESCRIPTIVE LABELS**

Label	African	Coloured	White
affection		x	x
appreciative	x		x
cheeky			x
compassionate		x	x
cute			x
expression of emotion	x		
flirting		x	x
happy	x		
in agreement		x	x
in love		x	
kiss	x	x	x
like			x
love	x	x	x
playful			x
romance	x		x
sympathetic			x
thankful	x		x

STANDARDISED RESIDUALS

Label	African	Coloured	White
affection	-0.43545	8.28319	17.59623
amazed	-0.23743	-0.36539	-1.21065
amused	-0.41742	-0.64240	-2.12844
angry	-0.40178	-0.61833	-2.04870
annoyed	-0.50111	-0.77119	-2.55518

anxious	-0.26786	-0.41222	-1.36580
appreciative	3.53884	-0.40479	8.35171
astonished	-0.26303	-0.40479	-1.34119
awkward	-0.19605	-0.30171	-0.99966
blushing	-0.60321	-0.92831	-3.07576
cheeky	-0.30791	-0.47386	0.97768
compassionate	-0.26786	4.43955	6.68809
concerned	-0.28635	-0.44068	-1.46010
content	-0.72122	-1.10994	-3.67753
crying	-0.82868	-1.27532	-4.22547
cute	-0.30791	-0.47386	1.61461
depressed	-0.30791	-0.47386	-1.57003
devastated	-0.34703	-0.53407	-1.76953
disappointed	-0.88114	-1.35604	-4.49293
disbelief	-0.43838	-0.67465	-2.23531
discouraged	-0.38551	-0.59329	-1.96572
disgusted	-0.22065	-0.33957	-1.12508
disinterested	-0.26786	-0.41222	-1.36580
embarrassed	-0.58597	-0.90179	-2.98786
emotional	-0.29516	-0.45424	-1.50504
excited	-0.43838	-0.67465	-2.23531
exhausted	-0.23743	-0.36539	-1.21065
expression of emotion	3.69792	-0.38951	-1.29056
flirting	-0.48288	0.60250	7.69117
friendly	-0.38882	-0.59838	-0.46943
frustrated	-0.50111	-0.77119	-2.55518
funny	-0.74911	-1.15285	-1.98710
happy	1.23543	-1.87937	-4.62092
hopeless	-0.26303	-0.40479	-1.34119
humorous	-0.26786	-0.41222	-1.36580
hurt	-0.27260	-0.41952	-1.38997
in agreement	-0.39210	1.05377	1.00169
in love	-0.64825	0.00473	-1.18773
irritated	-0.42952	-0.66102	-2.19015
joking	-0.55451	-0.85338	-0.70544
joyful	-0.28635	-0.44068	-1.46010
kiss	5.30374	21.28760	39.93008
laughing	-0.79555	-1.22433	-4.05655
laughing till you cry	-0.26786	-0.41222	-1.36580
like	-0.32015	-0.49270	0.20529
love	6.43277	6.07732	24.73586
nervous	-0.33577	-0.51675	-1.71212
neverminded	-0.26303	-0.40479	-1.34119
oops	-0.29079	-0.44752	-1.48274
playful	-0.28635	-0.44068	1.27944
pleased	-0.35070	-0.53972	-1.78825
ponder	-0.23197	-0.35699	-1.18282

questioning	-0.25811	-0.39723	-1.31612
relieved	-0.59465	-0.91515	-3.03213
remorse	-0.36852	-0.56714	-1.87908
romance	4.19099	-0.34839	7.50886
sad	-1.42547	-2.19375	-7.26849
sarcastic	-0.31612	-0.48650	-0.99152
scared	-0.30791	-0.47386	-1.57003
sceptical	-0.28184	-0.43374	-1.43711
shocked	-0.72829	-1.12082	-3.71358
shy	-0.62203	-0.95728	-2.85645
smiling	-0.57493	-0.88480	-2.93159
smirking	-0.24799	-0.38164	-1.26448
smuggish	-0.22638	-0.34839	-1.15431
stressed	-0.27726	-0.42669	-1.41374
surprised	-0.57493	-0.88480	-2.93159
sympathetic	-0.34332	-0.52836	1.67680
teasing	-0.24276	-0.37361	-0.43002
thankful	4.41259	-0.63766	7.82698
thinking	-0.26303	-0.40479	-1.34119
tired	-0.46943	-0.72244	-2.39363
uncertain	-0.44706	-0.68802	-2.27958
unhappy	-0.65022	-1.00067	-3.31551
unimpressed	-0.29079	-0.44752	-1.48274
upset	-0.51870	-0.79826	-2.64486
winking	-0.57493	-0.88480	-0.54380
worried	-0.37880	-0.58297	-1.93153

EMOJI 3**DESCRIPTIVE LABELS**

Label	African	Coloured	White
amused	x	x	x
awkward			x
funny	x	x	x
happy	x	x	x
humorous	x	x	x
joking	x		x
joyful			x
laughing	x	x	x
laughing till you cry	x	x	x
teasing	x		x

STANDARDISED RESIDUALS

Label	African	Coloured	White
affection	-0.52861	-0.46857	-2.0473

amazed	-0.28823	-0.25549	-1.1163
amused	1.46670	6.22982	21.4762
angry	-0.48775	-0.43234	-1.8890
annoyed	-0.60833	-0.53922	-2.3560
anxious	-0.32516	-0.28823	-1.2594
appreciative	-0.31930	-0.28303	-1.2367
astonished	-0.31930	-0.28303	-1.2367
awkward	-0.23800	-0.21096	0.1631
blushing	-0.73226	-0.64908	-2.8360
cheeky	-0.37379	-0.33133	-1.4477
compassionate	-0.32516	-0.28823	-1.2594
concerned	-0.34761	-0.30813	-1.3463
content	-0.87553	-0.77608	-3.0960
crying	-1.00598	-0.89171	-3.6395
cute	-0.37379	-0.33133	-1.4477
depressed	-0.37379	-0.33133	-1.4477
devastated	-0.42128	-0.37343	-1.6316
disappointed	-1.06966	-0.94815	-4.1428
disbelief	-0.53217	-0.47172	-0.6056
discouraged	-0.46799	-0.41483	-1.8125
disgusted	-0.26786	-0.23743	-1.0374
disinterested	-0.32516	-0.28823	-1.2594
embarrassed	-0.71134	-0.63053	-2.7550
emotional	-0.35831	-0.31761	-1.3877
excited	-0.53217	-0.47172	-1.0907
exhausted	-0.28823	-0.25549	-1.1163
expression of emotion	-0.30725	-0.27235	-1.1900
flirting	-0.58620	-0.51961	-2.2703
friendly	-0.47201	-0.41839	-1.8281
frustrated	-0.60833	-0.53922	-2.3560
funny	3.48922	4.15621	32.5369
happy	0.54119	0.20793	0.1802
hopeless	-0.31930	-0.28303	-1.2367
humorous	2.75021	3.18126	1.9169
hurt	-0.33092	-0.29333	-1.2816
in agreement	-0.47599	-0.42192	-1.8435
in love	-0.78695	-0.69755	-3.0478
irritated	-0.52142	-0.46219	-2.0195
joking	0.81239	-0.59669	0.4614
joyful	-0.34761	-0.30813	7.5670
kiss	-0.81291	-0.72057	-3.1484
laughing	14.56595	8.48908	36.3623
laughing till you cry	5.82558	13.58972	13.8277
like	-0.38865	-0.34450	-1.5052
love	-1.15127	-1.02049	-4.2346
nervous	-0.40761	-0.36131	-1.5787
neverminded	-0.31930	-0.28303	-1.2367

oops	-0.35300	-0.31291	-1.3672
playful	-0.34761	-0.30813	-0.6035
pleased	-0.42574	-0.37738	-1.0424
ponder	-0.28160	-0.24961	-1.0906
questioning	-0.31334	-0.27774	-1.2135
relieved	-0.72188	-0.63988	-2.7958
remorse	-0.44736	-0.39655	-1.7326
romance	-0.27481	-0.24360	-1.0643
sad	-1.73045	-1.53388	-6.7020
sarcastic	-0.38376	-0.34016	-1.4863
scared	-0.37379	-0.33133	-1.4477
sceptical	-0.34214	-0.30327	-1.3251
shocked	-0.88411	-0.78368	-3.4242
shy	-0.75511	-0.66934	-2.9245
smiling	-0.69794	-0.61866	-1.9632
smirking	-0.30104	-0.26685	-1.1659
smuggish	-0.27481	-0.24360	-1.0643
stressed	-0.33658	-0.29834	-1.3036
surprised	-0.69794	-0.61866	-2.7031
sympathetic	-0.41678	-0.36943	-0.9946
teasing	3.09852	-0.26123	0.6109
thankful	-0.50299	-0.44585	-1.9481
thinking	-0.31930	-0.28303	-1.2367
tired	-0.56987	-0.50513	-2.2071
uncertain	-0.54271	-0.48106	-2.1019
unhappy	-0.78934	-0.69968	-3.0571
unimpressed	-0.35300	-0.31291	-1.3672
upset	-0.62968	-0.55815	-2.4387
winking	-0.69794	-0.61866	-2.7031
worried	-0.45985	-0.40761	-1.7810

EMOJI 4**DESCRIPTIVE LABELS**

Label	African	Coloured	White
amazed		x	x
anxious			x
astonished	x	x	x
awkward			x
blushing	x	x	x
concerned			x
disbelief		x	x
embarrassed	x	x	x
nervous	x		
oops			x
questioning		x	x
remorse			x

scared	x	x	x
shocked	x	x	x
shy	x		
stressed			x
surprised	x	x	x
uncertain		x	x
unimpressed		x	
worried	x		x

STANDARDISED RESIDUALS

Label	African	Coloured	White
affection	-0.59939	-0.62387	-2.02280
amazed	-0.32682	2.59960	5.24381
amused	-0.57458	-0.59804	-1.93906
angry	-0.55305	-0.57563	-1.86641
annoyed	-0.68978	-0.71794	-1.89823
anxious	-0.36870	-0.38376	1.97046
appreciative	-0.36206	-0.37684	-1.22185
astonished	5.16193	7.58407	8.59931
awkward	-0.26986	-0.28088	0.18733
blushing	0.37406	0.29291	1.12358
cheeky	-0.42383	-0.44114	-1.43033
compassionate	-0.36870	-0.38376	-1.24427
concerned	-0.39416	-0.41025	3.93225
content	-0.99276	-1.03330	-3.35031
crying	-1.14068	-1.18726	-3.84949
cute	-0.42383	-0.44114	-1.43033
depressed	-0.42383	-0.44114	-1.43033
devastated	-0.47769	-0.49719	-1.61208
disappointed	-0.38839	-1.26240	-3.84884
disbelief	-0.60343	0.96411	11.71321
discouraged	-0.53065	-0.55232	-1.79081
disgusted	-0.30372	-0.31612	-1.02497
disinterested	-0.36870	-0.38376	-1.24427
embarrassed	5.39242	2.73397	16.01419
emotional	-0.40629	-0.42288	-1.37112
excited	-0.60343	-0.62807	-2.03642
exhausted	-0.32682	-0.34016	-1.10293
expression of emotion	-0.34839	-0.36262	-0.32519
flirting	-0.66469	-0.69183	-2.24314
friendly	-0.53521	-0.55706	-1.80619
frustrated	-0.68978	-0.71794	-2.32782
funny	-1.03114	-1.07324	-3.47983
happy	-1.68096	-1.74960	-5.67280
hopeless	-0.36206	-0.37684	-1.22185
humorous	-0.36870	-0.38376	-1.24427

hurt	-0.37523	-0.39055	-1.26630
in agreement	-0.53972	-0.56176	-1.82143
in love	-0.89231	-0.92875	-3.01133
irritated	-0.59124	-0.61538	-1.99527
joking	-0.76328	-0.79445	-2.57589
joyful	-0.39416	-0.41025	-1.33018
kiss	-0.92175	-0.95939	-3.11068
laughing	-1.09508	-1.13979	-3.69560
laughing till you cry	-0.36870	-0.38376	-1.24427
like	-0.44068	-0.45868	-1.48719
love	-1.30542	-1.35872	-4.40545
nervous	1.70141	-0.48106	-0.91866
neverminded	-0.36206	-0.37684	-1.22185
oops	-0.40027	-0.41661	5.31188
playful	-0.39416	-0.41025	-1.33018
pleased	-0.48274	-0.50246	-1.62913
ponder	-0.31930	-0.33234	-1.07757
questioning	-0.35529	2.33439	6.30718
relieved	-0.81853	-0.85195	-2.76233
remorse	-0.50726	-0.52798	0.04057
romance	-0.31161	-0.32433	-1.05160
sad	-1.96215	-2.04227	-6.01768
sarcastic	-0.43514	-0.45291	-1.46848
scared	6.65440	1.82571	7.65846
sceptical	-0.38795	-0.40379	-1.30923
shocked	8.97265	15.24905	38.58954
shy	0.31171	-0.89118	-0.46696
smiling	-0.79139	-0.82370	-2.67074
smirking	-0.34135	-0.35529	-1.15197
smuggish	-0.31161	-0.32433	-1.05160
stressed	-0.38164	-0.39723	0.26492
surprised	11.84461	10.10254	23.91368
sympathetic	-0.47258	-0.49188	-0.34078
teasing	-0.33416	-0.34781	-1.12772
thankful	-0.57034	-0.59363	-1.92475
thinking	-0.36206	-0.37684	-1.22185
tired	-0.64617	-0.67255	-2.18065
uncertain	-0.61538	0.92076	1.29391
unhappy	-0.89503	-0.93158	-2.68942
unimpressed	-0.40027	1.98369	-1.35081
upset	-0.71399	-0.74314	-1.99450
winking	-0.79139	-0.82370	-2.67074
worried	3.31424	-0.54271	4.49152

EMOJI 5**DESCRIPTIVE LABELS**

Label	African	Coloured	White
amazed	x		
amused	x		
angry	x	x	x
annoyed			x
anxious	x	x	x
astonished		x	
awkward			x
concerned			x
disappointed	x		
disbelief		x	x
disgusted			x
embarrassed	x		x
excited	x	x	x
frustrated		x	x
irritated		x	x
nervous	x	x	x
oops			x
questioning			x
remorse			x
sarcastic		x	x
scared		x	x
shocked		x	
smiling	x		x
stressed		x	x
surprised		x	x
uncertain			x
unhappy	x		
upset		x	
worried			x

STANDARDISED RESIDUALS

Label	African	Coloured	White
affection	-0.50939	-0.52861	-1.80648
amazed	3.32271	-0.28823	-0.98499
amused	1.55963	-0.50673	-1.73170
angry	5.91292	1.56250	10.33208
annoyed	-0.58620	-0.60833	1.76932
anxious	2.87813	8.90095	12.38755
appreciative	-0.30769	-0.31930	-1.09119
astonished	-0.30769	5.94430	-1.09119
awkward	-0.22934	-0.23800	10.25237
blushing	-0.70563	-0.73226	-2.50243

cheeky	-0.36019	-0.37379	-1.27738
compassionate	-0.31334	-0.32516	-1.11121
concerned	-0.33497	-0.34761	2.17925
content	-0.84368	-0.87553	-2.65781
crying	-0.96939	-1.00598	-3.43784
cute	-0.36019	-0.37379	-1.27738
depressed	-0.36019	-0.37379	-1.27738
devastated	-0.40596	-0.42128	-1.43968
disappointed	0.90959	-1.06966	-3.38187
disbelief	-0.51282	3.22599	0.38079
discouraged	-0.45097	-0.46799	-1.59931
disgusted	-0.25811	-0.26786	0.17709
disinterested	-0.31334	-0.32516	-1.11121
embarrassed	0.77341	-0.71134	0.44865
emotional	-0.34528	-0.35831	-1.22450
excited	1.43720	3.22599	17.42640
exhausted	-0.27774	-0.28823	-0.98499
expression of emotion	-0.29607	-0.30725	-1.05000
flirting	-0.56487	-0.58620	-2.00327
friendly	-0.45484	-0.47201	-1.61304
frustrated	-0.58620	4.32324	8.50369
funny	-0.87630	-0.90938	-2.46415
happy	-1.42854	-1.48247	-2.30274
hopeless	-0.30769	-0.31930	-1.09119
humorous	-0.31334	-0.32516	-1.11121
hurt	-0.31888	-0.33092	-1.13088
in agreement	-0.45868	-0.47599	-1.62665
in love	-0.75832	-0.78695	-2.68931
irritated	-0.50246	3.31424	1.58528
joking	-0.64867	-0.67315	-2.30043
joyful	-0.33497	-0.34761	-0.34614
kiss	-0.78334	-0.81291	-2.77803
laughing	-0.93064	-0.96577	-2.69441
laughing till you cry	-0.31334	-0.32516	-1.11121
like	-0.37451	-0.38865	-1.32815
love	-1.10939	-1.15127	-3.93434
nervous	4.69903	9.40558	13.68262
neverminded	-0.30769	-0.31930	-1.09119
oops	-0.34016	-0.35300	12.88568
playful	-0.33497	-0.34761	-1.18794
pleased	-0.41025	-0.42574	-1.45492
ponder	-0.27136	-0.28160	-0.96234
questioning	-0.30194	-0.31334	0.79699
relieved	-0.69562	-0.72188	-2.46694
remorse	-0.43109	-0.44736	1.74168
romance	-0.26482	-0.27481	-0.93915
sad	-1.66751	-1.73045	-5.57544

sarcastic	-0.36980	2.22206	1.73862
scared	-0.36019	4.97685	12.03114
sceptical	-0.32969	-0.34214	-1.16923
shocked	-0.85195	0.24696	-0.70453
shy	-0.72765	-0.75511	-2.19300
smiling	14.19618	-0.69794	5.58087
smirking	-0.29009	-0.30104	-1.02878
smuggish	-0.26482	-0.27481	-0.93915
stressed	-0.32433	2.63451	11.89083
surprised	-0.67255	3.60042	3.90381
sympathetic	-0.40162	-0.41678	-1.42429
teasing	-0.28398	-0.29470	-1.00712
thankful	-0.48469	-0.50299	-1.71892
thinking	-0.30769	-0.31930	-1.09119
tired	-0.54914	-0.56987	-1.94746
uncertain	-0.52297	-0.54271	8.92895
unhappy	3.18347	-0.78934	-1.58535
unimpressed	-0.34016	-0.35300	-1.20636
upset	-0.60677	0.95844	-0.75771
winking	-0.67255	-0.69794	-2.38514
worried	-0.44312	-0.45985	8.60991

EMOJI 6**DESCRIPTIVE LABELS**

Label	African	Coloured	White
angry			x
crying	x	x	x
depressed			x
devastated	x	x	x
emotional		x	x
frustrated		x	
hurt	x		x
questioning	x		
remorse			x
sad	x	x	x
sympathetic	x		x
unhappy	x	x	x
upset		x	x

STANDARDISED RESIDUALS

Label	African	Coloured	White
affection	-0.49949	-0.6397	-2.1704
amazed	-0.27235	-0.3488	-1.1834
amused	-0.47882	-0.6132	-1.5999

angry	-0.46088	-0.5902	0.4942
annoyed	-0.57481	-0.7361	-2.4976
anxious	-0.30725	-0.3935	-0.5860
appreciative	-0.30171	-0.3864	-1.3110
astonished	-0.30171	-0.3864	-1.3110
awkward	-0.22488	-0.2880	-0.9771
blushing	-0.69192	-0.8861	-3.0065
cheeky	-0.35320	-0.4523	-1.5347
compassionate	-0.30725	-0.3935	-0.5860
concerned	-0.32847	-0.4206	-1.4272
content	-0.82730	-1.0595	-3.5947
crying	10.62150	14.3908	30.0075
cute	-0.35320	-0.4523	-0.8831
depressed	-0.35320	-0.4523	4.3298
devastated	2.11402	9.2983	15.0365
disappointed	-0.02135	-1.2944	-0.5208
disbelief	-0.50286	-0.6440	-1.2696
discouraged	-0.44221	-0.5663	-1.4010
disgusted	-0.25310	-0.3241	-1.0997
disinterested	-0.30725	-0.3935	-1.3350
embarrassed	-0.67215	-0.8608	-2.5782
emotional	-0.33857	4.1791	7.3655
excited	-0.50286	-0.6440	-2.1850
exhausted	-0.27235	-0.3488	-0.3384
expression of emotion	-0.29032	-0.3718	-1.2615
flirting	-0.55390	-0.7093	-2.4068
friendly	-0.44601	-0.5712	-1.9379
frustrated	-0.57481	0.6224	-0.0954
funny	-0.85928	-1.1004	-3.4659
happy	-1.40080	-1.7939	-5.9223
hopeless	-0.30171	-0.3864	-0.5482
humorous	-0.30725	-0.3935	-1.3350
hurt	2.88537	-0.4004	5.2654
in agreement	-0.44977	-0.5760	-1.9543
in love	-0.74359	-0.9523	-3.2310
irritated	-0.49270	-0.6310	-1.2066
joking	-0.63607	-0.8146	-2.7638
joyful	-0.32847	-0.4206	-0.7266
kiss	-0.76813	-0.9837	-3.3376
laughing	-0.91256	-1.1687	-3.7130
laughing till you cry	-0.30725	-0.3935	-1.3350
like	-0.36724	-0.4703	-1.5957
love	-1.08785	-1.3931	-4.7268
nervous	-0.38516	-0.4932	-1.6736
neverminded	-0.30171	-0.3864	-1.3110
oops	-0.33356	-0.4272	-1.4493
playful	-0.32847	-0.4206	-1.4272

pleased	-0.40229	-0.5152	-1.7480
ponder	-0.26609	-0.3408	-1.1562
questioning	3.08145	-0.3792	-1.2865
relieved	-0.68211	-0.8735	-2.9638
remorse	-0.42272	-0.5413	0.3410
romance	-0.25967	-0.3325	-1.1283
sad	2.64589	3.6367	16.5412
sarcastic	-0.36262	-0.4644	-1.5756
scared	-0.35320	-0.4523	-1.5347
sceptical	-0.32329	-0.4140	-1.4047
shocked	-0.83541	-1.0698	-3.3545
shy	-0.71351	-0.9137	-3.1003
smiling	-0.65949	-0.8446	-2.8656
smirking	-0.28446	-0.3643	-1.2360
smuggish	-0.25967	-0.3325	-1.1283
stressed	-0.31804	-0.4073	-0.6583
surprised	-0.65949	-0.8446	-2.8656
sympathetic	2.14544	-0.5043	1.2108
teasing	-0.27847	-0.3566	-1.2100
thankful	-0.47528	-0.6087	-2.0652
thinking	-0.30171	-0.3864	-1.3110
tired	-0.53847	-0.6896	-1.4849
uncertain	-0.51282	-0.6567	-2.2282
unhappy	1.93562	0.0918	1.0790
unimpressed	-0.33356	-0.4272	-1.4493
upset	-0.59499	0.5505	8.6320
winking	-0.65949	-0.8446	-2.8656
worried	-0.43452	-0.5565	-1.8880

EMOJI 7**DESCRIPTIVE LABELS**

Label	African	Coloured	White
annoyed		x	
concerned			x
depressed	x	x	x
disappointed	x	x	x
discouraged	x	x	x
disinterested			x
emotional			x
exhausted		x	
expression of emotion			x
frustrated	x		
hopeless			x
hurt			x
in agreement		x	

remorse		x	x
sad	x	x	x
sympathetic			x
thinking			x
tired	x	x	x
unhappy			x
unimpressed			x
upset		x	x
worried			x

STANDARDISED RESIDUALS

Label	African	Coloured	White
affection	-0.4468	-0.7273	-2.0812
amazed	-0.2436	-0.3965	-1.1348
amused	-0.4283	-0.6972	-1.9950
angry	-0.4122	-0.6710	-0.8787
annoyed	-0.5141	0.3579	-1.9774
anxious	-0.2748	-0.4474	-1.2802
appreciative	-0.2699	-0.4393	-1.2571
astonished	-0.2699	-0.4393	-1.2571
awkward	-0.2011	-0.3274	-0.9370
blushing	-0.6189	-1.0075	-2.8829
cheeky	-0.3159	-0.5143	-1.4716
compassionate	-0.2748	-0.4474	-0.4990
concerned	-0.2938	-0.4783	2.2849
content	-0.7400	-1.2046	-3.4470
crying	-0.8502	-1.3840	-3.9606
cute	-0.3159	-0.5143	-1.4716
depressed	2.8496	7.2639	7.3623
devastated	-0.3560	-0.5796	-0.4527
disappointed	4.6268	11.4391	20.2471
disbelief	-0.4498	-0.7322	-1.6179
discouraged	2.1328	0.9092	11.1834
disgusted	-0.2264	-0.3685	-1.0545
disinterested	-0.2748	-0.4474	1.0633
embarrassed	-0.6012	-0.9787	-2.4435
emotional	-0.3028	-0.4930	0.7160
excited	-0.4498	-0.7322	-2.0952
exhausted	-0.2436	2.1252	-0.2535
expression of emotion	-0.2597	-0.4227	1.2704
flirting	-0.4954	-0.8065	-2.3079
friendly	-0.3989	-0.6494	-1.8583
frustrated	1.4309	-0.8369	-1.9774
funny	-0.7686	-1.2511	-3.5802
happy	-1.2529	-2.0396	-5.6651
hopeless	-0.2699	-0.4393	2.7203

humorous	-0.2748	-0.4474	-1.2802
hurt	-0.2797	-0.4553	1.7674
in agreement	-0.4023	0.8721	-1.8740
in love	-0.6651	-1.0827	-3.0982
irritated	-0.4407	-0.7174	-2.0528
joking	-0.5689	-0.9261	-2.6502
joyful	-0.2938	-0.4783	-1.3686
kiss	-0.6870	-1.1184	-3.2004
laughing	-0.8162	-1.3287	-3.8022
laughing till you cry	-0.2748	-0.4474	-1.2802
like	-0.3285	-0.5347	-1.5301
love	-0.9730	-1.5839	-4.5326
nervous	-0.3445	-0.5608	-1.6048
neverminded	-0.2699	-0.4393	-1.2571
oops	-0.2983	-0.4857	-1.3898
playful	-0.2938	-0.4783	-1.3686
pleased	-0.3598	-0.5857	-1.6761
ponder	-0.2380	-0.3874	-1.1087
questioning	-0.2648	-0.4311	-1.2336
relieved	-0.6101	-0.9932	-2.8420
remorse	-0.3781	1.0092	5.0520
romance	-0.2323	-0.3781	-1.0819
sad	5.3751	6.0198	16.3788
sarcastic	-0.3243	-0.5280	-1.5109
scared	-0.3159	-0.5143	-1.4716
sceptical	-0.2892	-0.4707	-1.3470
shocked	-0.7472	-1.2164	-3.1935
shy	-0.6382	-1.0389	-2.3001
smiling	-0.5899	-0.9602	-2.7478
smirking	-0.2544	-0.4142	-1.1852
smuggish	-0.2323	-0.3781	-1.0819
stressed	-0.2845	-0.4631	-0.5704
surprised	-0.5899	-0.9602	-2.3839
sympathetic	-0.3522	-0.5734	4.4536
teasing	-0.2491	-0.4055	-1.1603
thankful	-0.4251	-0.6920	-1.9803
thinking	-0.2699	-0.4393	0.3339
tired	3.6710	0.4914	5.3337
uncertain	-0.4587	-0.7467	-1.6686
unhappy	-0.6671	-0.1652	5.2588
unimpressed	-0.2983	-0.4857	0.7688
upset	-0.5322	1.4423	3.1683
winking	-0.5899	-0.9602	-2.7478
worried	-0.3886	-0.6327	2.0560

EMOJI 8**DESCRIPTIVE LABELS**

Label	African	Coloured	White
blushing	x		
content	x	x	x
disappointed			x
discouraged			x
disinterested	x		
excited	x		
expression of emotion		x	x
friendly			x
happy	x	x	x
in agreement		x	
joyful			x
pleased		x	x
relieved		x	x
remorse			x
sarcastic			x
shy	x	x	x
smiling			x
smuggish			x
sympathetic		x	
thankful			x
thinking			x
tired		x	x
uncertain		x	

STANDARDISED RESIDUALS

Label	African	Coloured	White
affection	-0.38691	-0.51909	-1.8010
amazed	-0.21096	-0.28303	-0.9820
amused	-0.37089	-0.49760	-1.7264
angry	-0.35699	-0.47896	-1.6617
annoyed	-0.44525	-0.59736	-1.5900
anxious	-0.23800	-0.31930	-1.1078
appreciative	-0.23371	-0.31355	-1.0878
astonished	-0.23371	-0.31355	-1.0878
awkward	-0.17419	-0.23371	-0.8108
blushing	3.19564	-0.71907	-2.0939
cheeky	-0.27358	-0.36705	-1.2735
compassionate	-0.23800	-0.31930	-1.1078
concerned	-0.25443	-0.34135	-1.1843
content	2.48016	8.44523	30.5419

crying	-0.73630	-0.98786	-3.4273
cute	-0.27358	-0.36705	-1.2735
depressed	-0.27358	-0.36705	-1.2735
devastated	-0.30835	-0.41369	-1.4353
disappointed	-0.78291	-0.09835	0.1974
disbelief	-0.38951	-0.52258	-1.8131
discouraged	-0.34253	-0.45956	2.1687
disgusted	-0.19605	-0.26303	-0.9126
disinterested	3.96376	-0.31930	-0.2051
embarrassed	-0.52065	-0.69852	-0.7730
emotional	-0.26226	-0.35186	-0.4016
excited	2.17780	-0.52258	-1.8131
exhausted	-0.21096	-0.28303	-0.9820
expression of emotion	-0.22488	3.01268	0.8638
flirting	-0.42905	-0.57563	-1.9971
friendly	-0.34547	-0.46350	1.5012
frustrated	-0.44525	-0.59736	-1.5900
funny	-0.66560	-0.89299	-2.7754
happy	3.52301	0.60504	8.4129
hopeless	-0.23371	-0.31355	-0.1686
humorous	-0.23800	-0.31930	-1.1078
hurt	-0.24221	-0.32496	-1.1274
in agreement	-0.34839	3.81145	-0.3884
in love	-0.57599	-0.77277	-2.3081
irritated	-0.38164	-0.51203	-1.7764
joking	-0.49270	-0.66102	-2.2934
joyful	-0.25443	-0.34135	0.5045
kiss	-0.59499	-0.79826	-2.7695
laughing	-0.70687	-0.94836	-3.2903
laughing till you cry	-0.23800	-0.31930	-1.1078
like	-0.28446	-0.38164	-0.5688
love	-0.84264	-1.13052	-3.9223
nervous	-0.29834	-0.40027	-1.3887
neverminded	-0.23371	-0.31355	-1.0878
oops	-0.25837	-0.34664	-1.2027
playful	-0.25443	-0.34135	-1.1843
pleased	-0.31161	4.36584	8.8911
ponder	-0.20611	-0.27653	-0.9594
questioning	-0.22934	-0.30769	-1.0675
relieved	-0.52836	0.70183	0.7935
remorse	-0.32744	-0.43930	1.7564
romance	-0.20114	-0.26986	-0.9363
sad	-1.26656	-1.11078	-2.3335
sarcastic	-0.28088	-0.37684	0.2223
scared	-0.27358	-0.36705	-1.2735
sceptical	-0.25042	-0.33598	-1.1656
shocked	-0.64711	-0.86818	-3.0121

shy	1.25666	4.65292	4.0355
smiling	-0.51084	-0.68536	0.1455
smirking	-0.22034	-0.29562	-0.0506
smuggish	-0.20114	-0.26986	2.2679
stressed	-0.24635	-0.33051	-1.1467
surprised	-0.51084	-0.68536	-1.5367
sympathetic	-0.30505	2.03414	-0.7157
teasing	-0.21570	-0.28939	-0.0081
thankful	-0.36815	-0.49393	2.3712
thinking	-0.23371	-0.31355	0.7506
tired	-0.41710	1.22740	3.2092
uncertain	-0.39723	1.34347	-1.8490
unhappy	-0.57774	-0.77512	-1.9455
unimpressed	-0.25837	-0.34664	-0.3712
upset	-0.46088	-0.61833	-2.1453
winking	-0.51084	-0.68536	-2.3778
worried	-0.33658	-0.45157	-1.5667

EMOJI 9**DESCRIPTIVE LABELS**

Label	African	Coloured	White
affection	x	x	x
amazed			x
appreciative			x
astonished	x		x
blushing	x		
compassionate			x
cute			x
excited	x	x	x
happy		x	x
in love	x	x	x
laughing	x		
like	x	x	x
love	x	x	x
romance	x	x	x
smirking			x
teasing	x		
thankful			x

STANDARDISED RESIDUALS

Label	African	Coloured	White
affection	3.10801	2.85094	5.8247
amazed	-0.29834	-0.31761	6.5647
amused	-0.52452	-0.55839	-2.0472

angry	-0.50487	-0.53747	-1.9705
annoyed	-0.62968	-0.67034	-2.0507
anxious	-0.33658	-0.35831	-1.3137
appreciative	-0.33051	-0.35186	2.5860
astonished	2.69510	-0.35186	2.5860
awkward	-0.24635	-0.26226	-0.9615
blushing	0.56136	-0.80692	-2.9583
cheeky	-0.38691	-0.41189	-1.5101
compassionate	-0.33658	-0.35831	0.9700
concerned	-0.35982	-0.38305	-1.4044
content	-0.90626	-0.96479	-3.5371
crying	-1.04129	-1.10854	-4.0642
cute	-0.38691	-0.41189	2.4632
depressed	-0.38691	-0.41189	-1.5101
devastated	-0.43607	-0.46423	-1.7020
disappointed	-1.10720	-1.17871	-4.3214
disbelief	-0.55085	-0.58643	-2.1500
discouraged	-0.48442	-0.51570	-1.8907
disgusted	-0.27726	-0.29516	-1.0821
disinterested	-0.33658	-0.35831	-1.3137
embarrassed	-0.73630	-0.78386	-2.8738
emotional	-0.37089	-0.39484	-1.4476
excited	1.26451	1.11881	4.3617
exhausted	-0.29834	-0.31761	-1.1644
expression of emotion	-0.31804	-0.33857	-1.2413
flirting	-0.60677	-0.64596	-1.9460
friendly	-0.48857	-0.52013	-1.9069
frustrated	-0.62968	-0.67034	-2.4576
funny	-0.94130	-1.00209	-2.3129
happy	-0.23114	0.20284	2.6933
hopeless	-0.33051	-0.35186	-1.2900
humorous	-0.33658	-0.35831	-0.5524
hurt	-0.34253	-0.36466	-1.3369
in agreement	-0.49270	-0.52452	-0.3629
in love	7.77895	15.27724	37.3964
irritated	-0.53972	-0.57458	-2.1065
joking	-0.69678	-0.74178	-2.7195
joyful	-0.35982	-0.38305	-0.6923
kiss	-0.84144	-0.89578	-3.2841
laughing	0.00067	-1.06422	-3.6454
laughing till you cry	-0.33658	-0.35831	-1.3137
like	2.08351	1.90673	11.1678
love	8.87816	8.19033	28.6743
nervous	-0.42192	-0.44917	-1.6468
neverminded	-0.33051	-0.35186	-1.2900
oops	-0.36539	-0.38899	-1.4261
playful	-0.35982	-0.38305	-1.4044

pleased	-0.44068	-0.46914	-1.7200
ponder	-0.29148	-0.31031	-1.1377
questioning	-0.32433	-0.34528	-1.2659
relieved	-0.74721	-0.79547	-2.9164
remorse	-0.46307	-0.49297	-1.8073
romance	3.23098	2.99935	5.1947
sad	-1.79119	-1.90687	-6.9910
sarcastic	-0.39723	-0.42288	-1.5504
scared	-0.38691	-0.41189	-1.5101
sceptical	-0.35415	-0.37702	-1.3822
shocked	-0.91515	-0.97425	-3.5718
shy	-0.78162	-0.83209	-3.0506
smiling	-0.72244	-0.76909	-2.1104
smirking	-0.31161	-0.33173	0.4282
smuggish	-0.28446	-0.30283	-1.1102
stressed	-0.34839	-0.37089	-1.3598
surprised	-0.72244	-0.76909	-2.8197
sympathetic	-0.43140	-0.45926	-1.6838
teasing	2.97312	-0.32475	-1.1906
thankful	-0.52065	-0.55427	0.9206
thinking	-0.33051	-0.35186	-1.2900
tired	-0.58987	-0.62796	-2.3022
uncertain	-0.56176	-0.59804	-2.1926
unhappy	-0.81705	-0.86981	-3.1889
unimpressed	-0.36539	-0.38899	-1.4261
upset	-0.65178	-0.69387	-2.5439
winking	-0.72244	-0.76909	-2.8197
worried	-0.47599	-0.50673	-1.8578

EMOJI 10**DESCRIPTIVE LABELS**

Label	African	Coloured	White
amused			x
anxious			x
awkward	x	x	
disbelief		x	
embarrassed	x	x	x
exhausted			x
expression of emotion	x	x	x
funny		x	x
happy	x	x	x
humorous			x
joking		x	
joyful			x
laughing	x	x	x

laughing till you cry		x	x
nervous	x	x	x
oops			x
playful		x	
questioning			x
relieved	x	x	x
stressed			x
tired	x		x
uncertain			x

STANDARDISED RESIDUALS

Label	African	Coloured	White
affection	-0.37379	-0.47910	-1.89808
amazed	-0.20381	-0.26123	-1.03493
amused	-0.35831	-0.45926	0.37890
angry	-0.34489	-0.44206	-1.75133
annoyed	-0.43015	-0.55134	-2.18429
anxious	-0.22993	-0.29470	0.54543
appreciative	-0.22578	-0.28939	-1.14652
astonished	-0.22578	-0.28939	-1.14652
awkward	5.77389	4.42033	-0.85456
blushing	-0.51779	-0.66367	-2.62931
cheeky	-0.26431	-0.33877	-1.34214
compassionate	-0.22993	-0.29470	-1.16755
concerned	-0.24580	-0.31505	-0.44699
content	-0.61909	-0.79352	-2.82564
crying	-0.71134	-0.91175	-3.61215
cute	-0.26431	-0.33877	-1.34214
depressed	-0.26431	-0.33877	-1.34214
devastated	-0.29789	-0.38182	-1.51268
disappointed	-0.75636	-0.96946	-3.84078
disbelief	-0.37630	1.59097	-1.38753
discouraged	-0.33092	-0.42415	-1.68040
disgusted	-0.18940	-0.24276	-0.96178
disinterested	-0.22993	-0.29470	-1.16755
embarrassed	1.48511	0.90639	4.10160
emotional	-0.25337	-0.32475	-1.28658
excited	-0.37630	-0.48232	-1.38753
exhausted	-0.20381	-0.26123	1.86383
expression of emotion	4.38553	3.31258	4.33532
flirting	-0.41450	-0.53129	-2.10484
friendly	-0.33376	-0.42779	-1.10479
frustrated	-0.43015	-0.55134	-2.18429
funny	-0.64303	1.60241	8.37233
happy	0.85966	0.88921	2.56719
hopeless	-0.22578	-0.28939	-1.14652

humorous	-0.22993	-0.29470	5.68438
hurt	-0.23400	-0.29992	-1.18822
in agreement	-0.33658	-0.43140	-1.70912
in love	-0.55646	-0.71323	-2.82566
irritated	-0.36870	-0.47258	-1.33814
joking	-0.47599	1.02899	-0.34844
joyful	-0.24580	-0.31505	1.15535
kiss	-0.57481	-0.73676	-2.91889
laughing	5.17448	4.83703	10.37413
laughing till you cry	-0.22993	3.09852	0.54543
like	-0.27481	-0.35224	-1.39549
love	-0.81407	-1.04343	-4.13382
nervous	3.18126	2.33742	6.05207
neverminded	-0.22578	-0.28939	-1.14652
oops	-0.24961	-0.31994	1.09931
playful	-0.24580	2.85902	-1.24817
pleased	-0.30104	-0.38586	-0.87453
ponder	-0.19912	-0.25522	-0.02214
questioning	-0.22156	-0.28398	0.65256
relieved	3.40771	6.98801	44.47561
remorse	-0.31633	-0.40546	-0.36126
romance	-0.19432	-0.24907	-0.98676
sad	-1.22362	-1.56836	-6.21348
sarcastic	-0.27136	-0.34781	-0.65222
scared	-0.26431	-0.33877	-1.34214
sceptical	-0.24193	-0.31009	-1.22851
shocked	-0.62516	-0.80130	-3.17456
shy	-0.53395	-0.68438	-1.23608
smiling	-0.49352	-0.63256	-1.70801
smirking	-0.21287	-0.27284	-1.08095
smuggish	-0.19432	-0.24907	-0.98676
stressed	-0.23800	-0.30505	3.75616
surprised	-0.49352	-0.63256	-1.70801
sympathetic	-0.29470	-0.37774	-1.49650
teasing	-0.20839	-0.26710	-1.05819
thankful	-0.35567	-0.45587	-1.80607
thinking	-0.22578	-0.28939	-1.14652
tired	2.07870	-0.51648	0.39736
uncertain	-0.38376	-0.49188	0.61711
unhappy	-0.55815	-0.71540	-2.83426
unimpressed	-0.24961	-0.31994	-1.26752
upset	-0.44525	-0.57069	-2.26096
winking	-0.49352	-0.63256	-2.50607
worried	-0.32516	-0.41678	-0.43991

EMOJI 11**DESCRIPTIVE LABELS**

Label	African	Coloured	White
amazed	x		
amused	x		
appreciative			x
blushing	x	x	x
cheeky	x		
content		x	x
cute	x		x
embarrassed		x	x
excited	x		x
flirting		x	
friendly			x
happy	x	x	x
in agreement			x
joyful	x	x	x
pleased	x	x	x
shy	x	x	x
smiling	x	x	x
surprised	x		
thankful		x	x

STANDARDISED RESIDUALS

Label	African	Coloured	White
affection	-0.52861	-0.6921	-1.5099
amazed	3.18126	-0.3774	-1.0948
amused	1.46670	-0.6635	-0.8858
angry	-0.48775	-0.6386	-1.8527
annoyed	-0.60833	-0.7965	-2.3107
anxious	-0.32516	-0.4257	-1.2351
appreciative	-0.31930	-0.4181	2.0851
astonished	-0.31930	-0.4181	-1.2129
awkward	-0.23800	-0.3116	-0.9040
blushing	7.46150	3.2133	10.8802
cheeky	2.30153	-0.4894	-1.4198
compassionate	-0.32516	-0.4257	-0.4255
concerned	-0.34761	-0.4551	-1.3204
content	-0.87553	2.3430	10.2053
crying	-1.00598	-1.3171	-3.8212
cute	2.30153	-0.4894	3.5103
depressed	-0.37379	-0.4894	-1.4198
devastated	-0.42128	-0.5516	-1.6002
disappointed	-1.06966	-1.4005	-4.0631

disbelief	-0.53217	-0.6968	-2.0215
discouraged	-0.46799	-0.6127	-1.7777
disgusted	-0.26786	-0.3507	-1.0174
disinterested	-0.32516	-0.4257	-1.2351
embarrassed	-0.71134	3.3634	1.3690
emotional	-0.35831	-0.4691	-1.3611
excited	1.34691	-0.6968	0.9467
exhausted	-0.28823	-0.3774	-1.0948
expression of emotion	-0.30725	-0.4023	-1.1671
flirting	-0.58620	0.5354	-0.8794
friendly	-0.47201	-0.6180	10.4776
frustrated	-0.60833	-0.7965	-2.3107
funny	-0.90938	-1.1907	-2.0068
happy	3.91394	6.3022	19.5858
hopeless	-0.31930	-0.4181	-1.2129
humorous	-0.32516	-0.4257	-1.2351
hurt	-0.33092	-0.4333	-1.2570
in agreement	-0.47599	-0.6232	2.6166
in love	-0.78695	-0.0598	-2.6547
irritated	-0.52142	-0.6827	-1.9806
joking	-0.67315	-0.8814	-2.1659
joyful	2.52913	1.7420	0.9516
kiss	-0.81291	-1.0643	-3.0878
laughing	-0.96577	-1.2645	-3.6685
laughing till you cry	-0.32516	-0.4257	-1.2351
like	-0.38865	-0.5089	-1.4763
love	-1.15127	-0.8440	-3.2297
nervous	-0.40761	-0.5337	-1.5483
neverminded	-0.31930	-0.4181	-1.2129
oops	-0.35300	-0.4622	-0.5951
playful	-0.34761	-0.4551	-1.3204
pleased	1.92311	3.0305	5.1848
ponder	-0.28160	-0.3687	-1.0697
questioning	-0.31334	-0.4103	-1.1902
relieved	-0.72188	-0.9452	-2.7420
remorse	-0.44736	-0.5857	-0.5224
romance	-0.27481	-0.3598	-1.0439
sad	-1.73045	-2.2657	-6.5731
sarcastic	-0.38376	-0.5025	-1.4577
scared	-0.37379	-0.4894	-1.4198
sceptical	-0.34214	-0.4480	-1.2996
shocked	-0.88411	-1.1576	-3.3583
shy	3.21780	5.0801	6.8936
smiling	3.60042	6.7463	12.0596
smirking	-0.30104	-0.3942	-1.1435
smuggish	-0.27481	-0.3598	-0.0859
stressed	-0.33658	-0.4407	-1.2785

surprised	0.73485	-0.9138	-2.6511
sympathetic	-0.41678	-0.5457	-1.5831
teasing	-0.29470	-0.3859	-1.1194
thankful	-0.50299	0.8599	4.3701
thinking	-0.31930	-0.4181	-1.2129
tired	-0.56987	-0.7461	-2.1646
uncertain	-0.54271	-0.7106	-2.0615
unhappy	-0.78934	-1.0335	-2.9983
unimpressed	-0.35300	-0.4622	-1.3409
upset	-0.62968	-0.8244	-2.3918
winking	-0.69794	-0.9138	-2.6511
worried	-0.45985	-0.6021	-1.7467

EMOJI 12**DESCRIPTIVE LABELS**

Label	African	Coloured	White
amused		x	x
angry	x		
annoyed	x	x	
cheeky	x		x
concerned			x
content	x		
cute		x	
disbelief	x		x
disgusted	x		
disinterested			x
expression of emotion			x
flirting	x		x
in agreement	x	x	x
like			x
neverminded	x	x	x
oops			x
playful		x	x
ponder		x	x
questioning			x
sarcastic	x	x	x
sceptical		x	x
shy			x
smiling	x		x
smirking	x		x
smuggish	x		x
surprised	x		
teasing	x		x
thinking		x	x
uncertain	x	x	x

unhappy	x		
unimpressed		x	x
winking	x		
worried		x	

STANDARDISED RESIDUALS

Label	African	Coloured	White
affection	-0.49949	-0.43545	-1.73606
amazed	-0.27235	-0.23743	-0.94658
amused	-0.47882	1.97823	0.13849
angry	1.70890	-0.40178	-1.60184
annoyed	1.16488	1.49445	-1.49730
anxious	-0.30725	-0.26786	-1.06789
appreciative	-0.30171	-0.26303	-1.04865
astonished	-0.30171	-0.26303	-1.04865
awkward	-0.22488	-0.19605	-0.78162
blushing	-0.69192	-0.60321	-2.40487
cheeky	2.47810	-0.30791	6.10394
compassionate	-0.30725	-0.26786	-1.06789
concerned	-0.32847	-0.28635	0.61027
content	0.38145	-0.72122	-1.13649
crying	-0.95057	-0.82868	-3.30381
cute	-0.35320	2.93981	-1.22758
depressed	-0.35320	-0.30791	-1.22758
devastated	-0.39807	-0.34703	-1.38356
disappointed	-1.01073	-0.88114	-1.80495
disbelief	1.48578	-0.43838	3.40174
discouraged	-0.44221	-0.38551	-0.88632
disgusted	3.69792	-0.22065	-0.87968
disinterested	-0.30725	-0.26786	4.55066
embarrassed	-0.67215	-0.58597	-1.90809
emotional	-0.33857	-0.29516	-1.17676
excited	-0.50286	-0.43838	-1.74775
exhausted	-0.27235	-0.23743	-0.94658
expression of emotion	-0.29032	-0.25310	0.97298
flirting	3.05682	-0.48288	6.38580
friendly	-0.44601	-0.38882	-0.25995
frustrated	-0.57481	-0.50111	-0.99676
funny	-0.85928	-0.74911	-0.97754
happy	-1.40080	-1.22119	-3.43089
hopeless	-0.30171	-0.26303	-0.09504
humorous	-0.30725	-0.26786	-0.13147
hurt	-0.31269	-0.27260	-1.08679
in agreement	3.99695	2.15827	2.91467
in love	-0.74359	-0.64825	-2.58446
irritated	-0.49270	-0.42952	-0.54451

joking	-0.63607	-0.55451	-0.40140
joyful	-0.32847	-0.28635	-1.14162
kiss	-0.76813	-0.66964	-2.66973
laughing	-0.91256	-0.79555	-2.22588
laughing till you cry	-0.30725	-0.26786	-1.06789
like	-0.36724	-0.32015	1.07403
love	-1.08785	-0.94836	-3.78095
nervous	-0.38516	-0.33577	-1.33867
neverminded	6.32707	11.14257	10.39466
oops	-0.33356	-0.29079	1.42839
playful	-0.32847	3.20589	2.36216
pleased	-0.40229	-0.35070	-1.39820
ponder	-0.26609	8.38985	17.45712
questioning	-0.29607	-0.25811	2.85805
relieved	-0.68211	-0.59465	-2.37076
remorse	-0.42272	-0.36852	-0.10795
romance	-0.25967	-0.22638	-0.90253
sad	-1.02355	-1.42547	-5.50713
sarcastic	2.39512	2.84722	10.64144
scared	-0.35320	-0.30791	-1.22758
sceptical	-0.32329	3.26628	10.44586
shocked	-0.83541	-0.72829	-2.55917
shy	-0.71351	-0.62203	0.34277
smiling	0.85683	-0.57493	0.76175
smirking	10.26187	-0.24799	17.21751
smuggish	3.59130	-0.22638	13.50138
stressed	-0.31804	-0.27726	-1.10537
surprised	2.37315	-0.57493	-0.98333
sympathetic	-0.39382	-0.34332	-1.36876
teasing	3.31258	-0.24276	2.13177
thankful	-0.47528	-0.41434	-1.65191
thinking	-0.30171	7.34070	15.16270
tired	-0.53847	-0.46943	-0.26857
uncertain	1.43720	4.02658	13.92716
unhappy	0.59488	-0.65022	-2.20657
unimpressed	-0.33356	3.14813	4.87868
upset	-0.59499	-0.51870	-2.06796
winking	0.85683	-0.57493	-1.41960
worried	-0.43452	2.26108	-0.18592

EMOJI 13**DESCRIPTIVE LABELS**

Label	African	Coloured	White
angry	x	x	x
annoyed	x	x	x
depressed			x

disappointed	x	x	x
disbelief	x		x
discouraged			x
disgusted			x
disinterested		x	x
expression of emotion			x
frustrated	x	x	x
hurt			x
irritated	x	x	x
neverminded		x	x
ponder			x
questioning		x	
sarcastic	x		x
sceptical	x	x	x
surprised		x	
thinking		x	x
tired		x	
uncertain			x
unhappy	x	x	x
unimpressed	x	x	x
upset	x	x	x

STANDARDISED RESIDUALS

Label	African	Coloured	White
affection	-0.41189	-0.71342	-1.87693
amazed	-0.22458	-0.38899	-0.04625
amused	-0.39484	-0.68389	-1.24343
angry	7.51368	0.86088	11.54903
annoyed	7.96475	10.14126	21.91461
anxious	-0.25337	-0.43884	-1.15454
appreciative	-0.24880	-0.43093	-1.13374
astonished	-0.24880	-0.43093	-1.13374
awkward	-0.18544	-0.32120	-0.84504
blushing	-0.57058	-0.98827	-2.60002
cheeky	-0.29125	-0.50446	-1.32719
compassionate	-0.25337	-0.43884	-1.15454
concerned	-0.27086	-0.46914	-0.42406
content	-0.68221	-1.18162	-3.10871
crying	-0.78386	-1.35768	-3.57190
cute	-0.29125	-0.50446	-1.32719
depressed	-0.29125	-0.50446	0.17976
devastated	-0.32826	-0.56856	-0.15877
disappointed	0.36633	0.63451	6.47062
disbelief	1.99691	-0.71822	0.22732
discouraged	-0.36466	-0.63160	1.34734
disgusted	-0.20871	-0.36150	13.76933

disinterested	-0.25337	1.83988	12.70373
embarrassed	-0.55427	-0.96002	-2.52571
emotional	-0.27920	-0.48358	-1.27225
excited	-0.41467	-0.71822	-1.88957
exhausted	-0.22458	-0.38899	-1.02339
expression of emotion	-0.23941	-0.41467	0.74234
flirting	-0.45676	-0.79113	-2.08139
friendly	-0.36779	-0.63702	-1.67594
frustrated	1.63568	2.83309	3.85869
funny	-0.70858	-1.22730	-3.22889
happy	-1.15513	-2.00074	-4.88377
hopeless	-0.24880	-0.43093	-0.25170
humorous	-0.25337	-0.43884	-1.15454
hurt	-0.25785	-0.44661	0.52717
in agreement	-0.37089	-0.64240	-1.69008
in love	-0.61318	-1.06207	-2.79418
irritated	2.05501	12.08559	19.75399
joking	-0.52452	-0.90849	-2.39013
joyful	-0.27086	-0.46914	-1.23426
kiss	-0.63341	-1.09711	-2.88636
laughing	-0.75252	-1.30340	-3.42910
laughing till you cry	-0.25337	-0.43884	-1.15454
like	-0.30283	-0.52452	-1.37994
love	-0.89706	-1.55376	-4.08776
nervous	-0.31761	-0.55012	-1.44730
neverminded	-0.24880	6.53068	5.04051
oops	-0.27506	-0.47642	-1.25340
playful	-0.27086	-0.46914	-1.23426
pleased	-0.33173	-0.57458	-1.51165
ponder	-0.21942	-0.38005	0.00027
questioning	-0.24415	1.94186	-0.21371
relieved	-0.56248	-0.97425	-2.56313
remorse	-0.34858	-0.60376	-0.32934
romance	-0.21413	-0.37089	-0.97577
sad	-0.60672	-0.19449	-2.23815
sarcastic	3.04523	-0.51792	0.83911
scared	-0.29125	-0.50446	-1.32719
sceptical	3.48443	6.03522	7.84000
shocked	-0.68890	-0.35512	-3.13919
shy	-0.58838	-1.01910	-2.30817
smiling	-0.54383	-0.94194	-2.47814
smirking	-0.23457	-0.40629	-1.06890
smuggish	-0.21413	-0.37089	-0.97577
stressed	-0.26226	-0.45424	-1.19507
surprised	-0.54383	0.11969	-1.26756
sympathetic	-0.32475	-0.56248	-1.47983
teasing	-0.22963	-0.39773	-1.04640

thankful	-0.39193	-0.67884	-1.78595
thinking	-0.24880	1.88960	1.51237
tired	-0.44404	0.53114	-0.54074
uncertain	-0.42288	-0.73245	1.70562
unhappy	1.01083	3.62822	9.32856
unimpressed	3.36052	5.82060	9.91625
upset	1.54751	0.32691	3.13152
winking	-0.54383	-0.94194	-2.47814
worried	-0.35831	-0.62062	-1.02032

EMOJI 14

DESCRIPTIVE LABELS

Label	African	Coloured	White
amazed			x
amused	x		
annoyed	x	x	x
astonished			x
concerned			x
crying		x	
depressed		x	x
disappointed	x	x	x
disbelief		x	x
discouraged	x	x	x
disgusted			x
emotional			x
exhausted	x		x
expression of emotion	x		x
frustrated	x	x	x
hopeless		x	x
hurt			x
irritated		x	x
questioning		x	x
sad	x	x	x
shocked	x	x	x
stressed	x		x
sympathetic			x
tired	x	x	x
unhappy	x	x	x
upset	x	x	x
worried	x		x

STANDARDISED RESIDUALS

Label	African	Coloured	White
affection	-0.55621	-0.63182	-2.02280
amazed	-0.30327	-0.34450	0.71042
amused	1.34233	-0.60566	-1.93906
angry	-0.51321	-0.58297	-0.25904
annoyed	2.48449	0.64826	3.68639
anxious	-0.34214	-0.38865	-0.44059
appreciative	-0.33598	-0.38164	-1.22185
astonished	-0.33598	-0.38164	0.41501
awkward	-0.25042	-0.28446	-0.91071
blushing	-0.77049	-0.87522	-2.80208
cheeky	-0.39330	-0.44676	-1.43033
compassionate	-0.34214	-0.38865	-1.24427
concerned	-0.36576	-0.41548	0.92515
content	-0.92124	-1.04646	-3.35031
crying	-0.11378	2.12435	-1.51153
cute	-0.39330	-0.44676	-1.43033
depressed	-0.39330	1.79157	2.06536
devastated	-0.44328	-0.50353	-1.61208
disappointed	0.65148	0.28587	9.34393
disbelief	-0.55996	0.93608	4.34734
discouraged	1.53835	1.22841	7.14367
disgusted	-0.28184	-0.32015	1.90193
disinterested	-0.34214	-0.38865	-1.24427
embarrassed	-0.74848	-0.85021	-2.72200
emotional	-0.37702	-0.42827	1.54620
excited	-0.55996	-0.63607	-2.03642
exhausted	9.58874	-0.34450	9.77719
expression of emotion	5.86306	-0.36724	1.37589
flirting	-0.61680	-0.70064	-2.24314
friendly	-0.49665	-0.56416	-1.80619
frustrated	0.92220	2.02361	14.42605
funny	-0.95686	-1.08692	-3.47983
happy	-1.55986	-1.77189	-5.67280
hopeless	-0.33598	2.23861	12.69147
humorous	-0.34214	-0.38865	-0.44059
hurt	-0.34820	-0.39552	0.31311
in agreement	-0.50084	-0.56892	-1.82143
in love	-0.82803	-0.94058	-3.01133
irritated	-0.54865	0.98135	2.01420
joking	-0.70830	-0.80457	-2.57589
joyful	-0.36576	-0.41548	-1.33018
kiss	-0.85535	-0.97161	-3.11068
laughing	-1.01619	-1.15431	-3.42501
laughing till you cry	-0.34214	-0.38865	-1.24427

like	-0.40894	-0.46452	-1.48719
love	-1.21138	-1.37603	-4.40545
nervous	-0.42890	-0.48719	-0.91866
neverminded	-0.33598	-0.38164	-1.22185
oops	-0.37143	-0.42192	-1.35081
playful	-0.36576	-0.41548	-1.33018
pleased	-0.44797	-0.50886	-1.62913
ponder	-0.29630	-0.33658	-1.07757
questioning	-0.32969	2.29566	0.46903
relieved	-0.75956	-0.86281	-2.76233
remorse	-0.47072	-0.53470	-0.54358
romance	-0.28916	-0.32847	-1.05160
sad	2.02367	2.76663	3.64743
sarcastic	-0.40379	-0.45868	-1.46848
scared	-0.39330	-0.44676	-1.43033
sceptical	-0.36000	-0.40894	-1.30923
shocked	1.21963	1.78226	0.75500
shy	-0.79454	-0.90253	-2.88951
smiling	-0.73438	-0.83420	-2.67074
smirking	-0.31676	-0.35982	-1.15197
smuggish	-0.28916	-0.32847	-1.05160
stressed	2.46952	-0.40229	1.04135
surprised	-0.73438	-0.83420	-1.92188
sympathetic	-0.43853	-0.49814	0.28624
teasing	-0.31009	-0.35224	-1.12772
thankful	-0.52925	-0.60119	-1.92475
thinking	-0.33598	-0.38164	-1.22185
tired	2.73584	11.06424	11.11815
uncertain	-0.57105	-0.64867	-0.63218
unhappy	2.78150	1.17645	9.56022
unimpressed	-0.37143	-0.42192	-0.61051
upset	2.35608	1.90482	6.72092
winking	-0.73438	-0.83420	-2.67074
worried	1.58286	-0.54963	1.65007

EMOJI 15**DESCRIPTIVE LABELS**

Label	African	Coloured	White
awkward			x
blushing	x	x	x
content		x	x
cute		x	x
embarrassed	x	x	x
excited	x		
flirting		x	x
friendly			x

happy	x	x	x
joyful	x	x	x
like	x		x
pleased	x	x	x
shy	x	x	x
smiling	x	x	x
smuggish			x
thankful	x	x	x

STANDARDISED RESIDUALS

Label	African	Coloured	White
affection	-0.56511	-0.67755	-0.9591
amazed	-0.30813	-0.36943	-1.0757
amused	-0.54172	-0.64950	-0.8336
angry	-0.52142	-0.62516	-1.8203
annoyed	-0.65033	-0.77972	-2.2703
anxious	-0.34761	-0.41678	-1.2135
appreciative	-0.34135	-0.40927	-0.3525
astonished	-0.34135	-0.40927	-1.1917
awkward	-0.25443	-0.30505	1.3635
blushing	10.71403	8.65047	18.8560
cheeky	-0.39960	-0.47910	-1.3950
compassionate	-0.34761	-0.41678	-0.3895
concerned	-0.37162	-0.44555	-1.2973
content	-0.93598	0.66001	4.9955
crying	-1.07544	-1.28941	-3.7544
cute	-0.39960	1.60816	5.0566
depressed	-0.39960	-0.47910	-1.3950
devastated	-0.45037	-0.53997	-1.5723
disappointed	-1.14351	-1.37102	-3.9921
disbelief	-0.56892	-0.68211	-1.9861
discouraged	-0.50030	-0.59984	-1.7466
disgusted	-0.28635	-0.34332	-0.9997
disinterested	-0.34761	-0.41678	-1.2135
embarrassed	0.55456	2.37863	5.6321
emotional	-0.38305	-0.45926	-1.3373
excited	1.18880	-0.68211	-0.4757
exhausted	-0.30813	-0.36943	-1.0757
expression of emotion	-0.32847	-0.39382	-1.1467
flirting	-0.62667	1.91051	0.0977
friendly	-0.50460	-0.60499	6.7535
frustrated	-0.65033	-0.77972	-2.2703
funny	-0.97217	-1.16559	-2.2153
happy	1.57010	5.46775	14.7105
hopeless	-0.34135	-0.40927	-1.1917
humorous	-0.34761	-0.41678	-1.2135

hurt	-0.35377	-0.42415	-1.2350
in agreement	-0.50886	-0.61010	-1.2135
in love	-0.84128	-1.00866	-1.9155
irritated	-0.55742	-0.66833	-1.9460
joking	-0.71963	-0.86281	-2.1142
joyful	5.01028	1.79886	1.0151
kiss	-0.86904	-1.04194	-3.0339
laughing	-1.03245	-0.43002	-2.2171
laughing till you cry	-0.34761	-0.41678	-1.2135
like	1.99138	-0.49814	0.6178
love	-0.41825	-1.47563	-3.5984
nervous	-0.43576	-0.52246	-1.5213
neverminded	-0.34135	-0.40927	-1.1917
oops	-0.37738	-0.45246	-1.3174
playful	-0.37162	-0.44555	-1.2973
pleased	6.13632	1.28686	4.7047
ponder	-0.30104	-0.36094	-1.0510
questioning	-0.33497	-0.40162	-1.1694
relieved	-0.77172	-0.92526	-2.6941
remorse	-0.47825	-0.57340	-1.6696
romance	-0.29379	-0.35224	-1.0256
sad	-1.84993	-2.21799	-6.4582
sarcastic	-0.41025	-0.49188	-1.4322
scared	-0.39960	-0.47910	-1.3950
sceptical	-0.36576	-0.43853	-1.2769
shocked	-0.94516	-1.13321	-3.2996
shy	2.90907	5.23140	18.1175
smiling	4.61487	2.45896	6.2251
smirking	-0.32183	-0.38586	-1.1235
smuggish	-0.29379	-0.35224	0.9244
stressed	-0.35982	-0.43140	-1.2561
surprised	-0.74613	-0.89458	-2.6048
sympathetic	-0.44555	-0.53420	-1.5554
teasing	-0.31505	-0.37774	-1.0999
thankful	1.32198	2.45749	3.4498
thinking	-0.34135	-0.40927	-1.1917
tired	-0.60921	-0.73042	-2.1268
uncertain	-0.58019	-0.69562	-2.0255
unhappy	-0.84384	-1.01173	-2.9459
unimpressed	-0.37738	-0.45246	-1.3174
upset	-0.67315	-0.80708	-2.3500
winking	-0.74613	-0.89458	-2.6048
worried	-0.49160	-0.58941	-1.7162

EMOJI 16**DESCRIPTIVE LABELS**

Label	African	Coloured	White
appreciative			x
cheeky			x
cute			x
excited			x
flirting		x	x
friendly	x	x	x
funny			x
happy	x	x	
humorous			x
in agreement	x	x	x
joking		x	x
joyful		x	
like			x
playful		x	x
questioning			x
sarcastic		x	x
sceptical			x
sympathetic			x
teasing		x	x
thankful		x	x
winking	x	x	x

STANDARDISED RESIDUALS

Label	African	Coloured	White
affection	-0.29970	-0.56511	-2.05947
amazed	-0.16341	-0.30813	-1.12292
amused	-0.28729	-0.54172	-1.46768
angry	-0.27653	-0.52142	-1.90024
annoyed	-0.34489	-0.65033	-2.37002
anxious	-0.18435	-0.34761	-1.26683
appreciative	-0.18103	-0.34135	1.16757
astonished	-0.18103	-0.34135	-1.24400
awkward	-0.13493	-0.25443	-0.92722
blushing	-0.41515	-0.78282	-2.85288
cheeky	-0.21192	-0.39960	13.65090
compassionate	-0.18435	-0.34761	-0.47746
concerned	-0.19708	-0.37162	-1.35430
content	-0.49638	-0.93598	-1.65205
crying	-0.57034	-1.07544	-3.91928
cute	-0.21192	-0.39960	2.66387
depressed	-0.21192	-0.39960	-1.45626

devastated	-0.23884	-0.45037	-1.64130
disappointed	-0.60644	-1.14351	-4.16735
disbelief	-0.30171	-0.56892	-1.10871
discouraged	-0.26533	-0.50030	-1.82328
disgusted	-0.15186	-0.28635	-1.04356
disinterested	-0.18435	-0.34761	-1.26683
embarrassed	-0.40329	-0.76045	-2.77135
emotional	-0.20314	-0.38305	-1.39598
excited	-0.30171	-0.56892	0.82055
exhausted	-0.16341	-0.30813	-1.12292
expression of emotion	-0.17419	-0.32847	-1.19704
flirting	-0.33234	4.16052	11.72788
friendly	3.46927	1.47718	3.05523
frustrated	-0.34489	-0.65033	-2.37002
funny	-0.51557	-0.97217	0.12638
happy	0.34932	1.57010	-1.96654
hopeless	-0.18103	-0.34135	-1.24400
humorous	-0.18435	-0.34761	7.41627
hurt	-0.18761	-0.35377	-1.28925
in agreement	3.43574	7.35191	9.46968
in love	-0.44616	-0.84128	-3.06592
irritated	-0.29562	-0.55742	-2.03145
joking	-0.38164	0.66997	32.45731
joyful	-0.19708	2.31933	-1.35430
kiss	-0.46088	-0.86904	-3.16707
laughing	-0.54754	-1.03245	-3.23105
laughing till you cry	-0.18435	-0.34761	-1.26683
like	-0.22034	-0.41548	3.10891
love	-0.65271	-1.23076	-4.48531
nervous	-0.23110	-0.43576	-0.95835
neverminded	-0.18103	-0.34135	-1.24400
oops	-0.20013	-0.37738	-1.37529
playful	-0.19708	2.31933	13.41351
pleased	-0.24137	-0.45513	-1.05577
ponder	-0.15965	-0.30104	-1.09711
questioning	-0.17764	-0.33497	0.41759
relieved	-0.40927	-0.77172	-2.81241
remorse	-0.25363	-0.47825	-1.16917
romance	-0.15580	-0.29379	-1.07067
sad	-0.98108	-1.84993	-6.74179
sarcastic	-0.21757	2.02727	3.85570
scared	-0.21192	-0.39960	-1.45626
sceptical	-0.19398	-0.36576	0.16744
shocked	-0.50125	-0.94516	-3.44448
shy	-0.42811	-0.80725	-2.94190
smiling	-0.39569	-0.74613	-2.35139
smirking	-0.17068	-0.32183	-1.17286

smuggish	-0.15580	-0.29379	-1.07067
stressed	-0.19082	-0.35982	-1.31129
surprised	-0.39569	-0.74613	-2.35139
sympathetic	-0.23629	-0.44555	0.22384
teasing	-0.16708	2.85902	9.30333
thankful	-0.28517	1.32198	0.08155
thinking	-0.18103	-0.34135	-1.24400
tired	-0.32308	-0.60921	-2.22018
uncertain	-0.30769	-0.58019	-1.16850
unhappy	-0.44752	-0.84384	-3.07525
unimpressed	-0.20013	-0.37738	-1.37529
upset	-0.35699	-0.67315	-2.45320
winking	14.76750	15.33687	34.42476
worried	-0.26071	-0.49160	-1.79157

ADDENDUM I**EMOJI LABELS AND STANDARDISED RESIDUALS FOR INDUSTRIES OF
WORK****EMOJI 1****DESCRIPTIVE LABELS**

Label	Secondary	Tertiary
anxious		x
compassionate	x	x
concerned		x
crying	x	x
devastated		x
disappointed	x	x
discouraged		x
emotional	x	x
exhausted	x	
hurt		x
remorse	x	x
sad	x	x
sympathetic		x
unhappy		x
upset	x	x
worried		x

STANDARDISED RESIDUALS

Label	Secondary	Tertiary
affection	-0.54865	-2.0223
amazed	-0.29562	-1.0897
amused	-0.47259	-1.7419
angry	-0.49271	-1.2655
annoyed	-0.63097	-2.3257
anxious	-0.32682	0.4556
appreciative	-0.30372	-1.1195
astonished	-0.34136	-1.2582
awkward	-0.26987	-0.9947
blushing	-0.78215	-2.8830
cheeky	-0.36871	-1.3590
compassionate	2.52190	1.8307
concerned	-0.34840	3.3881
content	-0.87029	-3.2079
crying	1.86030	11.6346
cute	-0.35530	-1.3096

depressed	-0.41807	-0.2431
devastated	-0.43515	2.7604
disappointed	0.71946	1.1289
disbelief	-0.54865	-2.0223
discouraged	-0.46742	0.0184
disgusted	-0.29562	-1.0897
disinterested	-0.32682	-1.2047
embarrassed	-0.73080	-2.6937
emotional	2.23856	4.9911
excited	-0.53973	-1.9894
exhausted	3.08706	-1.0897
expression of emotion	-0.34136	-1.2582
flirting	-0.59940	-2.2094
friendly	-0.46742	-1.7229
frustrated	-0.58713	-1.2400
funny	-0.89504	-3.2991
happy	-1.50739	-5.5562
hopeless	-0.34136	-1.2582
humorous	-0.31161	-1.1486
hurt	-0.32682	4.6061
in agreement	-0.50727	-1.8698
in love	-0.78524	-2.8944
irritated	-0.54421	-2.0059
joking	-0.66470	-2.4500
joyful	-0.35530	-1.3096
kiss	-0.84481	-3.1139
laughing	-0.97052	-3.5773
laughing till you cry	-0.30372	-1.1195
like	-0.36871	-1.3590
love	-1.15339	-4.2514
nervous	-0.41223	-1.5194
neverminded	-0.31161	-1.1486
oops	-0.36871	-1.3590
playful	-0.35530	-1.3096
pleased	-0.41807	-1.5410
ponder	-0.29562	-1.0897
questioning	-0.31161	-1.1486
relieved	-0.74070	-2.7302
remorse	8.51915	0.7878
romance	-0.31931	-1.1770
sad	7.15615	24.6513
sarcastic	-0.40028	-1.4754
scared	-0.37523	-0.6601
sceptical	-0.34840	-1.2842
shocked	-0.94002	-1.4446
shy	-0.76330	-2.8135
smiling	-0.68979	-2.5425
smirking	-0.32682	-1.2047

smuggish	-0.24138	-0.8897
stressed	-0.33417	-1.2317
surprised	-0.73080	-1.5800
sympathetic	-0.42384	6.7590
teasing	-0.26987	-0.9947
thankful	-0.49761	-1.8342
thinking	-0.31931	-1.1770
tired	-0.60344	-1.7747
uncertain	-0.53973	-1.9894
unhappy	-0.76330	4.2952
unimpressed	-0.34840	-0.5055
upset	0.88872	1.3613
winking	-0.71400	-2.6318
worried	-0.43515	0.8900

EMOJI 2**DESCRIPTIVE LABELS**

Label	Secondary	Tertiary
affection	x	x
appreciative	x	x
cheeky		x
compassionate	x	x
cute		x
flirting		x
funny	x	
in agreement		x
in love	x	
kiss	x	x
like		x
love	x	x
playful		x
romance		x
sympathetic		x
thankful	x	x

STANDARDISED RESIDUALS

Label	Secondary	Tertiary
affection	5.39782	16.54118
amazed	-0.35577	-1.12771
amused	-0.56873	-1.80276
angry	-0.59294	-1.87951
annoyed	-0.75934	-2.40695
anxious	-0.39331	-1.24673
appreciative	2.37035	5.74622

astonished	-0.41080	-1.30216
awkward	-0.32477	-1.02945
blushing	-0.94127	-2.98363
cheeky	-0.44372	0.72646
compassionate	4.35087	6.94779
concerned	-0.41927	-1.32902
content	-1.04735	-3.31988
crying	-1.24659	-3.95145
cute	-0.42758	2.33379
depressed	-0.50313	-1.59482
devastated	-0.52367	-1.65994
disappointed	-1.32321	-4.19430
disbelief	-0.66027	-2.09294
discouraged	-0.56252	-1.78306
disgusted	-0.35577	-1.12771
disinterested	-0.39331	-1.24673
embarrassed	-0.87948	-2.78777
emotional	-0.45929	-1.45586
excited	-0.64954	-2.05890
exhausted	-0.35577	-1.12771
expression of emotion	-0.41080	-1.30216
flirting	-0.72135	6.89772
friendly	-0.56252	-0.66139
frustrated	-0.70657	-2.23970
funny	0.77964	-1.94987
happy	-1.81406	-4.01113
hopeless	-0.41080	-1.30216
humorous	-0.37501	-1.18871
hurt	-0.39331	-1.24673
in agreement	-0.61047	1.68235
in love	0.11321	-0.65857
irritated	-0.65493	-2.07599
joking	-0.79992	-0.56368
joyful	-0.42758	-1.35533
kiss	15.70430	37.11627
laughing	-1.16796	-3.70221
laughing till you cry	-0.36551	-1.15861
like	-0.44372	0.72646
love	7.25721	22.41943
nervous	-0.49609	-1.57251
neverminded	-0.37501	-1.18871
oops	-0.44372	-1.40650
playful	-0.42758	0.12032
pleased	-0.50313	-1.59482
ponder	-0.35577	-1.12771
questioning	-0.37501	-1.18871
relieved	-0.89139	-2.82553
remorse	-0.53693	-1.70197

romance	-0.38427	7.81267
sad	-2.15264	-6.82343
sarcastic	-0.48171	-1.52692
scared	-0.45157	-1.43139
sceptical	-0.41927	-1.32902
shocked	-1.13126	-3.58588
shy	-0.91858	-2.56829
smiling	-0.83012	-2.63132
smirking	-0.39331	-1.24673
smuggish	-0.29048	-0.92077
stressed	-0.40215	-1.27475
surprised	-0.87948	-2.78777
sympathetic	-0.51007	1.47568
teasing	-0.32477	-1.02945
thankful	2.74093	6.53076
thinking	-0.38427	-1.21806
tired	-0.72620	-2.30192
uncertain	-0.64954	-2.05890
unhappy	-0.91858	-2.91173
unimpressed	-0.41927	-1.32902
upset	-0.78215	-2.47925
winking	-0.85926	-0.15361
worried	-0.52367	-1.65994

EMOJI 3**DESCRIPTIVE LABELS**

Label	Secondary	Tertiary
amused	x	x
awkward		x
crying	x	
funny	x	x
happy	x	x
humorous	x	x
joyful	x	x
laughing	x	x
laughing till you cry		x
teasing		x

STANDARDISED RESIDUALS

Label	Secondary	Tertiary
affection	-0.46688	-1.8620
amazed	-0.25156	-1.0033
amused	7.05768	20.2191
angry	-0.41927	-1.6721
annoyed	-0.53693	-2.1413

anxious	-0.27812	-1.1091
appreciative	-0.25846	-1.0308
astonished	-0.29048	-1.1585
awkward	-0.22965	0.1760
blushing	-0.66558	-2.6544
cheeky	-0.31376	-1.2513
compassionate	-0.29647	-1.1824
concerned	-0.29647	-1.1824
content	-0.74059	-2.6149
crying	0.25299	-3.2309
cute	-0.30234	-1.2058
depressed	-0.35577	-1.4188
devastated	-0.37029	-1.4768
disappointed	-0.93565	-3.7314
disbelief	-0.46688	-0.2508
discouraged	-0.39776	-1.5863
disgusted	-0.25156	-1.0033
disinterested	-0.27812	-1.1091
embarrassed	-0.62188	-2.4801
emotional	-0.32477	-1.2952
excited	-0.45929	-1.2857
exhausted	-0.25156	-1.0033
expression of emotion	-0.29048	-1.1585
flirting	-0.51007	-2.0342
friendly	-0.39776	-1.5863
frustrated	-0.49962	-1.9925
funny	4.49011	28.8964
happy	0.27644	0.5533
hopeless	-0.29048	-1.1585
humorous	3.50596	0.8337
hurt	-0.27812	-1.1091
in agreement	-0.43167	-1.7215
in love	-0.66821	-2.6649
irritated	-0.46310	-1.8469
joking	-0.56563	-0.0393
joyful	3.00516	4.5997
kiss	-0.71891	-2.8671
laughing	10.07166	34.9617
laughing till you cry	-0.25846	14.4919
like	-0.31376	-1.2513
love	-0.98150	-3.6588
nervous	-0.35079	-1.3990
neverminded	-0.26517	-1.0575
oops	-0.31376	-1.2513
playful	-0.30234	-0.3764
pleased	-0.35577	-0.7140
ponder	-0.25156	-1.0033
questioning	-0.26517	-1.0575

relieved	-0.63031	-2.5137
remorse	-0.37967	-1.5142
romance	-0.27172	-1.0836
sad	-1.52215	-6.0704
sarcastic	-0.34062	-1.3584
scared	-0.31931	-1.2734
sceptical	-0.29647	-1.1824
shocked	-0.79992	-3.1902
shy	-0.64954	-2.5904
smiling	-0.58698	-1.4866
smirking	-0.27812	-1.1091
smuggish	-0.20540	-0.8192
stressed	-0.28437	-1.1341
surprised	-0.62188	-2.4801
sympathetic	-0.36067	-0.7432
teasing	-0.22965	0.1760
thankful	-0.42345	-1.6887
thinking	-0.27172	-1.0836
tired	-0.51350	-2.0479
uncertain	-0.45929	-1.8317
unhappy	-0.64954	-2.5904
unimpressed	-0.29647	-1.1824
unsure about label	-0.59294	-1.0960
upset	-0.55306	-2.2057
winking	-0.60759	-2.4231
worried	-0.37029	-1.4768

EMOJI 4**DESCRIPTIVE LABELS**

Label	Secondary	Tertiary
amazed	x	x
anxious		x
astonished	x	x
blushing		x
concerned		x
disbelief		x
embarrassed		x
oops		x
questioning	x	x
remorse		x
scared		x
shocked	x	x
shy		x
stressed		x
surprised	x	x
tired	x	

uncertain		x
worried		x

STANDARDISED RESIDUALS

Label	Secondary	Tertiary
affection	-0.49912	-2.00426
amazed	3.44945	3.55000
amused	-0.42992	-1.72639
angry	-0.44822	-1.79988
annoyed	-0.57401	-1.87113
anxious	-0.29732	2.99402
appreciative	-0.27630	-1.10952
astonished	9.35011	9.17806
awkward	-0.24550	-0.98584
blushing	-0.71153	0.99266
cheeky	-0.33542	-1.34691
compassionate	-0.31694	-1.27271
concerned	-0.31694	4.22737
content	-0.79172	-3.17923
crying	-0.94234	-3.78404
cute	-0.32322	-1.29791
depressed	-0.38033	-1.52725
devastated	-0.39586	-1.58961
disappointed	-1.00025	-3.76764
disbelief	-0.49912	10.96807
discouraged	-0.42522	-1.70752
disgusted	-0.26893	-1.07993
disinterested	-0.29732	-1.19391
embarrassed	-0.66482	16.80850
emotional	-0.34719	-0.67692
excited	-0.49100	-1.97167
exhausted	-0.26893	-1.07993
expression of emotion	-0.31054	-0.44507
flirting	-0.54529	-2.18965
friendly	-0.42522	-1.70752
frustrated	-0.53412	-2.14481
funny	-0.81424	-3.26965
happy	-1.37130	-5.50658
hopeless	-0.31054	-1.24700
humorous	-0.28348	-1.13835
hurt	-0.29732	-1.19391
in agreement	-0.46147	-1.85309
in love	-0.71435	-2.86854
irritated	-0.49508	-1.98804
joking	-0.60469	-2.42817
joyful	-0.32322	-1.29791
kiss	-0.76854	-3.08616

laughing	-0.88290	-3.54536
laughing till you cry	-0.27630	-1.10952
like	-0.33542	-1.34691
love	-1.04926	-4.21342
nervous	-0.37501	-0.84183
neverminded	-0.28348	-1.13835
oops	-0.33542	3.85018
playful	-0.32322	-1.29791
pleased	-0.38033	-1.52725
ponder	-0.26893	-1.07993
questioning	3.24409	4.13246
relieved	-0.67383	-2.70582
remorse	-0.40588	0.21078
romance	-0.29048	-1.16646
sad	-1.62724	-6.07523
sarcastic	-0.36414	-1.46223
scared	-0.34136	8.11311
sceptical	-0.31694	-1.27271
shocked	13.17738	34.71445
shy	-0.69438	0.43933
smiling	-0.62751	-2.51984
smirking	-0.29732	-1.19391
smuggish	-0.21958	-0.88176
stressed	-0.30400	0.41761
surprised	8.36014	23.17635
sympathetic	-0.38558	-0.90246
teasing	-0.24550	-0.98584
thankful	-0.45268	-1.81779
thinking	-0.29048	-1.16646
tired	1.27267	-2.20440
uncertain	-0.49100	0.56424
unhappy	-0.69438	-2.78837
unimpressed	-0.31694	-0.48698
upset	-0.59125	-2.37421
winking	-0.64954	-2.60828
worried	-0.39586	5.33031

EMOJI 5**DESCRIPTIVE LABELS**

Label	Secondary	Tertiary
amazed		x
angry	x	x
annoyed	x	x
anxious		x
astonished		x
awkward		x

concerned		x
disbelief	x	x
disgusted		x
embarrassed		x
excited	x	x
frustrated	x	x
irritated		x
nervous		x
oops	x	x
questioning		x
remorse	x	x
sarcastic		x
scared		x
shocked		x
smiling	x	x
stressed		x
surprised	x	x
unhappy	x	
uncertain		x
worried		x

STANDARDISED RESIDUALS

Label	Secondary	Tertiary
affection	-0.52940	-1.72299
amazed	-0.28525	0.14878
amused	-0.45600	-1.48411
angry	1.62802	8.79337
annoyed	1.03368	1.04651
anxious	-0.31535	9.69117
appreciative	-0.29306	-0.95381
astonished	-0.32938	0.79369
awkward	-0.26039	12.13208
blushing	-0.75469	-2.45625
cheeky	-0.35577	-1.15789
compassionate	-0.33617	-1.09410
concerned	-0.33617	2.56188
content	-0.83975	-2.73306
crying	-0.99950	-3.25299
cute	-0.34282	-1.11577
depressed	-0.40340	-1.31292
devastated	-0.41987	-1.36653
disappointed	-1.06093	-3.16331
disbelief	1.35954	0.59856
discouraged	-0.45102	-1.46789
disgusted	-0.28525	0.14878
disinterested	-0.31535	-1.02636
embarrassed	-0.70515	0.75510

emotional	-0.36825	-1.19853
excited	9.08004	15.41446
exhausted	-0.28525	-0.92837
expression of emotion	-0.32938	-0.13915
flirting	-0.57836	-1.88236
friendly	-0.45102	-1.46789
frustrated	4.72897	6.83388
funny	-0.86363	-2.45502
happy	-0.76695	-2.41008
hopeless	-0.32938	-1.07199
humorous	-0.30068	-0.97859
hurt	-0.31535	-1.02636
in agreement	-0.48947	-1.59303
in love	-0.75768	-2.46597
irritated	-0.52511	2.97196
joking	-0.64137	-2.08741
joyful	-0.34282	-1.11577
kiss	-0.81516	-2.65305
laughing	-0.93645	-2.71970
laughing till you cry	-0.29306	-0.95381
like	-0.35577	-1.15789
love	-1.11291	-3.62211
nervous	-0.39776	15.69969
neverminded	-0.30068	-0.97859
oops	13.69841	8.34219
playful	-0.34282	-1.11577
pleased	-0.40340	-1.31292
ponder	-0.28525	-0.92837
questioning	-0.30068	1.06516
relieved	-0.71470	-2.32609
remorse	4.21521	0.74000
romance	-0.30810	-1.00276
sad	-1.72595	-5.26128
sarcastic	-0.38623	2.72062
scared	-0.36206	11.55095
sceptical	-0.33617	-1.09410
shocked	-0.90703	0.09670
shy	-0.73651	-2.39705
smiling	3.84179	7.98980
smirking	-0.31535	-1.02636
smuggish	-0.23290	-0.75801
stressed	-0.32244	8.47962
surprised	4.96740	3.80521
sympathetic	-0.40897	-1.33103
teasing	-0.26039	-0.84749
thankful	-0.48014	-1.56269
thinking	-0.30810	-1.00276
tired	-0.58226	-1.89504

uncertain	-0.52079	6.56475
unhappy	0.62126	-1.14551
unimpressed	-0.33617	-1.09410
upset	-0.62711	-0.08121
winking	-0.68894	-2.24224
worried	-0.41987	6.68306

EMOJI 6**DESCRIPTIVE LABELS**

Label	Secondary	Tertiary
amused	x	
angry		x
crying	x	x
depressed		x
devastated	x	x
disbelief	x	
emotional	x	x
frustrated		x
hopeless		x
hurt		x
remorse	x	
sad	x	x
sympathetic		x
unhappy		x
upset		x

STANDARDISED RESIDUALS

Label	Secondary	Tertiary
affection	-0.61973	-2.0579
amazed	-0.33392	-1.1088
amused	1.33953	-1.7726
angry	-0.55653	0.8575
annoyed	-0.71271	-2.3667
anxious	-0.36916	-0.4101
appreciative	-0.34307	-1.1392
astonished	-0.38558	-1.2804
awkward	-0.30482	-1.0122
blushing	-0.88347	-2.9337
cheeky	-0.41647	-1.3830
compassionate	-0.39353	-0.5415
concerned	-0.39353	-1.3068
content	-0.98303	-3.2643
crying	13.35938	28.8016
cute	-0.40132	-0.5823

depressed	-0.47223	4.8088
devastated	5.61206	14.2975
disappointed	-1.24195	-0.9720
disbelief	0.99389	-1.5720
discouraged	-0.52797	-1.7532
disgusted	-0.33392	-1.1088
disinterested	-0.36916	-1.2259
embarrassed	-0.82547	-2.3763
emotional	4.20834	4.8556
excited	-0.60965	-2.0245
exhausted	-0.33392	-0.2070
expression of emotion	-0.38558	-1.2804
flirting	-0.67705	-2.2483
friendly	-0.52797	-1.7532
frustrated	-0.66318	0.5223
funny	-1.01099	-3.0593
happy	-1.70266	-5.4771
hopeless	-0.38558	0.2817
humorous	-0.35198	-1.1688
hurt	-0.36916	5.3001
in agreement	-0.57298	-1.9027
in love	-0.88696	-2.9453
irritated	-0.61471	-1.0615
joking	-0.75080	-2.4932
joyful	-0.40132	-0.5823
kiss	-0.95425	-3.1688
laughing	-1.09624	-3.3656
laughing till you cry	-0.34307	-1.1392
like	-0.41647	-1.3830
love	-1.30281	-4.3262
nervous	-0.46563	-1.5462
neverminded	-0.35198	-1.1688
oops	-0.41647	-1.3830
playful	-0.40132	-1.3327
pleased	-0.47223	-1.5681
ponder	-0.33392	-1.1088
questioning	-0.35198	-1.1688
relieved	-0.83665	-2.7783
remorse	3.46460	-1.6735
romance	-0.36067	-1.1977
sad	3.42390	14.4554
sarcastic	-0.45213	-1.5014
scared	-0.42384	-1.4074
sceptical	-0.39353	-1.3068
shocked	-1.06179	-3.2423
shy	-0.86217	-2.8630
smiling	-0.77914	-2.5873
smirking	-0.36916	-1.2259

smuggish	-0.27264	-0.9054
stressed	-0.37746	-0.4556
surprised	-0.82547	-2.7411
sympathetic	-0.47875	0.9263
teasing	-0.30482	-1.0122
thankful	-0.56207	-1.8665
thinking	-0.36067	-1.1977
tired	-0.68161	-2.2634
uncertain	-0.60965	-2.0245
unhappy	-0.86217	2.0269
unimpressed	-0.39353	-1.3068
upset	-0.73412	7.8175
winking	-0.80649	-2.6781
worried	-0.49152	-1.6322

EMOJI 7**DESCRIPTIVE LABELS**

Label	Secondary	Tertiary
concerned		x
depressed		x
disappointed	x	x
discouraged		x
disinterested		x
emotional		x
exhausted		x
expression of emotion		x
hopeless	x	x
hurt		x
remorse	x	x
sad	x	x
shy	x	
sympathetic	x	x
thinking		x
tired	x	x
unhappy	x	x
unimpressed		x
upset		x
worried		x

STANDARDISED RESIDUALS

Label	Secondary	Tertiary
affection	-0.5294	-2.0274
amazed	-0.2852	-1.0924
amused	-0.4560	-1.7463

angry	-0.4754	-1.2714
annoyed	-0.6088	-1.9027
anxious	-0.3154	-1.2077
appreciative	-0.2931	-1.1223
astonished	-0.3294	-1.2614
awkward	-0.2604	-0.9972
blushing	-0.7547	-2.8903
cheeky	-0.3558	-1.3625
compassionate	-0.3362	-0.5107
concerned	-0.3362	1.8196
content	-0.8397	-3.2160
crying	-0.9995	-3.8278
cute	-0.3428	-1.3129
depressed	-0.4034	9.4590
devastated	-0.4199	-0.9861
disappointed	6.4797	20.5491
disbelief	-0.5294	-1.5342
discouraged	-0.4510	11.0097
disgusted	-0.2852	-1.0924
disinterested	-0.3154	1.2763
embarrassed	-0.7052	-2.3302
emotional	-0.3683	0.7169
excited	-0.5208	-1.9945
exhausted	-0.2852	0.7384
expression of emotion	-0.3294	1.9096
flirting	-0.5784	-2.2150
friendly	-0.4510	-1.7273
frustrated	-0.5665	-1.2478
funny	-0.8636	-3.3075
happy	-1.4545	-5.3907
hopeless	2.7067	0.3241
humorous	-0.3007	-1.1515
hurt	-0.3154	1.2763
in agreement	-0.4895	-1.3410
in love	-0.7577	-2.9017
irritated	-0.5251	-2.0110
joking	-0.6414	-2.4562
joyful	-0.3428	-1.3129
kiss	-0.8152	-3.1218
laughing	-0.9365	-3.5863
laughing till you cry	-0.2931	-1.1223
like	-0.3558	-1.3625
love	-1.1129	-4.2621
nervous	-0.3978	-1.5233
neverminded	-0.3007	-1.1515
oops	-0.3558	-1.3625
playful	-0.3428	-1.3129
pleased	-0.4034	-1.5449

ponder	-0.2852	-1.0924
questioning	-0.3007	-1.1515
relieved	-0.7147	-2.7371
remorse	1.8924	3.2036
romance	-0.3081	-1.1799
sad	5.2267	16.0834
sarcastic	-0.3862	-1.4791
scared	-0.3621	-1.3866
sceptical	-0.3362	-1.2874
shocked	-0.9070	-3.1858
shy	0.6213	-2.4661
smiling	-0.6656	-2.5490
smirking	-0.3154	-1.2077
smuggish	-0.2329	-0.8920
stressed	-0.3224	-0.4250
surprised	-0.7052	-2.3302
sympathetic	2.0362	2.2647
teasing	-0.2604	-0.9972
thankful	-0.4801	-1.8388
thinking	-0.3081	0.5151
tired	1.1352	4.9454
uncertain	-0.5208	-1.9945
unhappy	1.9790	2.8519
unimpressed	-0.3362	1.0428
upset	-0.6271	3.4277
winking	-0.6889	-2.6384
worried	-0.4199	0.2577

EMOJI 8**DESCRIPTIVE LABELS**

Label	Secondary	Tertiary
content	x	x
disappointed		x
discouraged		x
disinterested		x
expression of emotion	x	
friendly	x	x
happy	x	x
in agreement		x
joyful		x
pleased		x
relieved	x	x
remorse		x
shy		x
smirking		x
smuggish		x

thankful	x	x
thinking		x
tired		x

STANDARDISED RESIDUALS

Label	Secondary	Tertiary
affection	-0.42007	-1.6301
amazed	-0.22634	-0.8783
amused	-0.36183	-1.4041
angry	-0.37724	-1.4639
annoyed	-0.48310	-1.8747
anxious	-0.25023	-0.9710
appreciative	-0.23254	-0.9024
astonished	-0.26136	-1.0142
awkward	-0.20662	-0.8018
blushing	-0.59884	-1.0329
cheeky	-0.28230	-1.0955
compassionate	-0.26675	-1.0351
concerned	-0.26675	-1.0351
content	11.33970	25.6459
crying	-0.79309	-3.0777
cute	-0.27203	-1.0556
depressed	-0.32010	-1.2422
devastated	-0.33317	-1.2929
disappointed	-0.84184	0.7126
disbelief	-0.42007	-1.6301
discouraged	-0.35788	1.4915
disgusted	-0.22634	-0.8783
disinterested	-0.25023	0.0588
embarrassed	-0.55953	-1.2502
emotional	-0.29221	-0.2520
excited	-0.41324	-1.6036
exhausted	-0.22634	-0.8783
expression of emotion	3.56483	-0.0282
flirting	-0.45893	-1.7809
friendly	2.43637	0.7714
frustrated	-0.44953	-1.7444
funny	-0.68528	-2.2832
happy	1.44526	7.1320
hopeless	-0.26136	-0.0282
humorous	-0.23859	-0.9258
hurt	-0.25023	-0.9710
in agreement	-0.38839	0.4833
in love	-0.60122	-1.9044
irritated	-0.41667	-1.6169
joking	-0.50892	-1.9749
joyful	-0.27203	0.8390

kiss	-0.64683	-2.5101
laughing	-0.74307	-2.8835
laughing till you cry	-0.23254	-0.9024
like	-0.28230	-0.1826
love	-0.88309	-3.4269
nervous	-0.31562	-1.2248
neverminded	-0.23859	-0.9258
oops	-0.28230	-1.0955
playful	-0.27203	-1.0556
pleased	-0.32010	10.0286
ponder	-0.22634	-0.8783
questioning	-0.23859	-0.9258
relieved	1.19622	0.5257
remorse	-0.34160	2.4462
romance	-0.24448	-0.9487
sad	-0.63935	-1.9276
sarcastic	-0.30647	-0.3484
scared	-0.28729	-1.1149
sceptical	-0.26675	-1.0351
shocked	-0.71972	-2.7929
shy	-0.58441	4.3463
smiling	-0.52813	-0.0977
smirking	-0.25023	0.0588
smuggish	-0.18481	2.0716
stressed	-0.25585	-0.9929
surprised	-0.55953	-1.7107
sympathetic	-0.32451	-0.4652
teasing	-0.20662	-0.8018
thankful	2.24375	1.2271
thinking	-0.24448	0.1054
tired	-0.46202	3.7847
uncertain	-0.41324	-0.9800
unhappy	-0.58441	-1.3860
unimpressed	-0.26675	-1.0351
upset	-0.49761	-1.9310
winking	-0.54667	-2.1214
worried	-0.33317	-1.2929

EMOJI 9**DESCRIPTIVE LABELS**

Label	Secondary	Tertiary
affection		x
amazed	x	x
appreciative		x
astonished		x
compassionate		x

cute		x
excited	x	x
happy	x	x
in love	x	x
like		x
love	x	x
romance		x
smirking		x
thankful		x

STANDARDISED RESIDUALS

Label	Secondary	Tertiary
affection	-0.49912	6.12333
amazed	3.44945	5.51156
amused	-0.42992	-1.70167
angry	-0.44822	-1.77412
annoyed	-0.57401	-1.83184
anxious	-0.29732	-1.17682
appreciative	-0.27630	3.47825
astonished	-0.31054	2.02515
awkward	-0.24550	-0.97172
blushing	-0.71153	-2.46125
cheeky	-0.33542	-1.32763
compassionate	-0.31694	1.13692
concerned	-0.31694	-1.25449
content	-0.79172	-3.13372
crying	-0.94234	-3.72987
cute	-0.32322	1.84729
depressed	-0.38033	-1.50539
devastated	-0.39586	-1.56686
disappointed	-1.00025	-3.95911
disbelief	-0.49912	-1.97557
discouraged	-0.42522	-1.68308
disgusted	-0.26893	-1.06447
disinterested	-0.29732	-1.17682
embarrassed	-0.66482	-2.63144
emotional	-0.34719	-1.37423
excited	1.54564	4.23114
exhausted	-0.26893	-1.06447
expression of emotion	-0.31054	-1.22915
flirting	-0.54529	-1.69498
friendly	-0.42522	-1.68308
frustrated	-0.53412	-2.11411
funny	-0.81424	-2.29199
happy	1.54564	1.94176
hopeless	-0.31054	-1.22915
humorous	-0.28348	-1.12205

hurt	-0.29732	-1.17682
in agreement	-0.46147	-0.73162
in love	10.48464	34.30806
irritated	-0.49508	-1.95958
joking	-0.60469	-2.39342
joyful	-0.32322	-1.27934
kiss	-0.76854	-3.04198
laughing	-0.88290	-3.20845
laughing till you cry	-0.27630	-1.09364
like	-0.33542	11.47715
love	8.48123	25.70407
nervous	-0.37501	-1.48433
neverminded	-0.28348	-1.12205
oops	-0.33542	-1.32763
playful	-0.32322	-1.27934
pleased	-0.38033	-1.50539
ponder	-0.26893	-1.06447
questioning	-0.28348	-1.12205
relieved	-0.67383	-2.66709
remorse	-0.40588	-1.60653
romance	-0.29048	7.54770
sad	-1.62724	-6.44081
sarcastic	-0.36414	-1.44130
scared	-0.34136	-1.35113
sceptical	-0.31694	-1.25449
shocked	-0.85516	-3.38480
shy	-0.69438	-2.74845
smiling	-0.62751	-1.67854
smirking	-0.29732	0.52268
smuggish	-0.21958	-0.86914
stressed	-0.30400	-1.20327
surprised	-0.66482	-2.63144
sympathetic	-0.38558	-1.52615
teasing	-0.24550	-0.97172
thankful	-0.45268	0.99876
thinking	-0.29048	-1.14976
tired	-0.54896	-2.17284
uncertain	-0.49100	-1.94345
unhappy	-0.69438	-2.74845
unimpressed	-0.31694	-1.25449
upset	-0.59125	-2.34022
winking	-0.64954	-2.57094
worried	-0.39586	-1.56686

EMOJI 10**DESCRIPTIVE LABELS**

Label	Secondary	Tertiary
amused		x
anxious		x
awkward	x	x
embarrassed		x
exhausted		x
expression of emotion	x	x
funny	x	x
happy		x
humorous		x
joking		x
laughing	x	x
laughing till you cry		x
nervous	x	x
oops		x
ponder		x
questioning		x
relieved	x	x
stressed		x
tired		x
uncertain		x
worried		x

STANDARDISED RESIDUALS

Label	Secondary	Tertiary
affection	-0.44410	-1.77638
amazed	-0.23929	-0.95714
amused	-0.38252	0.43056
angry	-0.39881	-1.59524
annoyed	-0.51073	-2.04290
anxious	-0.26454	0.83191
appreciative	-0.24584	-0.98337
astonished	-0.27630	-1.10521
awkward	4.35954	0.27075
blushing	-0.63309	-2.53236
cheeky	-0.29844	-1.19377
compassionate	-0.28200	-1.12800
concerned	-0.28200	-0.24148
content	-0.70444	-2.46286
crying	-0.83845	-3.35380
cute	-0.28759	-1.15034
depressed	-0.33840	-1.35360

devastated	-0.35222	-1.40888
disappointed	-0.88998	-3.55992
disbelief	-0.44410	-0.65050
discouraged	-0.37834	-1.51338
disgusted	-0.23929	-0.95714
disinterested	-0.26454	-1.05816
embarrassed	-0.59153	3.55074
emotional	-0.30892	-1.23567
excited	-0.43687	-1.74750
exhausted	-0.23929	1.13241
expression of emotion	6.96212	4.32360
flirting	-0.48517	-1.94069
friendly	-0.37834	-0.85260
frustrated	-0.47524	-1.90095
funny	0.65584	8.14461
happy	-1.22012	2.08602
hopeless	-0.27630	-1.10521
humorous	-0.25223	3.94689
hurt	-0.26454	-1.05816
in agreement	-0.41060	-1.64240
in love	-0.63560	-2.54239
irritated	-0.44050	-1.19446
joking	-0.53802	0.63589
joyful	-0.28759	-1.15034
kiss	-0.68382	-2.73526
laughing	1.76038	10.86043
laughing till you cry	-0.24584	2.06736
like	-0.29844	-1.19377
love	-0.93359	-3.73436
nervous	5.66031	4.65931
neverminded	-0.25223	-1.00892
oops	-0.29844	0.48160
playful	-0.28759	-0.28104
pleased	-0.33840	-1.35360
ponder	-0.23929	0.08763
questioning	-0.25223	0.97341
relieved	16.07985	37.63237
remorse	-0.36114	-0.75229
romance	-0.25846	-1.03383
sad	-1.44785	-5.79140
sarcastic	-0.32399	-0.52436
scared	-0.30372	-1.21490
sceptical	-0.28200	-1.12800
shocked	-0.76088	-3.04352
shy	-0.61783	-0.85277
smiling	-0.55833	-1.33781
smirking	-0.26454	-1.05816
smuggish	-0.19538	-0.78150

stressed	-0.27049	4.46363
surprised	-0.59153	-1.52086
sympathetic	-0.34307	-1.37228
teasing	-0.21844	-0.87375
thankful	-0.40278	-1.61111
thinking	-0.25846	-1.03383
tired	-0.48844	1.11724
uncertain	-0.43687	0.54149
unhappy	-0.61783	-2.47133
unimpressed	-0.28200	-1.12800
upset	-0.52607	-2.10426
winking	-0.57793	-2.31172
worried	-0.35222	0.01069

EMOJI 11**DESCRIPTIVE LABELS**

Label	Secondary	Tertiary
appreciative		x
blushing	x	x
content	x	x
cute	x	x
embarrassed	x	x
excited		x
friendly	x	x
happy	x	x
in agreement		x
joyful		x
pleased	x	x
shy	x	x
smiling	x	x
smuggish		x
thankful	x	x

STANDARDISED RESIDUALS

Label	Secondary	Tertiary
affection	-1.9756	-0.52940
amazed	-1.0645	-0.28525
amused	-1.1140	-0.45600
angry	-1.7741	-0.47541
annoyed	-2.2720	-0.60883
anxious	-1.1768	-0.31535
appreciative	1.6495	-0.29306
astonished	-1.2291	-0.32938
awkward	-0.9717	-0.26039

blushing	12.0967	3.22043
cheeky	-0.5744	-0.35577
compassionate	-0.4574	-0.33617
concerned	-1.2545	-0.33617
content	8.3542	1.54193
crying	-3.7299	-0.99950
cute	1.8473	2.57412
depressed	-1.5054	-0.40340
devastated	-1.5669	-0.41987
disappointed	-3.9591	-1.06093
disbelief	-1.9756	-0.52940
discouraged	-1.6831	-0.45102
disgusted	-1.0645	-0.28525
disinterested	-1.1768	-0.31535
embarrassed	2.3088	0.71299
emotional	-1.3742	-0.36825
excited	0.1147	-0.52079
exhausted	-1.0645	-0.28525
expression of emotion	-1.2291	-0.32938
flirting	-0.3050	-0.57836
friendly	7.8233	1.76620
frustrated	-2.1141	-0.56652
funny	-1.9817	-0.86363
happy	18.3390	7.48340
hopeless	-1.2291	-0.32938
humorous	-1.1221	-0.30068
hurt	-1.1768	-0.31535
in agreement	3.1007	-0.48947
in love	-2.1201	-0.75768
irritated	-1.9596	-0.52511
joking	-1.5578	-0.64137
joyful	3.4106	-0.34282
kiss	-3.0420	-0.81516
laughing	-3.4946	-0.93645
laughing till you cry	-1.0936	-0.29306
like	-1.3276	-0.35577
love	-2.7084	-1.11291
nervous	-1.4843	-0.39776
neverminded	-1.1221	-0.30068
oops	-0.5744	-0.35577
playful	-1.2793	-0.34282
pleased	5.1374	2.07552
ponder	-1.0645	-0.28525
questioning	-1.1221	-0.30068
relieved	-2.6671	-0.71470
remorse	-0.3616	-0.43050
romance	-1.1498	-0.30810
sad	-6.4408	-1.72595

sarcastic	-1.4413	-0.38623
scared	-1.3511	-0.36206
sceptical	-1.2545	-0.33617
shocked	-3.3848	-0.90703
shy	7.8029	0.62126
smiling	11.6077	3.84179
smirking	-1.1768	-0.31535
smuggish	0.2814	-0.23290
stressed	-1.2033	-0.32244
surprised	-2.6314	-0.70515
sympathetic	-1.5262	-0.40897
teasing	-0.9717	-0.26039
thankful	3.7893	1.60257
thinking	-1.1498	-0.30810
tired	-2.1728	-0.58226
uncertain	-1.9434	-0.52079
unhappy	-2.7485	-0.73651
unimpressed	-1.2545	-0.33617
upset	-2.3402	-0.62711
winking	-2.5709	-0.68894
worried	-1.5669	-0.41987

EMOJI 12**DESCRIPTIVE LABELS**

Label	Secondary	Tertiary
cheeky		x
concerned		x
content	x	
disbelief		x
disinterested		x
expression of emotion		x
flirting	x	x
friendly		x
funny	x	
hopeless		x
humorous		x
in agreement		x
laughing	x	
neverminded	x	x
oops		x
playful		x
ponder		x
questioning		x
sarcastic	x	x
sceptical	x	x
shy		x

smiling		x
smirking	x	x
smuggish		x
surprised		x
teasing		x
thinking	x	x
uncertain		x
unimpressed		x
worried		x

STANDARDISED RESIDUALS

Label	Secondary	Tertiary
affection	-0.39459	-1.60445
amazed	-0.21261	-0.86450
amused	-0.33988	-0.65841
angry	-0.35435	-1.44084
annoyed	-0.45379	-0.21930
anxious	-0.23505	-0.95574
appreciative	-0.21844	-0.88819
astonished	-0.24550	-0.99824
awkward	-0.19409	-0.78918
blushing	-0.56252	-2.28726
cheeky	-0.26517	6.34139
compassionate	-0.25056	-1.01882
concerned	-0.25056	0.94422
content	2.56944	-1.36625
crying	-0.74498	-3.02918
cute	-0.25553	-0.07654
depressed	-0.30068	-1.22259
devastated	-0.31295	-1.27251
disappointed	-0.79077	-2.28234
disbelief	-0.39459	2.13516
discouraged	-0.33617	-0.63531
disgusted	-0.21261	-0.86450
disinterested	-0.23505	3.22948
embarrassed	-0.52559	-1.66918
emotional	-0.27448	-1.11607
excited	-0.38817	-1.57836
exhausted	-0.21261	-0.86450
expression of emotion	-0.24550	1.00528
flirting	4.20834	6.23413
friendly	-0.33617	0.09627
frustrated	-0.42226	-0.55210
funny	0.90978	-1.47124
happy	-0.16169	-3.72755
hopeless	-0.24550	0.00352
humorous	-0.22411	0.18611

hurt	-0.23505	-0.95574
in agreement	-0.36483	4.58358
in love	-0.56474	-2.29631
irritated	-0.39139	-0.33474
joking	-0.47805	-1.42934
joyful	-0.25553	-1.03900
kiss	-0.60759	-2.47052
laughing	0.73469	-2.13343
laughing till you cry	-0.21844	-0.88819
like	-0.26517	-1.07822
love	-0.82952	-3.37291
nervous	-0.29647	-1.20549
neverminded	8.70001	7.86774
oops	-0.26517	0.77668
playful	-0.25553	2.81085
pleased	-0.30068	-1.22259
ponder	-0.21261	18.80001
questioning	-0.22411	2.38086
relieved	-0.53271	-2.16605
remorse	-0.32088	-0.53829
romance	-0.22965	-0.93377
sad	-1.28645	-4.84850
sarcastic	3.18583	9.08113
scared	-0.26987	-1.09731
sceptical	3.74043	9.77793
shocked	-0.67606	-2.38516
shy	-0.54896	0.45588
smiling	-0.49609	0.95729
smirking	4.01936	17.87778
smuggish	-0.17360	10.62779
stressed	-0.24033	-0.97722
surprised	-0.52559	0.20251
sympathetic	-0.30482	-1.23945
teasing	-0.19409	4.27938
thankful	-0.35788	-1.45517
thinking	8.47941	11.91738
tired	-0.43399	-0.63129
uncertain	-0.38817	14.89447
unhappy	-0.54896	-2.23213
unimpressed	-0.25056	3.88879
upset	-0.46742	-1.90059
winking	-0.51350	-1.13010
worried	-0.31295	1.08503

EMOJI 13**DESCRIPTIVE LABELS**

Label	Secondary	Tertiary
amazed		x
angry	x	x
annoyed	x	x
depressed	x	
disappointed		x
discouraged		x
disgusted	x	x
disinterested	x	x
frustrated		x
hurt		x
irritated	x	x
neverminded		x
questioning		x
sad	x	
sarcastic	x	x
sceptical	x	x
thinking		x
tired		x
uncertain		x
unhappy	x	x
unimpressed	x	x
upset	x	x

STANDARDISED RESIDUALS

Label	Secondary	Tertiary
affection	-0.53911	-1.81683
amazed	-0.29048	0.04258
amused	-0.46437	-1.56493
angry	3.64693	11.23958
annoyed	5.83165	22.79796
anxious	-0.32114	-1.08225
appreciative	-0.29844	-1.00576
astonished	-0.33542	-1.13038
awkward	-0.26517	-0.89364
blushing	-0.76854	-2.59002
cheeky	-0.36229	-1.22095
compassionate	-0.34234	-1.15369
concerned	-0.34234	-1.15369

content	-0.85516	-2.88190
crying	-1.01784	-3.43015
cute	-0.34912	-1.17653
depressed	2.02345	-0.66210
devastated	-0.42758	-0.74697
disappointed	-0.15481	5.97186
disbelief	-0.53911	-0.16559
discouraged	-0.45929	0.39036
disgusted	3.15207	12.30081
disinterested	2.79277	10.00573
embarrassed	-0.71809	-2.41999
emotional	-0.37501	-1.26380
excited	-0.53034	-1.78728
exhausted	-0.29048	-0.97893
expression of emotion	-0.33542	-0.24571
flirting	-0.58898	-1.98488
friendly	-0.45929	-1.54783
frustrated	-0.57692	2.17053
funny	-0.87948	-2.96387
happy	-1.48117	-4.59093
hopeless	-0.33542	-0.24571
humorous	-0.30619	-1.03189
hurt	-0.32114	0.76574
in agreement	-0.49845	-1.67979
in love	-0.77159	-2.60027
irritated	5.07539	18.72933
joking	-0.65314	-2.20109
joyful	-0.34912	-1.17653
kiss	-0.83012	-2.79754
laughing	-0.95364	-3.21379
laughing till you cry	-0.29844	-1.00576
like	-0.36229	-1.22095
love	-1.13333	-3.81938
nervous	-0.40506	-1.36506
neverminded	-0.30619	8.65909
oops	-0.36229	-1.22095
playful	-0.34912	-1.17653
pleased	-0.41080	-1.38442
ponder	-0.29048	-0.97893
questioning	-0.30619	1.87541
relieved	-0.72782	-2.45277
remorse	-0.43840	-0.12374
romance	-0.31376	-1.05737
sad	0.51818	-2.37790
sarcastic	2.14918	0.93784
scared	-0.36871	-1.24256
sceptical	8.42098	5.78062
shocked	-0.92367	-2.79156

shy	-0.75002	-2.13196
smiling	-0.67779	-2.28418
smirking	-0.32114	-1.08225
smuggish	-0.23718	-0.79930
stressed	-0.32836	-1.10658
surprised	-0.71809	-1.59354
sympathetic	-0.41647	-1.40352
teasing	-0.26517	-0.89364
thankful	-0.48895	-1.64779
thinking	-0.31376	2.72560
tired	-0.59294	0.00352
uncertain	-0.53034	1.56977
unhappy	4.58316	7.36322
unimpressed	5.49987	10.11455
upset	0.92726	3.42359
winking	-0.70158	-1.94140
worried	-0.42758	-0.74697

EMOJI 14**DESCRIPTIVE LABELS**

Label	Secondary	Tertiary
amazed		x
annoyed	x	x
astonished		x
crying	x	
depressed		x
disappointed	x	x
disbelief	x	x
discouraged		x
disgusted		x
emotional		x
exhausted		x
expression of emotion		x
frustrated	x	x
hopeless		x
hurt		x
irritated		x
questioning		x
remorse	x	
sad	x	x
shocked	x	x
stressed		x
sympathetic		x
tired	x	x
uncertain	x	
unhappy	x	x

upset	x	x
worried		x

STANDARDISED RESIDUALS

Label	Secondary	Tertiary
affection	-0.50941	-1.97031
amazed	-0.27448	0.82225
amused	-0.43879	-1.69714
angry	-0.45747	-0.07390
annoyed	1.12110	3.02991
anxious	-0.30345	-0.32166
appreciative	-0.28200	-1.09073
astonished	-0.31694	0.40562
awkward	-0.25056	-0.96914
blushing	-0.72620	-2.80883
cheeky	-0.34234	-1.32409
compassionate	-0.32348	-1.25115
concerned	-0.32348	-0.45189
content	-0.80805	-3.12537
crying	1.11774	-0.76290
cute	-0.32988	-1.27593
depressed	-0.38817	1.82889
devastated	-0.40402	-0.92276
disappointed	2.89732	7.95450
disbelief	1.45363	3.61255
discouraged	-0.43399	5.47024
disgusted	-0.27448	1.76419
disinterested	-0.30345	-0.32166
embarrassed	-0.67853	-2.62444
emotional	-0.35435	1.54793
excited	-0.50113	-1.93827
exhausted	-0.27448	10.24167
expression of emotion	-0.31694	2.85286
flirting	-0.55653	-2.15256
friendly	-0.43399	-1.67859
frustrated	4.95810	11.64553
funny	-0.83103	-3.21426
happy	-1.39958	-5.41330
hopeless	-0.31694	11.82606
humorous	-0.28933	-0.22546
hurt	-0.30345	0.53035
in agreement	-0.47099	-1.82170
in love	-0.72908	-2.81995
irritated	-0.50529	2.13905
joking	-0.61716	-2.38704
joyful	-0.32988	-1.27593
kiss	-0.78439	-3.03388

laughing	-0.90110	-3.19838
laughing till you cry	-0.28200	-1.09073
like	-0.34234	-1.32409
love	-1.07090	-4.14205
nervous	-0.38274	-0.80488
neverminded	-0.28933	-1.11906
oops	-0.34234	-1.32409
playful	-0.32988	-1.27593
pleased	-0.38817	-1.50138
ponder	-0.27448	-1.06164
questioning	-0.28933	0.66815
relieved	-0.68772	-2.65998
remorse	1.99973	-0.97813
romance	-0.29647	-1.14670
sad	0.14557	4.16222
sarcastic	-0.37165	-1.43746
scared	-0.34840	-1.34753
sceptical	-0.32348	-1.25115
shocked	1.41871	1.66007
shy	-0.70870	-2.74113
smiling	-0.64045	-2.47715
smirking	-0.30345	-1.17368
smuggish	-0.22411	-0.86682
stressed	-0.31027	1.29981
surprised	-0.67853	-1.86237
sympathetic	-0.39353	0.44888
teasing	-0.25056	-0.96914
thankful	-0.46202	-1.78700
thinking	-0.29647	-1.14670
tired	3.00937	12.59952
uncertain	1.49437	-1.42235
unhappy	4.93541	7.83843
unimpressed	-0.32348	-1.25115
upset	1.05373	6.23502
winking	-0.66293	-2.56410
worried	-0.40402	0.99701

EMOJI 15**DESCRIPTIVE LABELS**

Label	Secondary	Tertiary
awkward		x
blushing	x	x
content		x
cute		x
embarrassed		x
flirting		x

friendly	x	x
happy	x	x
joyful		x
like		x
pleased	x	x
shy	x	x
smiling	x	x
smuggish		x
thankful		x

STANDARDISED RESIDUALS

Label	Secondary	Tertiary
affection	-0.47787	-0.3221
amazed	-0.25748	-1.0241
amused	-0.41162	-1.0262
angry	-0.42914	-1.7068
annoyed	-0.54957	-2.1857
anxious	-0.28466	-1.1322
appreciative	-0.26454	-0.1017
astonished	-0.29732	-1.1825
awkward	-0.23505	0.1349
blushing	5.19040	20.1736
cheeky	-0.32114	-1.2772
compassionate	-0.30345	-0.3783
concerned	-0.30345	-1.2069
content	-0.75801	5.2777
crying	-0.90222	-3.5883
cute	-0.30946	3.6442
depressed	-0.36414	-1.4483
devastated	-0.37901	-1.5074
disappointed	-0.95767	-3.8088
disbelief	-0.47787	-1.9006
discouraged	-0.40712	-1.6192
disgusted	-0.25748	-1.0241
disinterested	-0.28466	-1.1322
embarrassed	-0.63652	4.5786
emotional	-0.33241	-1.3221
excited	-0.47010	-0.2651
exhausted	-0.25748	-1.0241
expression of emotion	-0.29732	-1.1825
flirting	-0.52207	0.8132
friendly	4.50545	3.3215
frustrated	-0.51138	-2.0339
funny	-0.77957	-1.8104
happy	4.01871	14.6949
hopeless	-0.29732	-1.1825
humorous	-0.27141	-1.0795

hurt	-0.28466	-1.1322
in agreement	-0.44183	-1.1882
in love	-0.68394	-1.6173
irritated	-0.47400	-1.8852
joking	-0.57894	-2.3026
joyful	-0.30946	5.2692
kiss	-0.73582	-2.9265
laughing	-0.84531	-1.8748
laughing till you cry	-0.26454	-1.0521
like	-0.32114	1.0716
love	-1.00459	-3.2446
nervous	-0.35905	-1.4280
neverminded	-0.27141	-1.0795
oops	-0.32114	-1.2772
playful	-0.30946	-1.2308
pleased	5.12828	4.0756
ponder	-0.25748	-1.0241
questioning	-0.27141	-1.0795
relieved	-0.64514	-2.5659
remorse	-0.38860	-1.5456
romance	-0.27812	-1.1061
sad	-1.55797	-6.1964
sarcastic	-0.34864	-1.3866
scared	-0.32682	-1.2998
sceptical	-0.30345	-1.2069
shocked	-0.81875	-3.2563
shy	5.35182	15.5092
smiling	4.39257	3.8880
smirking	-0.28466	-1.1322
smuggish	-0.21024	0.3598
stressed	-0.29106	-1.1576
surprised	-0.63652	-2.5316
sympathetic	-0.36916	-1.4682
teasing	-0.23505	-0.9348
thankful	-0.43341	2.3371
thinking	-0.27812	-1.1061
tired	-0.52559	-2.0904
uncertain	-0.47010	-1.8697
unhappy	-0.66482	-2.6441
unimpressed	-0.30345	-1.2069
upset	-0.56608	-2.2514
winking	-0.62188	-2.4734
worried	-0.37901	-1.5074

EMOJI 16**DESCRIPTIVE LABELS**

Label	Secondary	Tertiary
cheeky	x	x
cute		x
excited		x
flirting	x	x
friendly	x	x
humorous		x
in agreement		x
joking	x	x
like		x
playful		x
sarcastic		x
sceptical		x
teasing	x	x
thankful		x
winking	x	x

STANDARDISED RESIDUALS

Label	Secondary	Tertiary
affection	-0.46688	-1.88138
amazed	-0.25156	-1.01372
amused	-0.40215	-1.00346
angry	-0.41927	-1.68953
annoyed	-0.53693	-2.16365
anxious	-0.27812	-1.12071
appreciative	-0.25846	-0.08134
astonished	-0.29048	-1.17054
awkward	-0.22965	-0.92539
blushing	-0.66558	-2.68205
cheeky	2.87343	10.59968
compassionate	-0.29647	-1.19468
concerned	-0.29647	-1.19468
content	-0.74059	-1.30887
crying	-0.88147	-3.55203
cute	-0.30234	2.06483
depressed	-0.35577	-1.43361
devastated	-0.37029	-1.49215
disappointed	-0.93565	-3.77034
disbelief	-0.46688	-0.81833
discouraged	-0.39776	-1.60283
disgusted	-0.25156	-1.01372
disinterested	-0.27812	-1.12071

embarrassed	-0.62188	-2.50598
emotional	-0.32477	-1.30870
excited	-0.45929	0.85077
exhausted	-0.25156	-1.01372
expression of emotion	-0.29048	-1.17054
flirting	3.41097	9.62115
friendly	4.63042	2.76445
frustrated	-0.49962	-2.01331
funny	-0.76165	-1.11427
happy	-0.50315	-1.29972
hopeless	-0.29048	-1.17054
humorous	-0.26517	8.28990
hurt	-0.27812	-1.12071
in agreement	-0.43167	10.33311
in love	-0.66821	-2.69267
irritated	-0.46310	-1.86615
joking	8.27404	27.11568
joyful	-0.30234	-0.39755
kiss	-0.71891	-2.89694
laughing	-0.82587	-3.02751
laughing till you cry	-0.25846	-1.04150
like	-0.31376	1.89941
love	-0.98150	-3.95509
nervous	-0.35079	-0.70613
neverminded	-0.26517	-1.06855
oops	-0.31376	-1.26433
playful	-0.30234	13.55589
pleased	-0.35577	-1.43361
ponder	-0.25156	-1.01372
questioning	-0.26517	-0.13271
relieved	-0.63031	-2.53992
remorse	-0.37967	-0.87631
romance	-0.27172	-1.09494
sad	-1.52215	-6.13372
sarcastic	-0.34062	5.18441
scared	-0.31931	-1.28671
sceptical	-0.29647	0.47941
shocked	-0.79992	-3.22342
shy	-0.64954	-2.61741
smiling	-0.58698	-1.94257
smirking	-0.27812	-1.12071
smuggish	-0.20540	-0.82770
stressed	-0.28437	-1.14590
surprised	-0.62188	-2.10693
sympathetic	-0.36067	-0.07729
teasing	8.47941	7.71957
thankful	-0.42345	1.22390
thinking	-0.27172	-1.09494

tired	-0.51350	-2.06924
uncertain	-0.45929	-0.77017
unhappy	-0.64954	-2.61741
unimpressed	-0.29647	-1.19468
upset	-0.55306	-2.22864
winking	10.91341	33.49404
worried	-0.37029	-1.49215

ADDENDUM J**EMOJI LABELS AND STANDARDISED RESIDUALS FOR HIERARCHY****LEVELS****EMOJI 1****DESCRIPTIVE LABELS**

Label	Professional	Middle	Top
anxious	x		
compassionate		x	
concerned	x	x	x
crying	x	x	x
depressed		x	
devastated	x	x	
disappointed	x	x	x
disbelief			x
discouraged	x		
emotional	x		
exhausted	x		
frustrated			x
hurt	x	x	x
remorse	x	x	x
sad	x	x	x
sympathetic	x	x	
unhappy	x	x	x
upset	x	x	x
worried	x		

STANDARDISED RESIDUALS

Label	Professional	Middle	Top
affection	-1.8252	-1.2906	-0.6877
amazed	-0.9723	-0.6875	-0.3664
amused	-1.7497	-1.2372	-0.6593
angry	-1.6571	-0.3184	-0.6244
annoyed	-2.0240	-1.4312	-0.7626
anxious	0.5588	-0.8218	-0.4379
appreciative	-1.1025	-0.7796	-0.4154
astonished	-1.1227	-0.7939	-0.4230
awkward	-0.9002	-0.6365	-0.3392
blushing	-2.4925	-1.7625	-0.9392
cheeky	-1.2372	-0.8748	-0.4662
compassionate	-0.1576	7.0780	-0.4077
concerned	1.3581	1.5589	6.2945

content	-3.0305	-2.1429	-1.1419
crying	13.3382	6.1560	1.0037
cute	-1.2731	-0.9002	-0.4797
depressed	-0.5967	0.1050	-0.5056
devastated	0.6457	3.8961	-0.5422
disappointed	1.5996	0.1576	2.2852
disbelief	-1.8004	-1.2731	0.7957
discouraged	0.2407	-1.1426	-0.6089
disgusted	-0.8748	-0.6186	-0.3296
disinterested	-1.1426	-0.8079	-0.4305
embarrassed	-2.4285	-1.7172	-0.9150
emotional	7.8668	-0.9249	-0.4928
excited	-1.8739	-1.3250	-0.7061
exhausted	0.2107	-0.6365	-0.3392
expression of emotion	-1.1025	-0.7796	-0.4154
flirting	-1.9330	-1.3668	-0.7284
friendly	-1.5152	-1.0714	-0.5709
frustrated	-2.0240	-1.4312	1.8598
funny	-3.0600	-2.1638	-1.1530
happy	-5.0656	-3.5819	-1.9087
hopeless	-1.1227	-0.7939	-0.4230
humorous	-1.0609	-0.7502	-0.3997
hurt	1.9959	7.1268	1.6790
in agreement	-1.5735	-1.1127	-0.5929
in love	-2.6754	-1.8918	-1.0081
irritated	-1.7878	-1.2642	-0.6736
joking	-2.2950	-1.6228	-0.8648
joyful	-1.2372	-0.8748	-0.4662
kiss	-2.7501	-1.9446	-1.0362
laughing	-3.3279	-2.3531	-1.2539
laughing till you cry	-1.0609	-0.7502	-0.3997
like	-1.3419	-0.9489	-0.5056
love	-3.9467	-2.7907	-1.4871
nervous	-1.3250	-0.9369	-0.4993
neverminded	-1.1025	-0.7796	-0.4154
oops	-1.1621	-0.8218	-0.4379
pleased	-1.4852	-1.0502	-0.5596
ponder	-0.9002	-0.6365	-0.3392
questioning	-0.9489	-0.6710	-0.3575
relieved	-2.4099	-1.7040	-0.9080
remorse	1.7379	4.4640	4.6272
romance	-0.9489	-0.6710	-0.3575
sad	22.0712	15.2471	8.1247
sarcastic	-1.3419	-0.9489	-0.5056
scared	-0.4875	-0.9002	-0.4797
sceptical	-1.1813	-0.8353	-0.4451
shocked	-1.4486	-1.7142	-1.1585

shy	-2.5725	-1.8190	-0.9693
smiling	-2.3817	-1.6841	-0.8974
smirking	-1.1227	-0.7939	-0.4230
smuggish	-0.9249	-0.6540	-0.3485
stressed	-1.0394	-0.7350	-0.3917
surprised	-1.6173	-1.7237	-0.9185
sympathetic	2.0355	7.8271	-0.5422
teasing	-0.9952	-0.7037	-0.3750
thankful	-1.7625	-1.2463	-0.6641
thinking	-0.9952	-0.7037	-0.3750
tired	-1.3247	-1.3165	-0.7015
uncertain	-1.8128	-1.2819	-0.6831
unhappy	2.7360	3.0159	1.0435
unimpressed	-0.3671	-0.8487	-0.4522
upset	2.3932	1.0449	1.6067
winking	-2.3531	-1.6639	-0.8867
worried	2.9871	-0.1767	-0.5820

EMOJI 2**DESCRIPTIVE LABELS**

Label	Professional	Middle	Top
affection	x	x	x
appreciative	x	x	x
cheeky	x		
compassionate	x	x	x
cute	x	x	
expression of emotion		x	
flirting	x	x	x
in agreement		x	x
in love	x		
joking	x		
kiss	x	x	x
like		x	x
love	x	x	x
romance	x	x	x
sympathetic		x	
thankful	x	x	x
winking	x		

STANDARDISED RESIDUALS

Label	Professional	Middle	Top
affection	14.66787	9.51960	2.67889
amazed	-0.96931	-0.68965	-0.32410
amused	-1.74424	-1.24100	-0.58322

angry	-1.65203	-1.17539	-0.55238
annoyed	-2.01778	-1.43562	-0.67468
anxious	-1.15854	-0.82429	-0.38738
appreciative	5.26980	6.89077	2.35359
astonished	-1.11926	-0.79634	-0.37424
awkward	-0.89740	-0.63849	-0.30006
blushing	-2.48480	-1.76790	-0.83084
cheeky	2.00979	-0.87752	-0.41240
compassionate	7.26602	0.53578	2.41229
concerned	-1.17770	-0.83791	-0.39378
content	-3.02112	-2.14948	-1.01016
crying	-3.44330	-2.44986	-1.15133
cute	1.09472	1.31197	-0.42435
depressed	-1.33777	-0.95181	-0.44731
devastated	-1.43460	-1.02070	-0.47968
disappointed	-3.62065	-2.57604	-1.21062
disbelief	-1.79481	-1.27698	-0.60013
discouraged	-1.61089	-1.14613	-0.53863
disgusted	-0.87212	-0.62050	-0.29161
disinterested	-1.13907	-0.81043	-0.38087
embarrassed	-2.42096	-1.72248	-0.80949
emotional	-1.30390	-0.92770	-0.43598
excited	-1.86810	-1.32912	-0.62463
exhausted	-0.89740	-0.63849	-0.30006
expression of emotion	-1.09909	0.49680	-0.36750
flirting	5.33798	2.27575	2.45962
friendly	-0.18654	-1.07474	-0.50508
frustrated	-2.01778	-1.43562	-0.67468
funny	-1.73937	-1.70972	-1.02002
happy	-3.66384	-1.92307	-1.68855
hopeless	-1.11926	-0.79634	-0.37424
humorous	-1.05760	-0.75247	-0.35363
hurt	-1.23337	-0.87752	-0.41240
in agreement	-0.93120	0.67588	1.38201
in love	0.33226	-1.89765	-0.89181
irritated	-1.78230	-1.26808	-0.59594
joking	0.33450	-1.62784	-0.76501
joyful	-1.23337	-0.87752	-0.41240
kiss	38.11018	19.06834	15.44623
laughing	-3.31757	-2.36040	-1.10928
laughing till you cry	-1.05760	-0.75247	-0.35363
like	-0.59026	0.09883	1.78830
love	17.16090	19.34871	6.28571
nervous	-1.32094	-0.93983	-0.44168
neverminded	-1.09909	-0.78199	-0.36750
oops	-1.15854	-0.82429	-0.38738
pleased	-1.48064	-1.05346	-0.49508

ponder	-0.89740	-0.63849	-0.30006
questioning	-0.94595	-0.67303	-0.31629
relieved	-2.40241	-1.70928	-0.80329
remorse	-1.52530	-1.08522	-0.51001
romance	6.45404	2.29862	6.00694
sad	-5.88087	-4.18416	-1.96637
sarcastic	-0.59026	-0.95181	-0.44731
scared	-1.26912	-0.90296	-0.42435
sceptical	-1.17770	-0.83791	-0.39378
shocked	-3.06522	-2.18086	-1.02491
shy	-2.56455	-1.27658	-0.85750
smiling	-2.37431	-1.68929	-0.79389
smirking	-1.11926	-0.79634	-0.37424
smuggish	-0.92200	-0.65599	-0.30828
stressed	-1.03623	-0.73727	-0.34648
surprised	-2.43018	-1.72904	-0.81257
sympathetic	-0.04048	2.89819	-0.47968
teasing	-0.99212	-0.70588	-0.33173
thankful	5.64187	5.94937	1.11467
thinking	-0.99212	-0.70588	-0.33173
tired	-1.85608	-1.32058	-0.62061
uncertain	-1.80723	-1.28582	-0.60428
unhappy	-2.60780	-1.85541	-0.87196
unimpressed	-1.19654	-0.85132	-0.40008
upset	-2.17774	-1.54943	-0.72816
winking	0.21181	-1.66905	-0.78438
worried	-1.53989	-1.09561	-0.51489

EMOJI 3**DESCRIPTIVE LABELS**

Label	Professional	Middle	Top
amused	x	x	x
awkward	x		
disbelief	x		
excited			x
funny	x	x	x
happy	x		x
humorous	x		x
joking	x		x
joyful	x	x	
laughing	x	x	x
laughing till you cry	x	x	x
smiling			x
sympathetic		x	
teasing	x	x	

STANDARDISED RESIDUALS

Label	Professional	Middle	Top
affection	-1.7208	-1.2252	-0.59989
amazed	-0.9167	-0.6527	-0.31957
amused	12.2933	19.2596	6.38074
angry	-1.5624	-1.1124	-0.54466
annoyed	-1.9083	-1.3587	-0.66524
anxious	-1.0957	-0.7801	-0.38196
appreciative	-1.0394	-0.7401	-0.36236
astonished	-1.0585	-0.7537	-0.36901
awkward	0.3296	-0.6043	-0.29587
blushing	-2.3500	-1.6732	-0.81921
cheeky	-1.1664	-0.8305	-0.40663
compassionate	-1.0200	-0.7263	-0.35559
concerned	-1.1138	-0.7930	-0.38827
content	-2.5072	-2.0343	-0.99603
crying	-2.9494	-1.8873	-1.13522
cute	-1.2003	-0.8546	-0.41842
depressed	-1.2652	-0.9008	-0.44105
devastated	-1.3567	-0.9660	-0.47297
disappointed	-3.4242	-2.4380	-1.19369
disbelief	0.0700	-1.2086	-0.59173
discouraged	-1.5235	-1.0847	-0.53110
disgusted	-0.8248	-0.5873	-0.28753
disinterested	-1.0773	-0.7670	-0.37554
embarrassed	-2.2896	-1.6302	-0.79817
emotional	-1.2331	-0.8780	-0.42988
excited	-1.7667	-0.4629	1.00776
exhausted	-0.8487	-0.6043	-0.29587
expression of emotion	-1.0394	-0.7401	-0.36236
flirting	-1.8225	-1.2976	-0.63533
friendly	-1.4286	-1.0172	-0.49802
frustrated	-1.9083	-1.3587	-0.66524
funny	23.4577	19.8527	9.93136
happy	0.2493	0.4225	0.73758
hopeless	-1.0585	-0.7537	-0.36901
humorous	1.9992	-0.7121	8.25517
hurt	-1.1664	-0.8305	-0.40663
in agreement	-1.4835	-1.0563	-0.51718
in love	-2.5224	-1.7960	-0.87934
irritated	-1.6856	-1.2001	-0.58761
joking	1.0713	-0.8915	0.57140
joyful	4.8348	3.9859	-0.40663
kiss	-2.5928	-1.8461	-0.90388
laughing	34.4717	20.1482	6.22039
laughing till you cry	15.9962	4.9047	5.38722

like	-1.2652	-0.9008	-0.44105
love	-3.4522	-2.6493	-1.29717
nervous	-1.2493	-0.8895	-0.43550
neverminded	-1.0394	-0.7401	-0.36236
oops	-1.0957	-0.7801	-0.38196
pleased	-1.4003	-0.9970	-0.48815
ponder	-0.8487	-0.6043	-0.29587
questioning	-0.8946	-0.6370	-0.31187
relieved	-2.2720	-1.6177	-0.79205
remorse	-1.4425	-1.0271	-0.50287
romance	-0.8946	-0.6370	-0.31187
sad	-5.5617	-3.9600	-1.93887
sarcastic	-1.2652	-0.9008	-0.44105
scared	-1.2003	-0.8546	-0.41842
sceptical	-1.1138	-0.7930	-0.38827
shocked	-2.8989	-2.0640	-1.01057
shy	-2.4254	-1.7269	-0.84551
smiling	-1.8001	-1.5988	0.49470
smirking	-1.0585	-0.7537	-0.36901
smuggish	-0.8720	-0.6208	-0.30397
stressed	-0.9800	-0.6978	-0.34164
surprised	-2.2983	-1.6364	-0.80121
sympathetic	-1.3567	0.0692	-0.47297
teasing	1.1933	0.8288	-0.32709
thankful	-1.6617	-1.1831	-0.57927
thinking	-0.9383	-0.6681	-0.32709
tired	-1.7554	-1.2498	-0.61193
uncertain	-1.7092	-1.2169	-0.59583
unhappy	-2.4663	-1.7560	-0.85977
unimpressed	-1.1316	-0.8057	-0.39449
upset	-2.0596	-1.4664	-0.71798
winking	-2.2186	-1.5796	-0.77341
worried	-1.4563	-1.0369	-0.50769

EMOJI 4**DESCRIPTIVE LABELS**

Label	Professional	Middle	Top
amazed	x	x	x
anxious	x	x	x
astonished	x	x	x
awkward	x	x	
blushing	x		x
concerned	x	x	
disbelief	x	x	x
embarrassed	x	x	
emotional		x	

expression of emotion		x	
nervous	x		
oops	x	x	
questioning	x	x	
scared	x	x	
shocked	x	x	x
shy	x		
stressed	x	x	
surprised	x	x	x
uncertain	x	x	
upset			x
worried	x	x	x

STANDARDISED RESIDUALS

Label	Professional	Middle	Top
affection	-1.71783	-1.32210	-0.56457
amazed	3.45593	0.71555	9.67410
amused	-1.64672	-1.26737	-0.54120
angry	-1.55966	-1.20037	-0.51259
annoyed	-1.38001	-1.46612	-0.62607
anxious	0.73477	1.53406	2.42238
appreciative	-1.03764	-0.79860	-0.34103
astonished	5.56783	12.71261	2.53221
awkward	0.33309	0.88155	-0.27845
blushing	1.06437	-0.14384	0.52606
cheeky	-1.16441	-0.89617	-0.38269
compassionate	-1.01824	-0.78367	-0.33465
concerned	3.38516	1.48151	-0.36541
content	-2.85220	-2.19515	-0.93739
crying	-3.25078	-2.50191	-1.06839
cute	-1.19816	-0.92215	-0.39378
depressed	-1.26298	-0.97203	-0.41508
devastated	-1.35439	-1.04238	-0.44513
disappointed	-3.12566	-2.25065	-1.12341
disbelief	6.56776	7.13074	4.83014
discouraged	-1.52082	-1.17048	-0.49983
disgusted	-0.82336	-0.63368	-0.27060
disinterested	-1.07539	-0.82765	-0.35343
embarrassed	16.52781	6.76813	-0.75117
emotional	-1.23100	0.10809	-0.40457
excited	-1.76365	-1.35736	-0.57963
exhausted	-0.84723	-0.65206	-0.27845
expression of emotion	-1.03764	0.45359	-0.34103
flirting	-1.81930	-1.40019	-0.59792
friendly	-1.42610	-1.09757	-0.46869
frustrated	-1.90496	-1.46612	-0.62607

funny	-2.88003	-2.21656	-0.94654
happy	-4.76763	-3.66932	-1.56690
hopeless	-1.05668	-0.81326	-0.34728
humorous	-0.99847	-0.76846	-0.32815
hurt	-1.16441	-0.89617	-0.38269
in agreement	-1.48097	-1.13980	-0.48673
in love	-2.51805	-1.93797	-0.82757
irritated	-1.68265	-1.29502	-0.55301
joking	-2.16002	-1.66242	-0.70990
joyful	-1.16441	-0.89617	-0.38269
kiss	-2.58833	-1.99206	-0.85067
laughing	-3.13208	-2.41055	-1.02937
laughing till you cry	-0.99847	-0.76846	-0.32815
like	-1.26298	-0.97203	-0.41508
love	-3.71452	-2.85882	-1.22080
nervous	0.35665	-0.95980	-0.40986
neverminded	-1.03764	-0.79860	-0.34103
oops	3.47758	0.34613	-0.35947
pleased	-1.39786	-1.07584	-0.45941
ponder	-0.84723	-0.65206	-0.27845
questioning	2.46618	6.58723	-0.29351
relieved	-2.26809	-1.74560	-0.74542
remorse	-0.05114	-0.20599	-0.47327
romance	-0.89306	-0.68733	-0.29351
sad	-5.55207	-3.80501	-1.82471
sarcastic	-1.26298	-0.97203	-0.41508
scared	4.64411	9.92212	-0.39378
sceptical	-1.11185	-0.85572	-0.36541
shocked	34.42678	20.22256	12.71767
shy	0.47001	-1.32675	-0.79573
smiling	-2.24156	-1.72518	-0.73670
smirking	-1.05668	-0.81326	-0.34728
smuggish	-0.87045	-0.66992	-0.28608
stressed	0.04389	0.57522	-0.32152
surprised	20.37045	19.18818	8.52934
sympathetic	-0.61605	-0.08304	-0.44513
teasing	-0.93665	-0.72088	-0.30783
thankful	-1.65878	-1.27665	-0.54517
thinking	-0.93665	-0.72088	-0.30783
tired	-1.75231	-0.60714	-0.57590
uncertain	0.05212	2.49454	-0.56075
unhappy	-2.46199	-1.89483	-0.80915
unimpressed	-0.24440	-0.86941	-0.37126
upset	-2.05598	-1.58235	0.80423
winking	-2.21471	-1.70452	-0.72788
worried	2.67333	4.24358	1.61514

EMOJI 5**DESCRIPTIVE LABELS**

Label	Professional	Middle	Top
amazed	x		
angry	x	x	x
annoyed		x	
anxious	x	x	x
astonished	x		
awkward	x	x	
concerned	x		
disbelief	x		x
disgusted		x	
embarrassed	x	x	
excited	x	x	x
expression of emotion	x		
frustrated	x	x	x
irritated	x	x	
nervous	x	x	
oops	x	x	x
questioning			x
remorse		x	x
sarcastic	x		
scared	x	x	
shocked	x		
smiling	x	x	x
stressed	x	x	x
surprised	x	x	x
uncertain	x	x	
unhappy		x	
upset		x	
worried	x	x	

STANDARDISED RESIDUALS

Label	Professional	Middle	Top
affection	-1.51083	-1.16941	-0.48630
amazed	0.43764	-0.62296	-0.25906
amused	-0.75782	-1.12100	-0.46617
angry	5.18938	5.53127	17.67759
annoyed	-1.07854	3.33000	-0.53927
anxious	12.55197	7.31367	2.91998
appreciative	-0.91260	-0.70637	-0.29374
astonished	1.22269	-0.71933	-0.29913
awkward	9.99112	4.62483	-0.23984
blushing	-2.06320	-1.59694	-0.66409

cheeky	-1.02409	-0.79266	-0.32963
compassionate	-0.89554	-0.69317	-0.28825
concerned	3.11265	-0.75689	-0.31475
content	-2.10987	-1.94162	-0.80743
crying	-2.85906	-2.21296	-0.92026
cute	-1.05378	-0.81565	-0.33919
depressed	-1.11079	-0.85977	-0.35753
devastated	-1.19119	-0.92200	-0.38341
disappointed	-2.67368	-1.46743	-0.96766
disbelief	1.19379	-0.28657	1.60503
discouraged	-1.33756	-1.03529	-0.43053
disgusted	-0.72414	1.22363	-0.23308
disinterested	-0.94580	-0.73206	-0.30443
embarrassed	0.47714	0.37221	-0.64703
emotional	-1.08266	-0.83800	-0.34848
excited	19.07900	4.62983	1.50365
exhausted	-0.74514	-0.57675	-0.23984
expression of emotion	0.18316	-0.70637	-0.29374
flirting	-1.60007	-1.23848	-0.51502
friendly	-1.25425	-0.97081	-0.40371
frustrated	3.69640	5.64340	6.87812
funny	-2.53298	-0.94045	-0.81530
happy	-2.76222	-0.78063	-1.34966
hopeless	-0.92935	-0.71933	-0.29913
humorous	-0.87815	-0.67970	-0.28266
hurt	-1.02409	-0.79266	-0.32963
in agreement	-1.30251	-1.00816	-0.41925
in love	-2.21462	-1.71415	-0.71283
irritated	1.22301	2.34659	-0.47634
joking	-1.89974	-1.47043	-0.61148
joyful	-0.04762	-0.79266	-0.32963
kiss	-2.27644	-1.76200	-0.73273
laughing	-2.39164	-1.66314	-0.88666
laughing till you cry	-0.87815	-0.67970	-0.28266
like	-1.11079	-0.85977	-0.35753
love	-3.26692	-2.52865	-1.05154
nervous	15.31435	7.39652	-0.35304
neverminded	-0.91260	-0.70637	-0.29374
oops	6.31477	12.68583	2.91998
pleased	-1.22942	-0.95159	-0.39572
ponder	-0.74514	-0.57675	-0.23984
questioning	-0.78544	-0.60795	3.70264
relieved	-1.99478	-1.54399	-0.64207
remorse	-0.47691	2.08006	2.04542
romance	-0.78544	-0.60795	-0.25282
sad	-4.88304	-3.25038	-1.57173
sarcastic	4.29079	-0.85977	-0.35753

scared	12.23166	4.08845	-0.33919
sceptical	-0.97787	-0.75689	-0.31475
shocked	0.99103	-1.46235	-0.81921
shy	-1.65980	-1.64820	-0.68540
smiling	6.65164	5.68277	0.94133
smirking	-0.92935	-0.71933	-0.29913
smuggish	-0.76556	-0.59255	-0.24641
stressed	9.59970	2.33716	6.94470
surprised	2.44236	3.56032	2.42983
sympathetic	-1.19119	-0.92200	-0.38341
teasing	-0.82378	-0.63762	-0.26515
thankful	-1.45890	-1.12921	-0.46958
thinking	-0.82378	-0.63762	-0.26515
tired	-1.54115	-1.19288	-0.49606
uncertain	7.16267	4.00435	-0.48300
unhappy	-1.24167	0.71065	-0.69696
unimpressed	-0.99352	-0.76900	-0.31979
upset	-1.25520	0.74388	-0.58202
winking	-1.94784	-1.50766	-0.62696
worried	4.97817	4.06255	-0.41155

EMOJI 6**DESCRIPTIVE LABELS**

Label	Professional	Middle	Top
amused			x
angry		x	x
crying	x	x	x
depressed	x	x	
devastated	x	x	x
disappointed			x
disbelief		x	
embarrassed			x
emotional	x	x	
exhausted	x		
frustrated			x
hopeless		x	
hurt	x	x	x
irritated			x
questioning		x	
remorse			x
sad	x	x	x
sympathetic		x	
tired		x	
unhappy		x	x
upset	x	x	x

STANDARDISED RESIDUALS

Label	Professional	Middle	Top
affection	-1.8336	-1.3104	-0.64131
amazed	-0.9768	-0.6981	-0.34164
amused	-1.7577	-1.2561	1.01188
angry	-0.4635	0.4913	1.13517
annoyed	-2.0334	-1.4531	-0.71117
anxious	-0.3110	-0.8343	-0.40833
appreciative	-1.1076	-0.7915	-0.38738
astonished	-1.1279	-0.8060	-0.39449
awkward	-0.9043	-0.6463	-0.31629
blushing	-2.5040	-1.7895	-0.87578
cheeky	-1.2429	-0.8882	-0.43470
compassionate	-0.1668	-0.7767	-0.38014
concerned	-1.1868	-0.8481	-0.41508
content	-3.0445	-2.1757	-1.06480
crying	29.6719	16.0706	2.90635
cute	-0.4970	-0.9140	-0.44731
depressed	6.0696	0.0746	-0.47150
devastated	13.7719	6.7102	7.40529
disappointed	-0.0857	-1.4569	0.29115
disbelief	-1.8087	0.2548	-0.63259
discouraged	-1.6233	-0.2981	-0.56776
disgusted	-0.8789	-0.6281	-0.30738
disinterested	-1.1479	-0.8203	-0.40147
embarrassed	-2.4397	-1.7435	0.31868
emotional	7.8186	4.3857	-0.45956
excited	-1.8825	-1.3453	-0.65842
exhausted	0.2014	-0.6463	-0.31629
expression of emotion	-1.1076	-0.7915	-0.38738
flirting	-1.9419	-1.3878	-0.67919
friendly	-1.5222	-1.0878	-0.53240
frustrated	-0.0662	-0.7650	2.10108
funny	-3.0742	-1.7417	-1.07519
happy	-4.8925	-3.3618	-1.77988
hopeless	-0.2413	0.4346	-0.39449
humorous	-1.0658	-0.7616	-0.37276
hurt	3.5845	5.8668	1.86571
in agreement	-1.5808	-1.1297	-0.55289
in love	-2.6878	-1.9208	-0.94005
irritated	-1.7961	-1.2835	2.55563
joking	-2.3056	-1.6477	-0.80639
joyful	-0.4383	-0.8882	-0.43470
kiss	-2.7628	-1.9744	-0.96629
laughing	-3.3432	-1.9706	-1.16929
laughing till you cry	-1.0658	-0.7616	-0.37276

like	-1.3481	-0.9634	-0.47150
love	-3.9649	-2.8335	-1.38673
nervous	-1.3312	-0.9513	-0.46557
neverminded	-1.1076	-0.7915	-0.38738
oops	-1.1675	-0.8343	-0.40833
pleased	-1.4921	-1.0663	-0.52186
ponder	-0.9043	-0.6463	-0.31629
questioning	-0.9533	0.7867	-0.33340
relieved	-2.4210	-1.7301	-0.84674
remorse	-0.8865	-0.1881	3.18267
romance	-0.9533	-0.6812	-0.33340
sad	12.4661	10.1680	3.23426
sarcastic	-1.3481	-0.9634	-0.47150
scared	-1.2789	-0.9140	-0.44731
sceptical	-1.1868	-0.8481	-0.41508
shocked	-2.7652	-2.2075	-1.08035
shy	-2.5844	-1.8469	-0.90388
smiling	-2.3927	-1.7099	-0.83683
smirking	-1.1279	-0.8060	-0.39449
smuggish	-0.9291	-0.6640	-0.32496
stressed	-1.0442	-0.7463	-0.36522
surprised	-2.4490	-1.7501	-0.85653
sympathetic	-0.7540	2.8385	-0.50563
teasing	-0.9998	-0.7145	-0.34968
thankful	-1.7706	-1.2653	-0.61927
thinking	-0.9998	-0.7145	-0.34968
tired	-1.8704	0.1596	-0.65418
uncertain	-1.8212	-1.3015	-0.63697
unhappy	-0.3448	2.3817	2.34483
unimpressed	-1.2058	-0.8617	-0.42172
upset	5.0961	4.8079	5.74668
winking	-2.3640	-1.6894	-0.82681
worried	-1.5518	-1.1090	-0.54274

EMOJI 7**DESCRIPTIVE LABELS**

Label	Professional	Middle	Top
angry			x
concerned	x	x	x
depressed	x	x	
disappointed	x	x	x
discouraged	x	x	x
disinterested	x		
emotional	x	x	
exhausted	x		x
expression of emotion	x	x	

hopeless	x	x	x
hurt	x	x	
remorse	x	x	x
sad	x	x	x
shy			x
surprised			x
sympathetic	x	x	x
thinking	x		
tired	x	x	x
unhappy	x	x	x
unimpressed	x	x	
upset	x		x
worried	x		x

STANDARDISED RESIDUALS

Label	Professional	Middle	Top
affection	-1.8196	-1.1782	-0.58250
amazed	-0.9693	-0.6276	-0.31031
amused	-1.7442	-1.1294	-0.55839
angry	-1.0467	-1.0697	1.36197
annoyed	-1.0266	-1.3065	-0.64595
anxious	-1.1585	-0.7502	-0.37089
appreciative	-1.0991	-0.7117	-0.35185
astonished	-1.1193	-0.7247	-0.35831
awkward	-0.8974	-0.5811	-0.28729
blushing	-2.4848	-1.6089	-0.79546
cheeky	-1.2334	-0.7986	-0.39484
compassionate	-0.1514	-0.6984	-0.34528
concerned	1.3697	0.5488	2.27538
content	-3.0211	-1.9562	-0.96716
crying	-3.4433	-2.2295	-1.10231
cute	-1.2691	-0.8218	-0.40629
depressed	6.8849	8.3695	-0.42826
devastated	-0.7375	-0.9289	-0.45926
disappointed	19.3034	11.3054	3.15467
disbelief	-1.2376	-1.1621	-0.57458
discouraged	8.3215	5.6680	1.42342
disgusted	-0.8721	-0.5647	-0.27919
disinterested	1.4947	-0.7375	-0.36465
embarrassed	-2.4210	-0.9296	-0.77503
emotional	0.2300	0.3402	-0.41742
excited	-1.8681	-1.2096	-0.59804
exhausted	0.2169	-0.5811	3.19354
expression of emotion	1.6304	0.6935	-0.35185
flirting	-1.9270	-1.2478	-0.61691
friendly	-1.5106	-0.9781	-0.48358

frustrated	-1.0266	-1.3065	-0.64595
funny	-3.0506	-1.9753	-0.97659
happy	-5.0500	-2.9640	-1.61666
hopeless	0.6676	2.0350	2.43256
humorous	-1.0576	-0.6848	-0.33857
hurt	2.0098	0.4536	-0.39484
in agreement	-0.9312	-1.0157	-0.50218
in love	-2.6672	-1.7270	-0.85385
irritated	-1.7823	-1.1540	-0.57057
joking	-2.2879	-1.4814	-0.73244
joyful	-1.2334	-0.7986	-0.39484
kiss	-2.7416	-1.7752	-0.87768
laughing	-3.3176	-2.1481	-1.06206
laughing till you cry	-1.0576	-0.6848	-0.33857
like	-1.3378	-0.8662	-0.42826
love	-3.9345	-2.5476	-1.25956
nervous	-1.3209	-0.8553	-0.42288
neverminded	-1.0991	-0.7117	-0.35185
oops	-1.1585	-0.7502	-0.37089
pleased	-1.4806	-0.9587	-0.47400
ponder	-0.8974	-0.5811	-0.28729
questioning	-0.9459	-0.6125	-0.30283
relieved	-2.4024	-1.5556	-0.76909
remorse	3.7196	3.0625	1.55964
romance	-0.9459	-0.6125	-0.30283
sad	14.8643	10.3733	2.89782
sarcastic	-1.3378	-0.8662	-0.42826
scared	-1.2691	-0.8218	-0.40629
sceptical	-1.1777	-0.7626	-0.37702
shocked	-2.7390	-1.9847	-0.98128
shy	-2.5645	-1.0583	0.39704
smiling	-2.3743	-1.5374	-0.76009
smirking	-1.1193	-0.7247	-0.35831
smuggish	-0.9220	-0.5970	-0.29516
stressed	-0.0712	-0.6710	-0.33173
surprised	-2.4302	-1.5735	0.50740
sympathetic	3.4448	1.2242	1.71815
teasing	-0.9921	-0.6424	-0.31761
thankful	-1.7570	-1.1377	-0.56248
thinking	0.0158	-0.6424	-0.31761
tired	4.0704	2.9586	2.77173
uncertain	-1.2539	-1.1702	-0.57855
unhappy	1.6103	4.8259	5.15434
unimpressed	0.4749	0.5160	-0.38305
upset	2.4142	-0.7009	2.17161
winking	-2.3459	-1.5190	-0.75099
worried	1.7071	-0.9971	1.53556

EMOJI 8**DESCRIPTIVE LABELS**

Label	Professional	Middle	Top
content	x	x	x
disappointed	x		
discouraged	x		
disinterested	x	x	
embarrassed			x
expression of emotion	x		
friendly	x	x	x
happy	x	x	x
hopeless	x		
in agreement	x	x	
like		x	
joyful	x		
pleased	x	x	x
relieved	x		x
remorse	x	x	
sarcastic	x		
shy	x	x	x
smiling		x	
smirking		x	
smuggish	x	x	
surprised			x
sympathetic		x	
teasing	x		
thankful		x	
thinking	x		x
tired	x		

STANDARDISED RESIDUALS

Label	Professional	Middle	Top
affection	-1.5577	-1.0489	-0.51704
amazed	-0.8298	-0.5588	-0.27544
amused	-1.4933	-1.0055	-0.49564
angry	-1.4143	-0.9523	-0.46944
annoyed	-1.7274	-1.1632	-0.57337
anxious	-0.9918	-0.6678	-0.32921
appreciative	-0.9409	-0.6336	-0.31231
astonished	-0.9582	-0.6452	-0.31805
awkward	-0.7683	-0.5173	-0.25500
blushing	-0.7170	-1.4324	-0.70607
cheeky	-1.0559	-0.7110	-0.35047
compassionate	-0.9234	-0.6217	-0.30648

concerned	-1.0082	-0.6789	-0.33465
content	27.1847	14.3363	8.46041
crying	-2.9478	-1.9849	-0.97844
cute	-1.0865	-0.7316	-0.36063
depressed	-1.1453	-0.7712	-0.38014
devastated	-1.2282	-0.8270	-0.40765
disappointed	0.1265	-0.1706	-1.02883
disbelief	-1.5365	-1.0346	-0.51001
discouraged	2.2465	-0.9286	-0.45775
disgusted	-0.7466	-0.5027	-0.24782
disinterested	0.0503	0.8663	-0.32368
embarrassed	-1.1076	-0.6790	0.76569
emotional	-0.2204	-0.7516	-0.37051
excited	-1.5993	-0.1483	-0.53083
exhausted	-0.7683	-0.5173	-0.25500
expression of emotion	2.2474	-0.6336	-0.31231
flirting	-1.6498	-1.1108	-0.54758
friendly	1.0266	0.2776	1.90049
frustrated	-1.7274	-0.3034	-0.57337
funny	-2.6116	-1.1899	-0.86685
happy	6.7792	5.6768	2.04936
hopeless	0.0854	-0.6452	-0.31805
humorous	-0.9054	-0.6097	-0.30053
hurt	-1.0559	-0.7110	-0.35047
in agreement	0.1463	0.2016	-0.44575
in love	-1.8454	-1.5375	-0.75790
irritated	-1.5258	-1.0274	-0.50645
joking	-1.9587	-1.3189	-0.65014
joyful	0.8382	-0.7110	-0.35047
kiss	-2.3471	-1.5804	-0.77905
laughing	-2.8402	-1.9124	-0.94271
laughing till you cry	-0.9054	-0.6097	-0.30053
like	-1.1453	0.5256	-0.38014
love	-3.3684	-2.2681	-1.11802
nervous	-1.1309	-0.7615	-0.37536
neverminded	-0.9409	-0.6336	-0.31231
oops	-0.9918	-0.6678	-0.32921
pleased	9.7770	1.4897	4.33285
ponder	-0.7683	-0.5173	-0.25500
questioning	-0.8098	-0.5453	-0.26880
relieved	1.3468	-0.6628	0.78219
remorse	0.2258	2.5327	-0.43342
romance	-0.8098	-0.5453	-0.26880
sad	-2.2539	-0.4402	-1.67109
sarcastic	0.6010	-0.7712	-0.38014
scared	-1.0865	-0.7316	-0.36063
sceptical	-1.0082	-0.6789	-0.33465

shocked	-2.6242	-1.7670	-0.87100
shy	2.8147	2.5803	6.13247
smiling	-0.5568	0.0926	-0.67468
smirking	-0.9582	0.9047	-0.31805
smuggish	1.7445	1.3500	-0.26199
stressed	-0.8871	-0.5973	-0.29445
surprised	-1.5998	-1.4009	0.75756
sympathetic	-0.4140	0.3822	-0.40765
teasing	0.3280	-0.5719	-0.28192
thankful	-0.1746	3.9238	-0.49927
thinking	0.3280	-0.5719	3.26522
tired	4.7042	-1.0699	-0.52742
uncertain	-0.9008	-1.0418	-0.51354
unhappy	-2.2326	-0.1728	-0.74102
unimpressed	-1.0244	-0.6897	-0.34001
upset	-1.8644	-1.2554	-0.61882
winking	-2.0083	-1.3523	-0.66660
worried	-1.3183	-0.8877	-0.43757

EMOJI 9**DESCRIPTIVE LABELS**

Label	Professional	Middle	Top
affection	x	x	
amazed	x	x	
appreciative	x	x	x
astonished	x	x	x
compassionate		x	
cute	x		
excited	x	x	x
happy	x	x	x
in love	x	x	x
like	x	x	x
love	x	x	x
smiling			x
smirking			x
romance	x	x	
teasing		x	
thankful		x	x

STANDARDISED RESIDUALS

Label	Professional	Middle	Top
affection	6.6329	5.7342	-0.68773
amazed	4.3162	5.1709	-0.36636
amused	-1.7087	-1.2295	-0.65926

angry	-1.6183	-1.1645	-0.62441
annoyed	-1.9766	-0.7193	-0.76265
anxious	-1.1349	-0.8167	-0.43789
appreciative	0.7809	1.8067	1.99180
astonished	0.7277	1.7460	1.94080
awkward	-0.8791	-0.6326	-0.33919
blushing	-2.0233	-1.7516	-0.93917
cheeky	-1.2082	-0.8694	-0.46617
compassionate	-0.1101	1.8704	-0.40765
concerned	-1.1537	-0.8302	-0.44513
content	-2.9595	-2.1296	-1.14187
crying	-3.3731	-2.4272	-1.30145
cute	2.7785	-0.8946	-0.47968
depressed	-1.3105	-0.9430	-0.50563
devastated	-1.4053	-1.0113	-0.54223
disappointed	-3.5468	-2.5522	-1.36848
disbelief	-1.7582	-1.2652	-0.67837
discouraged	-1.5780	-1.1355	-0.60886
disgusted	-0.8543	-0.6148	-0.32963
disinterested	-1.1158	-0.8029	-0.43053
embarrassed	-2.3716	-1.7066	-0.91504
emotional	-1.2773	-0.9191	-0.49283
excited	4.7274	1.7207	0.71021
exhausted	-0.8791	-0.6326	-0.33919
expression of emotion	-1.0767	-0.7748	-0.41542
flirting	-1.3580	-1.3584	-0.72835
friendly	-1.4798	-1.0648	-0.57094
frustrated	-1.9766	-1.4223	-0.76265
funny	-2.3191	-1.2203	-0.28572
happy	1.1173	2.0586	0.71085
hopeless	-1.0964	-0.7890	-0.42304
humorous	-0.0708	-0.7455	-0.39974
hurt	-1.2082	-0.8694	-0.46617
in agreement	-0.2352	-0.2014	-0.59290
in love	34.5125	16.2040	12.87948
irritated	-1.7460	-1.2564	-0.67365
joking	-2.2413	-1.6128	-0.86476
joyful	-0.3805	-0.8694	-0.46617
kiss	-2.6857	-1.9326	-1.03623
laughing	-2.9422	-1.9110	-1.25392
laughing till you cry	-1.0360	-0.7455	-0.39974
like	10.8987	2.2383	5.42756
love	22.0910	20.3024	9.27207
nervous	-1.2940	-0.9311	-0.49927
neverminded	-1.0767	-0.7748	-0.41542
oops	-1.1349	-0.8167	-0.43789
pleased	-1.4504	-1.0437	-0.55963

ponder	-0.8791	-0.6326	-0.33919
questioning	-0.9267	-0.6668	-0.35753
relieved	-2.3534	-1.6935	-0.90803
remorse	-1.4942	-1.0752	-0.57651
romance	5.5482	3.8323	-0.35753
sad	-5.7609	-4.1455	-2.22276
sarcastic	-1.3105	-0.9430	-0.50563
scared	-1.2432	-0.8946	-0.47968
sceptical	-1.1537	-0.8302	-0.44513
shocked	-3.0027	-2.1607	-1.15854
shy	-2.5122	-1.8078	-0.96931
smiling	-2.3259	-1.6737	1.33124
smirking	-0.1844	-0.7890	1.94080
smuggish	-0.9032	-0.6499	-0.34848
stressed	-1.0151	-0.7304	-0.39166
surprised	-2.3806	-1.7131	-0.91852
sympathetic	-1.4053	-1.0113	-0.54223
teasing	-0.9719	0.7305	-0.37499
thankful	-0.5592	1.1837	0.84173
thinking	-0.9719	-0.6994	-0.37499
tired	-1.8182	-1.3084	-0.70153
uncertain	-1.7704	-1.2739	-0.68307
unhappy	-2.5546	-1.8383	-0.98566
unimpressed	-1.1721	-0.8434	-0.45225
upset	-2.1333	-1.5351	-0.82311
winking	-2.2980	-1.6536	-0.88666
worried	-1.5085	-1.0855	-0.58202

EMOJI 10**DESCRIPTIVE LABELS**

Label	Professional	Middle	Top
amused		x	
anxious	x		
awkward	x		
concerned			x
embarrassed	x	x	
exhausted	x	x	
expression of emotion	x	x	
funny	x	x	x
happy	x	x	x
humorous	x	x	
joyful	x		
laughing	x	x	x
laughing till you cry	x		
nervous	x	x	
oops	x	x	

relieved	x	x	x
stressed	x		x
tired	x	x	
worried		x	

STANDARDISED RESIDUALS

Label	Professional	Middle	Top
affection	-1.55113	-1.06350	-0.41808
amazed	-0.82631	-0.56654	-0.22272
amused	-0.14185	0.94233	-0.40078
angry	-1.40831	-0.96557	-0.37959
annoyed	-1.72010	-1.17935	-0.46363
anxious	0.02490	-0.67714	-0.26620
appreciative	-0.93694	-0.64240	-0.25254
astonished	-0.95414	-0.65418	-0.25717
awkward	1.84932	-0.52451	-0.20620
blushing	-2.11822	-1.45231	-0.57094
cheeky	-1.05141	-0.72088	-0.28339
compassionate	-0.91943	-0.63039	-0.24782
concerned	-1.00395	-0.68834	3.42488
content	-2.18713	-1.76578	-0.69417
crying	-2.93532	-2.01254	-0.79117
cute	-1.08189	-0.74177	-0.29161
depressed	-1.14041	-0.78190	-0.30738
devastated	-1.22296	-0.83849	-0.32963
disappointed	-3.08650	-2.11619	-0.83192
disbelief	-0.22286	-1.04903	-0.41240
discouraged	-1.37324	-0.94153	-0.37014
disgusted	-0.74346	-0.50974	-0.20039
disinterested	-0.97103	-0.66576	-0.26173
embarrassed	3.26617	3.53200	-0.55627
emotional	-1.11154	-0.76210	-0.29960
excited	-1.59250	-0.17600	-0.42924
exhausted	1.84932	1.38201	-0.20620
expression of emotion	4.39955	4.02762	-0.25254
flirting	-1.64275	-1.12631	-0.44278
friendly	-0.51113	-0.88289	-0.34708
frustrated	-1.72010	-1.17935	-0.46363
funny	6.62830	4.94721	3.57903
happy	0.57312	2.46918	1.42510
hopeless	-0.95414	-0.65418	-0.25717
humorous	5.75344	0.99960	-0.24301
hurt	-1.05141	-0.72088	-0.28339
in agreement	-1.33725	-0.91686	-0.36044
in love	-2.27369	-1.55890	-0.61284
irritated	-0.86119	-1.04172	-0.40952

joking	-0.41227	-0.58945	-0.52570
joyful	1.80191	-0.72088	-0.28339
kiss	-2.33715	-1.60242	-0.62995
laughing	12.02266	3.21813	4.48511
laughing till you cry	1.31676	-0.61815	-0.24301
like	-1.14041	-0.78190	-0.30738
love	-3.35406	-2.29963	-0.90404
nervous	5.97830	1.81840	-0.30352
neverminded	-0.93694	-0.64240	-0.25254
oops	1.03743	0.79965	-0.26620
pleased	-0.46994	-0.86540	-0.34021
ponder	-0.76501	-0.52451	-0.20620
questioning	-0.80639	-0.55289	-0.21735
relieved	33.10850	29.21922	8.50587
remorse	-0.53120	-0.89150	-0.35047
romance	-0.80639	-0.55289	-0.21735
sad	-5.01328	-3.43724	-1.35126
sarcastic	-0.26354	-0.78190	-0.30738
scared	-1.08189	-0.74177	-0.29161
sceptical	-1.00395	-0.68834	-0.27060
shocked	-2.61301	-1.79156	-0.70430
shy	-0.81396	-0.83178	-0.58926
smiling	-1.03591	-1.38773	-0.54555
smirking	-0.95414	-0.65418	-0.25717
smuggish	-0.78598	-0.53889	-0.21185
stressed	3.64480	-0.60566	3.96187
surprised	-2.07166	-1.42039	-0.55839
sympathetic	-1.22296	-0.83849	-0.32963
teasing	-0.84575	-0.57987	-0.22796
thankful	-1.49781	-1.02694	-0.40371
thinking	-0.84575	-0.57987	-0.22796
tired	0.31376	0.75875	-0.42648
uncertain	-0.24243	-0.10957	-0.41525
unhappy	-2.22307	-1.52420	-0.59920
unimpressed	-1.02002	-0.69935	-0.27493
upset	-1.85646	-1.27284	-0.50038
winking	-1.99979	-1.37111	-0.53902
worried	-0.55093	0.21104	-0.35382

EMOJI 11**DESCRIPTIVE LABELS**

Label	Professional	Middle	Top
amazed		x	
appreciative	x	x	
blushing	x	x	x
content	x	x	x

cute	x	x	x
embarrassed	x	x	x
excited	x	x	
flirting	x		
friendly	x	x	x
funny			x
happy	x	x	x
in agreement	x		x
In love			x
joking			x
joyful	x	x	
pleased	x	x	
shy	x	x	x
smiling	x	x	x
smuggish		x	
thankful	x	x	x

STANDARDISED RESIDUALS

Label	Professional	Middle	Top
affection	-1.7178	-0.3590	-0.6572
amazed	-0.9151	0.9334	-0.3501
amused	-1.0395	-0.2734	-0.6299
angry	-1.5597	-1.0854	-0.5966
annoyed	-1.9050	-1.3257	-0.7287
anxious	-1.0938	-0.7612	-0.4184
appreciative	0.8898	2.0475	-0.3969
astonished	-1.0567	-0.7354	-0.4042
awkward	-0.8472	-0.5896	-0.3241
blushing	10.4425	8.1679	0.2169
cheeky	-0.3056	-0.8103	-0.4454
compassionate	-0.0362	-0.7086	-0.3895
concerned	-1.1118	-0.7738	-0.4253
content	7.3154	5.0682	2.5749
crying	-3.2508	-2.2623	-1.2436
cute	0.4711	3.9632	3.9051
depressed	-1.2630	-0.8789	-0.4831
devastated	-1.3544	-0.9426	-0.5181
disappointed	-3.4182	-2.3788	-1.3076
disbelief	-1.6945	-1.1792	-0.6482
discouraged	-1.5208	-1.0584	-0.5818
disgusted	-0.8234	-0.5730	-0.3150
disinterested	-1.0754	-0.7484	-0.4114
embarrassed	1.6521	1.5528	0.2694
emotional	-1.2310	-0.8567	-0.4709
excited	0.5044	1.2169	-0.6747
exhausted	-0.8472	-0.5896	-0.3241
expression of	-1.0376	-0.7221	-0.3969

emotion			
flirting	0.3793	-1.2661	-0.6960
friendly	10.4945	0.0151	1.2875
frustrated	-1.9050	-1.3257	-0.7287
funny	-2.5328	-1.5054	0.7136
happy	14.5292	12.0530	9.1420
hopeless	-1.0567	-0.7354	-0.4042
humorous	-0.9985	-0.6949	-0.3820
hurt	-1.1644	-0.8103	-0.4454
in agreement	3.2457	-0.0604	1.1986
in love	-2.1209	-1.7524	0.0749
irritated	-1.6827	-1.1710	-0.6437
joking	-2.1600	-1.5032	1.5941
joyful	1.4120	2.8918	-0.4454
kiss	-2.5883	-1.8013	-0.9902
laughing	-3.1321	-2.1797	-1.1982
laughing till you cry	-0.9985	-0.6949	-0.3820
like	-1.2630	-0.8789	-0.4831
love	-2.3685	-2.1982	-1.4210
nervous	-1.2471	-0.8679	-0.4771
neverminded	-1.0376	-0.7221	-0.3969
oops	-1.0938	-0.7612	-0.4184
pleased	6.4713	2.1110	-0.5347
ponder	-0.8472	-0.5896	-0.3241
questioning	-0.8931	-0.6215	-0.3416
relieved	-2.2681	-1.5784	-0.8676
remorse	-1.4400	-0.0043	-0.5509
romance	-0.8931	-0.6215	-0.3416
sad	-5.5521	-3.8639	-2.1239
sarcastic	-1.2630	-0.8789	-0.4831
scared	-1.1982	-0.8338	-0.4584
sceptical	-1.1118	-0.7738	-0.4253
shocked	-2.8938	-2.0139	-1.1070
shy	8.7305	1.8759	1.2331
smiling	12.4803	6.7735	2.6410
smirking	-1.0567	-0.7354	-0.4042
smuggish	-0.8704	1.0450	-0.3330
stressed	-0.9783	-0.6808	-0.3742
surprised	-2.2943	-0.9704	-0.8777
sympathetic	-1.3544	-0.9426	-0.5181
teasing	-0.9366	-0.6518	-0.3583
thankful	1.3555	4.9094	0.9413
thinking	-0.9366	-0.6518	-0.3583
tired	-1.7523	-1.2195	-0.6703
uncertain	-1.7062	-1.1874	-0.6527
unhappy	-2.4620	-1.7134	-0.9418
unimpressed	-1.1296	-0.7862	-0.4321
upset	-2.0560	-1.4308	-0.7865

winking	-2.2147	-1.5413	-0.8472
worried	-1.4538	-1.0117	-0.5561

EMOJI 12**DESCRIPTIVE LABELS**

Label	Professional	Middle	Top
amused	x	x	
cheeky	x	x	x
concerned	x		
content		x	
cute	x		
disbelief	x	x	x
disgusted		x	
disinterested	x	x	
expression of emotion	x		
flirting	x	x	
friendly	x		
hopeless			x
humorous	x		
in agreement	x	x	x
irritated	x		
like	x		
neverminded	x	x	x
oops	x	x	
ponder	x	x	x
questioning	x		x
remorse	x		
sarcastic	x	x	x
sceptical	x	x	x
shy		x	x
smiling	x		
smirking	x	x	x
smuggish	x	x	x
surprised			x
teasing	x		
thinking	x	x	x
uncertain	x	x	x
unimpressed	x		
winking		x	
worried	x	x	

STANDARDISED RESIDUALS

Label	Professional	Middle	Top
affection	-1.43043	-0.98833	-0.61680
amazed	-0.76201	-0.52650	-0.32858
amused	0.81663	0.10809	-0.59126
angry	-0.52873	-0.89733	-0.56000
annoyed	-0.32541	-0.18357	-0.68398
anxious	-0.91078	-0.62928	-0.39272
appreciative	-0.86404	-0.59699	-0.37257
astonished	-0.87989	-0.60795	-0.37941
awkward	-0.70548	-0.48744	-0.30420
blushing	-1.95340	-1.34966	-0.84230
cheeky	7.28128	0.82278	1.97377
compassionate	-0.84789	-0.58583	-0.36560
concerned	1.23439	-0.63969	-0.39921
content	-0.26976	0.18721	-1.02409
crying	-2.70691	-1.87029	-1.16721
cute	0.00460	-0.68935	-0.43021
depressed	-1.05167	-0.72663	-0.45348
devastated	-1.12779	-0.77923	-0.48630
disappointed	-1.79234	-1.45813	-0.41254
disbelief	0.71523	2.10241	4.32254
discouraged	-0.47673	-0.87498	-0.54606
disgusted	-0.68561	1.63730	-0.29563
disinterested	2.45474	4.23011	-0.38612
embarrassed	-1.90321	-1.31499	-0.82066
emotional	-1.02504	-0.70824	-0.44199
excited	-1.46858	-1.01469	-0.63325
exhausted	-0.70548	-0.48744	-0.30420
expression of emotion	1.45068	-0.59699	-0.37257
flirting	8.38659	0.86405	-0.65323
friendly	0.49670	-0.82049	-0.51205
frustrated	-0.32541	-1.09599	-0.68398
funny	-1.14724	-0.44997	-1.03409
happy	-2.71053	-2.37842	-1.12767
hopeless	-0.87989	-0.60795	2.25629
humorous	0.37134	-0.57446	-0.35850
hurt	-0.96959	-0.66992	-0.41808
in agreement	1.19951	6.18975	3.22943
in love	-2.09676	-1.44872	-0.90411
irritated	0.02628	-0.96809	-0.60416
joking	-0.13071	-0.43806	-0.77556
joyful	-0.96959	-0.66992	-0.41808
kiss	-2.15529	-1.48916	-0.92935
laughing	-1.84121	-1.24705	-1.12459
laughing till you cry	-0.83142	-0.57446	-0.35850

like	1.80092	-0.72663	-0.45348
love	-3.09306	-2.13710	-1.33372
nervous	-1.03844	-0.71749	-0.44777
neverminded	3.76539	17.82874	4.99556
oops	1.28515	0.95982	-0.39272
pleased	-1.16399	-0.80424	-0.50191
ponder	9.21679	7.71868	19.41957
questioning	0.60108	-0.51381	5.91655
relieved	-1.88862	-1.30491	-0.81437
remorse	0.46884	-0.82849	-0.51704
romance	-0.74365	-0.51381	-0.32066
sad	-4.40688	-2.88124	-1.99349
sarcastic	9.40785	2.02578	8.36726
scared	-0.99770	-0.68935	-0.43021
sceptical	9.87528	2.48685	4.61063
shocked	-2.40969	-1.06430	-1.03905
shy	-1.02407	1.47856	0.28099
smiling	1.34798	-0.51424	-0.80484
smirking	15.03113	12.55112	4.89199
smuggish	10.31247	9.48326	2.88708
stressed	-0.81462	-0.56285	-0.35126
surprised	-0.34016	-1.32000	1.60405
sympathetic	-1.12779	-0.77923	-0.48630
teasing	4.34865	-0.53889	-0.33631
thankful	-1.38126	-0.95436	-0.59559
thinking	12.04153	6.88383	2.63716
tired	-0.08846	-0.01626	-0.62917
uncertain	9.84107	8.18680	5.91679
unhappy	-1.56230	-0.71049	-0.88399
unimpressed	6.50106	-0.64992	-0.40560
upset	-1.71200	-1.18288	-0.73821
winking	-1.30193	0.29541	-0.79520
worried	0.44155	0.35915	-0.52199

EMOJI 13**DESCRIPTIVE LABELS**

Label	Professional	Middle	Top
angry	x	x	x
annoyed	x	x	
concerned			x
depressed		x	
devastated		x	
disappointed	x	x	x
disbelief	x	x	
discouraged	x		
disgusted	x	x	x

disinterested	x	x	
expression of emotion	x		x
frustrated	x	x	
hopeless	x		
hurt	x		
irritated	x	x	x
neverminded	x	x	
ponder	x		
questioning	x	x	
remorse		x	
sad			x
sarcastic	x	x	
sceptical	x	x	
smirking		x	
thinking	x		
tired	x		
uncertain	x	x	
unhappy	x	x	x
unimpressed	x	x	
upset	x	x	x

STANDARDISED RESIDUALS

Label	Professional	Middle	Top
affection	-1.62557	-1.14273	-0.46468
amazed	-0.86597	-0.60875	-0.24754
amused	-1.55828	-0.18253	-0.44544
angry	12.07520	2.81789	1.94840
annoyed	21.49638	14.51556	-0.51529
anxious	-1.03503	-0.72759	-0.29587
appreciative	-0.98191	-0.69025	-0.28068
astonished	-0.99993	-0.70292	-0.28583
awkward	-0.80173	-0.56359	-0.22918
blushing	-2.21988	-1.56051	-0.63456
cheeky	-1.10187	-0.77458	-0.31497
compassionate	-0.96356	-0.67735	-0.27544
concerned	-1.05214	-0.73962	3.02419
content	-2.69902	-1.89732	-0.77152
crying	-3.07619	-2.16246	-0.87934
cute	-1.13381	-0.79703	-0.32410
depressed	-1.19515	1.54038	-0.34164
devastated	-1.28165	1.31890	-0.36636
disappointed	5.11254	3.00358	1.23840
disbelief	0.26750	0.64717	-0.45835
discouraged	1.34028	-0.02321	-0.41138
disgusted	8.20513	6.75543	4.26723
disinterested	9.79180	7.67202	-0.29089
embarrassed	-2.16285	-1.52041	-0.61826

emotional	-1.16488	-0.81888	-0.33299
excited	-1.66893	-1.17320	-0.47707
exhausted	-0.80173	-0.56359	-0.22918
expression of emotion	0.03651	-0.69025	3.28206
flirting	-1.72159	-1.21022	-0.49212
friendly	-1.34951	-0.94866	-0.38576
frustrated	5.40895	1.88935	-0.51529
funny	-2.72535	-1.91583	-0.77905
happy	-4.06827	-3.17149	-1.28965
hopeless	0.00014	-0.70292	-0.28583
humorous	-0.94485	-0.66420	-0.27009
hurt	0.71323	-0.77458	-0.31497
in agreement	-1.40143	-0.98516	-0.40060
in love	-2.38281	-1.67504	-0.68113
irritated	19.76072	12.28164	1.74188
joking	-2.04401	-1.43688	-0.58429
joyful	-1.10187	-0.77458	-0.31497
kiss	-2.44932	-1.72179	-0.70015
laughing	-2.96386	-2.08350	-0.84723
laughing till you cry	-0.94485	-0.66420	-0.27009
like	-1.19515	-0.84015	-0.34164
love	-3.51503	-2.47095	-1.00478
nervous	-1.18011	-0.82958	-0.33734
neverminded	4.11019	6.55347	-0.28068
oops	-1.03503	-0.72759	-0.29587
pleased	-1.32278	-0.92987	-0.37812
ponder	0.44558	-0.56359	-0.22918
questioning	1.52150	1.08922	-0.24157
relieved	-2.14628	-1.50876	-0.61352
remorse	-1.36268	0.08602	-0.38953
romance	-0.84510	-0.59407	-0.24157
sad	-2.58919	-1.25647	1.82741
sarcastic	0.47829	1.54038	-0.34164
scared	-1.13381	-0.79703	-0.32410
sceptical	5.60100	10.07679	-0.30076
shocked	-2.37325	-1.92502	-0.78279
shy	-2.29113	-0.98970	-0.65493
smiling	-2.12117	-1.49112	-0.60634
smirking	-0.99993	0.71972	-0.28583
smuggish	-0.82370	-0.57903	-0.23546
stressed	-0.92576	-0.65078	-0.26463
surprised	-0.78930	-1.52621	-0.62061
sympathetic	-1.28165	-0.90096	-0.36636
teasing	-0.88634	-0.62307	-0.25336
thankful	-1.56970	-1.10344	-0.44870
thinking	3.62658	-0.62307	-0.25336
tired	0.15100	-1.16566	-0.47400

uncertain	1.48228	0.62717	-0.46153
unhappy	4.96710	6.29996	6.84186
unimpressed	10.15678	8.56385	-0.30557
upset	1.13840	1.55703	4.83815
winking	-1.61862	-1.47326	-0.59908
worried	-0.64882	-0.96708	-0.39325

EMOJI 14**DESCRIPTIVE LABELS**

Label	Professional	Middle	Top
amazed	x		
angry		x	
annoyed	x	x	x
astonished	x		
concerned	x		
crying	x		
depressed	x		
disappointed	x	x	x
disbelief	x	x	x
discouraged	x	x	
disgusted	x	x	
disinterested			x
emotional	x	x	
exhausted	x	x	
expression of emotion	x	x	
frustrated	x	x	x
hopeless	x	x	
hurt	x		
irritated	x	x	x
questioning	x		x
remorse		x	
sad	x	x	x
shocked	x	x	
stressed	x	x	
surprised			x
sympathetic		x	
tired	x	x	x
uncertain			x
unhappy	x	x	x
upset	x	x	x
worried	x		x

STANDARDISED RESIDUALS

Label	Professional	Middle	Top
affection	-1.68154	-1.20833	-0.62507
amazed	1.33692	-0.64369	-0.33299
amused	-0.99155	-1.15830	-0.59920
angry	-0.87170	0.72597	-0.56752
annoyed	2.42550	3.13782	0.74949
anxious	-0.13666	-0.76936	-0.39799
appreciative	-1.01572	-0.72988	-0.37757
astonished	0.89922	-0.74327	-0.38450
awkward	-0.82933	-0.59594	-0.30828
blushing	-2.29631	-1.65009	-0.85360
cheeky	-1.13980	-0.81905	-0.42370
compassionate	-0.99673	-0.71623	-0.37051
concerned	0.74927	0.49657	-0.40457
content	-2.79194	-2.00624	-1.03784
crying	0.58900	-0.97462	-1.18288
cute	-1.17285	-0.84279	-0.43598
depressed	3.61694	-0.88838	-0.45956
devastated	-0.57150	-0.95268	-0.49283
disappointed	5.91884	5.91379	5.18811
disbelief	0.15003	6.35917	1.00531
discouraged	7.24381	4.53904	-0.55339
disgusted	0.43479	2.87417	-0.29960
disinterested	-1.05266	-0.75643	2.16425
embarrassed	-2.23731	-1.60770	-0.83167
emotional	1.28467	0.28900	-0.44793
excited	-1.72639	-1.24055	-0.64175
exhausted	6.40544	7.79412	-0.30828
expression of emotion	2.92239	0.64021	-0.37757
flirting	-1.78086	-1.27970	-0.66200
friendly	-1.39597	-1.00312	-0.51892
frustrated	10.46965	6.12300	6.52012
funny	-2.81918	-2.02582	-1.04797
happy	-4.66689	-3.35356	-1.73482
hopeless	12.50065	4.63834	-0.38450
humorous	-0.97737	-0.70233	-0.36332
hurt	0.61488	-0.81905	-0.42370
in agreement	-1.44968	-1.04172	-0.53889
in love	-2.46484	-1.77120	-0.91625
irritated	1.38854	0.50621	1.02098
joking	-2.11438	-1.51936	-0.78598
joyful	-1.13980	-0.81905	-0.42370
kiss	-2.53364	-1.82064	-0.94183
laughing	-3.06590	-2.20311	-1.13968
laughing till you cry	-0.97737	-0.70233	-0.36332

like	-1.23629	-0.88838	-0.45956
love	-3.63604	-2.61280	-1.35162
nervous	-0.40156	-0.87720	-0.45378
neverminded	-1.01572	-0.72988	-0.37757
oops	-1.07066	-0.76936	-0.39799
pleased	-1.36832	-0.98326	-0.50864
ponder	-0.82933	-0.59594	-0.30828
questioning	0.26973	-0.62818	2.75233
relieved	-2.22017	-1.59538	-0.82530
remorse	-1.40959	0.96160	-0.52398
romance	-0.87419	-0.62818	-0.32496
sad	3.76528	2.24011	0.94967
sarcastic	-1.23629	-0.88838	-0.45956
scared	-1.17285	-0.84279	-0.43598
sceptical	-1.08836	-0.78208	-0.40457
shocked	1.05053	1.40337	-0.10332
shy	-2.37001	-1.70305	-0.88100
smiling	-2.19420	-1.57672	-0.81565
smirking	-1.03435	-0.74327	-0.38450
smuggish	-0.85205	-0.61227	-0.31673
stressed	1.13087	0.76507	-0.35598
surprised	-1.80056	-1.61382	0.36300
sympathetic	-0.57150	1.14666	-0.49283
teasing	-0.91686	-0.65884	-0.34082
thankful	-1.62373	-1.16679	-0.60359
thinking	-0.91686	-0.65884	-0.34082
tired	10.52759	7.69182	2.49905
uncertain	-1.67014	-0.36689	2.60062
unhappy	5.88887	6.35244	3.56915
unimpressed	-0.20143	-0.79459	-0.41105
upset	6.93141	4.08565	1.92527
winking	-2.16792	-1.55783	-0.80588
worried	2.79314	-1.02260	1.36137

EMOJI 15**DESCRIPTIVE LABELS**

Label	Professional	Middle	Top
affection	x		
appreciative			x
awkward	x		
blushing	x	x	x
compassionate	x		
content	x	x	x
cute	x	x	
embarrassed	x	x	
excited		x	

flirting	x		
friendly	x		x
happy	x	x	x
in love			x
joyful	x	x	
like		x	
pleased	x	x	x
shy	x	x	x
smiling	x	x	
smuggish		x	
thankful	x	x	x

STANDARDISED RESIDUALS

Label	Professional	Middle	Top
affection	0.09626	-1.2336	-0.61680
amazed	-0.89740	-0.6572	-0.32858
amused	-0.37635	-1.1825	-0.59126
angry	-1.52948	-1.1200	-0.56000
annoyed	-1.86810	-1.3680	-0.68398
anxious	-1.07260	-0.7854	-0.39272
appreciative	-1.01756	-0.7451	2.31150
astonished	-1.03623	-0.7588	-0.37941
awkward	1.57638	-0.6084	-0.30420
blushing	16.39128	15.5303	2.71940
cheeky	-1.14187	-0.8362	-0.41808
compassionate	0.00292	-0.7312	-0.36560
concerned	-1.09033	-0.7984	-0.39921
content	1.13576	2.8342	4.83474
crying	-3.18788	-2.3344	-1.16721
cute	5.63365	2.6263	-0.43021
depressed	-1.23854	-0.9070	-0.45348
devastated	-1.32818	-0.9726	-0.48630
disappointed	-3.35207	-2.4546	-1.22732
disbelief	-1.66167	-1.2168	-0.60840
discouraged	-1.49140	-1.0921	-0.54606
disgusted	-0.80743	-0.5913	-0.29563
disinterested	-1.05458	-0.7722	-0.38612
embarrassed	5.34326	3.8421	-0.82066
emotional	-1.20718	-0.8840	-0.44199
excited	-0.57313	0.3127	-0.63325
exhausted	-0.83084	-0.6084	-0.30420
expression of emotion	-1.01756	-0.7451	-0.37257
flirting	1.57896	-0.5410	-0.65323
friendly	5.75199	-1.0241	3.39384
frustrated	-1.86810	-1.3680	-0.68398
funny	-1.76209	-2.0682	-1.03409

happy	10.72447	9.4280	5.88234
hopeless	-1.03623	-0.7588	-0.37941
humorous	-0.97915	-0.7170	-0.35850
hurt	-1.14187	-0.8362	-0.41808
in agreement	-1.45231	-0.1232	-0.53175
in love	-1.65938	-1.8082	0.20194
irritated	-1.65009	-1.2083	-0.60416
joking	-2.11822	-0.9064	-0.77556
joyful	5.86415	0.3598	-0.41808
kiss	-2.53824	-1.8587	-0.92935
laughing	-2.42032	-1.3600	-0.23537
laughing till you cry	-0.97915	-0.7170	-0.35850
like	-0.43113	2.4008	-0.45348
love	-3.09359	-1.9176	-1.33372
nervous	-1.22296	-0.8955	-0.44777
neverminded	-1.01756	-0.7451	-0.37257
oops	-1.07260	-0.7854	-0.39272
pleased	6.65365	1.9848	1.49049
ponder	-0.83084	-0.6084	-0.30420
questioning	-0.87578	-0.6413	-0.32066
relieved	-2.22420	-1.6287	-0.81437
remorse	-1.41215	-1.0341	-0.51704
romance	-0.87578	-0.6413	-0.32066
sad	-5.44463	-3.9870	-1.99349
sarcastic	-1.23854	-0.9070	-0.45348
scared	-1.17498	-0.8604	-0.43021
sceptical	-1.09033	-0.7984	-0.39921
shocked	-2.83784	-2.0781	-1.03905
shy	15.31504	7.4639	8.33318
smiling	6.90023	3.9815	-0.80484
smirking	-1.03623	-0.7588	-0.37941
smuggish	-0.85360	0.9747	-0.31254
stressed	-0.95937	-0.7025	-0.35126
surprised	-2.24991	-1.6476	-0.82378
sympathetic	-1.32818	-0.9726	-0.48630
teasing	-0.91852	-0.6726	-0.33631
thankful	2.67655	4.6853	1.08341
thinking	-0.91852	-0.6726	-0.33631
tired	-1.71840	-1.2583	-0.62917
uncertain	-1.67317	-1.2252	-0.61261
unhappy	-2.41435	-1.7680	-0.88399
unimpressed	-1.10778	-0.8112	-0.40560
upset	-2.01619	-1.4764	-0.73821
winking	-2.17186	-1.5904	-0.79520
worried	-1.42566	-1.0440	-0.52199

EMOJI 16**DESCRIPTIVE LABELS**

Label	Professional	Middle	Top
appreciative	x	x	
cheeky	x	x	x
compassionate	x		
content		x	
cute	x		
disbelief			x
excited	x	x	
flirting	x	x	x
friendly	x	x	
funny	x		
humorous	x	x	x
in agreement	x	x	x
joking	x	x	x
like	x	x	x
questioning	x		x
sarcastic	x	x	
sceptical		x	
sympathetic		x	
teasing	x		x
thankful		x	
winking	x	x	x

STANDARDISED RESIDUALS

Label	Professional	Middle	Top
affection	-1.65379	-1.08266	-0.64131
amazed	-0.88100	-0.57675	-0.34164
amused	-0.95455	-1.03784	-0.61476
angry	-1.50152	-0.98297	-0.58226
annoyed	-1.83394	-1.20060	-0.71117
anxious	-1.05299	-0.68935	-0.40833
appreciative	1.00313	0.87515	-0.38738
astonished	-1.01729	-0.66597	-0.39449
awkward	-0.81565	-0.53397	-0.31629
blushing	-2.25842	-1.47848	-0.87578
cheeky	8.69169	8.80468	1.86571
compassionate	0.03983	-0.64175	-0.38014
concerned	-1.07040	-0.70074	-0.41508
content	-2.38169	0.98390	-1.06480
crying	-3.12959	-2.04880	-1.21360
cute	3.18115	-0.75514	-0.44731
depressed	-1.21589	-0.79599	-0.47150

devastated	-1.30390	-0.85360	-0.50563
disappointed	-3.29078	-2.15432	-1.27611
disbelief	-1.01828	-1.06793	0.94822
discouraged	-1.46413	-0.95850	-0.56776
disgusted	-0.79266	-0.51892	-0.30738
disinterested	-1.03529	-0.67776	-0.40147
embarrassed	-2.20040	-1.44050	-0.85328
emotional	-1.18511	-0.77583	-0.45956
excited	0.06899	1.58743	-0.65842
exhausted	-0.81565	-0.53397	-0.31629
expression of emotion	-0.99896	-0.65397	-0.38738
flirting	13.66410	3.21407	0.79314
friendly	2.99726	3.55159	-0.53240
frustrated	-1.83394	-1.20060	-0.71117
funny	0.11265	-0.71328	-0.14513
happy	-0.66823	-1.34078	-0.65622
hopeless	-1.01729	-0.66597	-0.39449
humorous	6.32096	2.54893	2.30997
hurt	-1.12100	-0.73386	-0.43470
in agreement	7.69218	5.49488	6.68188
in love	-2.42417	-1.58699	-0.94005
irritated	-1.61992	-1.06049	-0.62818
joking	23.40745	17.73735	14.07467
joyful	-1.12100	-0.73386	-0.43470
kiss	-2.49184	-1.63129	-0.96629
laughing	-3.01531	-1.46740	-1.16929
laughing till you cry	-0.96125	-0.62928	-0.37276
like	2.07387	1.71661	1.64938
love	-3.57605	-2.34107	-1.38673
nervous	-0.36768	-0.78598	-0.46557
neverminded	-0.99896	-0.65397	-0.38738
oops	-1.05299	-0.68935	-0.40833
pleased	-0.60266	-0.88100	-0.52186
ponder	-0.81565	-0.53397	-0.31629
questioning	0.30334	-0.56285	2.66597
relieved	-2.18353	-1.42946	-0.84674
remorse	-0.66500	-0.90757	-0.53760
romance	-0.85977	-0.56285	-0.33340
sad	-5.34509	-3.49918	-2.07274
sarcastic	3.71876	2.97291	-0.47150
scared	-1.15350	-0.75514	-0.44731
sceptical	-0.13617	0.72632	-0.41508
shocked	-2.78596	-1.82384	-1.08035
shy	-2.33090	-1.52593	-0.90388
smiling	-1.69460	-1.41274	-0.83683
smirking	-1.01729	-0.66597	-0.39449
smuggish	-0.83800	-0.54860	-0.32496

stressed	-0.94183	-0.61657	-0.36522
surprised	-1.75604	-1.44598	-0.85653
sympathetic	-0.53697	1.48941	-0.50563
teasing	9.07909	2.79767	5.36991
thankful	-0.34455	1.82415	-0.61927
thinking	-0.90173	-0.59032	-0.34968
tired	-1.68698	-1.10439	-0.65418
uncertain	-1.03378	-0.14537	-0.63697
unhappy	-2.37021	-1.55167	-0.91913
unimpressed	-1.08753	-0.71195	-0.42172
upset	-1.97933	-1.29578	-0.76755
winking	32.10560	21.52978	8.84891
worried	-1.39960	-0.91625	-0.54274

ADDENDUM K

STATISTICALLY SIGNIFICANT EMOJI EFFECT LSD POST HOC TABLE

Emoji		Emoji	p-value
emoji_1	vs	emoji_10	0,00
emoji_1	vs	emoji_11	0,00
emoji_1	vs	emoji_12	0,00
emoji_1	vs	emoji_14	0,00
emoji_1	vs	emoji_15	0,00
emoji_1	vs	emoji_16	0,00
emoji_1	vs	emoji_2	0,00
emoji_1	vs	emoji_3	0,00
emoji_1	vs	emoji_4	0,00
emoji_1	vs	emoji_5	0,00
emoji_1	vs	emoji_6	0,00
emoji_1	vs	emoji_8	0,00
emoji_1	vs	emoji_9	0,00
emoji_10	vs	emoji_1	0,00
emoji_10	vs	emoji_11	0,00
emoji_10	vs	emoji_12	0,00
emoji_10	vs	emoji_13	0,00
emoji_10	vs	emoji_14	0,00
emoji_10	vs	emoji_2	0,00
emoji_10	vs	emoji_3	0,00
emoji_10	vs	emoji_4	0,00
emoji_10	vs	emoji_5	0,00
emoji_10	vs	emoji_6	0,00
emoji_10	vs	emoji_7	0,00
emoji_10	vs	emoji_8	0,00
emoji_10	vs	emoji_9	0,00
emoji_11	vs	emoji_1	0,00
emoji_11	vs	emoji_10	0,00
emoji_11	vs	emoji_12	0,00
emoji_11	vs	emoji_13	0,00
emoji_11	vs	emoji_14	0,00
emoji_11	vs	emoji_15	0,00
emoji_11	vs	emoji_16	0,00
emoji_11	vs	emoji_2	0,01
emoji_11	vs	emoji_3	0,00
emoji_11	vs	emoji_4	0,00
emoji_11	vs	emoji_5	0,00
emoji_11	vs	emoji_6	0,00
emoji_11	vs	emoji_7	0,00
emoji_11	vs	emoji_8	0,00
emoji_11	vs	emoji_9	0,00
emoji_12	vs	emoji_1	0,00

Emoji		Emoji	p-value
emoji_12	vs	emoji_10	0,00
emoji_12	vs	emoji_11	0,00
emoji_12	vs	emoji_13	0,00
emoji_12	vs	emoji_14	0,00
emoji_12	vs	emoji_15	0,00
emoji_12	vs	emoji_16	0,00
emoji_12	vs	emoji_2	0,00
emoji_12	vs	emoji_3	0,00
emoji_12	vs	emoji_4	0,00
emoji_12	vs	emoji_5	0,00
emoji_12	vs	emoji_6	0,00
emoji_12	vs	emoji_7	0,00
emoji_12	vs	emoji_8	0,00
emoji_12	vs	emoji_9	0,00
emoji_13	vs	emoji_10	0,00
emoji_13	vs	emoji_11	0,00
emoji_13	vs	emoji_12	0,00
emoji_13	vs	emoji_14	0,02
emoji_13	vs	emoji_15	0,00
emoji_13	vs	emoji_16	0,00
emoji_13	vs	emoji_2	0,00
emoji_13	vs	emoji_3	0,00
emoji_13	vs	emoji_4	0,00
emoji_13	vs	emoji_5	0,00
emoji_13	vs	emoji_6	0,00
emoji_13	vs	emoji_7	0,04
emoji_13	vs	emoji_8	0,00
emoji_13	vs	emoji_9	0,00
emoji_14	vs	emoji_1	0,00
emoji_14	vs	emoji_10	0,00
emoji_14	vs	emoji_11	0,00
emoji_14	vs	emoji_12	0,00
emoji_14	vs	emoji_13	0,02
emoji_14	vs	emoji_15	0,00
emoji_14	vs	emoji_16	0,00
emoji_14	vs	emoji_2	0,00
emoji_14	vs	emoji_3	0,00
emoji_14	vs	emoji_4	0,00
emoji_14	vs	emoji_5	0,00
emoji_14	vs	emoji_7	0,00
emoji_14	vs	emoji_8	0,00
emoji_14	vs	emoji_9	0,00
emoji_15	vs	emoji_1	0,00
emoji_15	vs	emoji_11	0,00
emoji_15	vs	emoji_12	0,00
emoji_15	vs	emoji_13	0,00
emoji_15	vs	emoji_14	0,00

Emoji		Emoji	p-value
emoji_15	vs	emoji_2	0,00
emoji_15	vs	emoji_3	0,00
emoji_15	vs	emoji_4	0,00
emoji_15	vs	emoji_5	0,00
emoji_15	vs	emoji_6	0,00
emoji_15	vs	emoji_7	0,00
emoji_15	vs	emoji_8	0,00
emoji_15	vs	emoji_9	0,00
emoji_16	vs	emoji_1	0,00
emoji_16	vs	emoji_11	0,00
emoji_16	vs	emoji_12	0,00
emoji_16	vs	emoji_13	0,00
emoji_16	vs	emoji_14	0,00
emoji_16	vs	emoji_2	0,00
emoji_16	vs	emoji_3	0,00
emoji_16	vs	emoji_4	0,00
emoji_16	vs	emoji_5	0,00
emoji_16	vs	emoji_6	0,00
emoji_16	vs	emoji_7	0,00
emoji_16	vs	emoji_8	0,00
emoji_16	vs	emoji_9	0,00
emoji_2	vs	emoji_1	0,00
emoji_2	vs	emoji_10	0,00
emoji_2	vs	emoji_11	0,01
emoji_2	vs	emoji_12	0,00
emoji_2	vs	emoji_13	0,00
emoji_2	vs	emoji_14	0,00
emoji_2	vs	emoji_15	0,00
emoji_2	vs	emoji_16	0,00
emoji_2	vs	emoji_3	0,00
emoji_2	vs	emoji_4	0,00
emoji_2	vs	emoji_5	0,00
emoji_2	vs	emoji_6	0,00
emoji_2	vs	emoji_7	0,00
emoji_2	vs	emoji_8	0,00
emoji_2	vs	emoji_9	0,00
emoji_3	vs	emoji_1	0,00
emoji_3	vs	emoji_10	0,00
emoji_3	vs	emoji_11	0,00
emoji_3	vs	emoji_12	0,00
emoji_3	vs	emoji_13	0,00
emoji_3	vs	emoji_14	0,00
emoji_3	vs	emoji_15	0,00
emoji_3	vs	emoji_16	0,00
emoji_3	vs	emoji_2	0,00
emoji_3	vs	emoji_4	0,00
emoji_3	vs	emoji_5	0,00

Emoji		Emoji	p-value
emoji_3	vs	emoji_6	0,00
emoji_3	vs	emoji_7	0,00
emoji_3	vs	emoji_8	0,00
emoji_4	vs	emoji_1	0,00
emoji_4	vs	emoji_10	0,00
emoji_4	vs	emoji_11	0,00
emoji_4	vs	emoji_12	0,00
emoji_4	vs	emoji_13	0,00
emoji_4	vs	emoji_14	0,00
emoji_4	vs	emoji_15	0,00
emoji_4	vs	emoji_16	0,00
emoji_4	vs	emoji_2	0,00
emoji_4	vs	emoji_3	0,00
emoji_4	vs	emoji_5	0,00
emoji_4	vs	emoji_6	0,00
emoji_4	vs	emoji_7	0,00
emoji_4	vs	emoji_8	0,00
emoji_4	vs	emoji_9	0,00
emoji_5	vs	emoji_1	0,00
emoji_5	vs	emoji_10	0,00
emoji_5	vs	emoji_11	0,00
emoji_5	vs	emoji_12	0,00
emoji_5	vs	emoji_13	0,00
emoji_5	vs	emoji_14	0,00
emoji_5	vs	emoji_15	0,00
emoji_5	vs	emoji_16	0,00
emoji_5	vs	emoji_2	0,00
emoji_5	vs	emoji_3	0,00
emoji_5	vs	emoji_4	0,00
emoji_5	vs	emoji_6	0,00
emoji_5	vs	emoji_7	0,00
emoji_5	vs	emoji_8	0,00
emoji_5	vs	emoji_9	0,00
emoji_6	vs	emoji_1	0,00
emoji_6	vs	emoji_10	0,00
emoji_6	vs	emoji_11	0,00
emoji_6	vs	emoji_12	0,00
emoji_6	vs	emoji_13	0,00
emoji_6	vs	emoji_15	0,00
emoji_6	vs	emoji_16	0,00
emoji_6	vs	emoji_2	0,00
emoji_6	vs	emoji_3	0,00
emoji_6	vs	emoji_4	0,00
emoji_6	vs	emoji_5	0,00
emoji_6	vs	emoji_7	0,00
emoji_6	vs	emoji_8	0,00
emoji_6	vs	emoji_9	0,00

Emoji		Emoji	p-value
emoji_7	vs	emoji_10	0,00
emoji_7	vs	emoji_11	0,00
emoji_7	vs	emoji_12	0,00
emoji_7	vs	emoji_13	0,04
emoji_7	vs	emoji_14	0,00
emoji_7	vs	emoji_15	0,00
emoji_7	vs	emoji_16	0,00
emoji_7	vs	emoji_2	0,00
emoji_7	vs	emoji_3	0,00
emoji_7	vs	emoji_4	0,00
emoji_7	vs	emoji_5	0,00
emoji_7	vs	emoji_6	0,00
emoji_7	vs	emoji_8	0,00
emoji_7	vs	emoji_9	0,00
emoji_8	vs	emoji_1	0,00
emoji_8	vs	emoji_10	0,00
emoji_8	vs	emoji_11	0,00
emoji_8	vs	emoji_12	0,00
emoji_8	vs	emoji_13	0,00
emoji_8	vs	emoji_14	0,00
emoji_8	vs	emoji_15	0,00
emoji_8	vs	emoji_16	0,00
emoji_8	vs	emoji_2	0,00
emoji_8	vs	emoji_3	0,00
emoji_8	vs	emoji_4	0,00
emoji_8	vs	emoji_5	0,00
emoji_8	vs	emoji_6	0,00
emoji_8	vs	emoji_7	0,00
emoji_8	vs	emoji_9	0,00
emoji_9	vs	emoji_1	0,00
emoji_9	vs	emoji_10	0,00
emoji_9	vs	emoji_11	0,00
emoji_9	vs	emoji_12	0,00
emoji_9	vs	emoji_13	0,00
emoji_9	vs	emoji_14	0,00
emoji_9	vs	emoji_15	0,00
emoji_9	vs	emoji_16	0,00
emoji_9	vs	emoji_2	0,00
emoji_9	vs	emoji_4	0,00
emoji_9	vs	emoji_5	0,00
emoji_9	vs	emoji_6	0,00
emoji_9	vs	emoji_7	0,00
emoji_9	vs	emoji_8	0,00

ADDENDUM L**STATISTICALLY SIGNIFICANT PLATFORM*EMOJI LSD POST HOC****TABLE**

Platform	Emoji		Platform	Emoji	p-value
ANW	emoji_10	vs	AW	emoji_10	0,01
ANW	emoji_10	vs	T	emoji_10	0,00
ANW	emoji_12	vs	AW	emoji_12	0,00
ANW	emoji_12	vs	T	emoji_12	0,01
ANW	emoji_13	vs	T	emoji_13	0,01
ANW	emoji_15	vs	M	emoji_15	0,03
ANW	emoji_6	vs	M	emoji_6	0,02
ANW	emoji_8	vs	M	emoji_8	0,00
AW	emoji_10	vs	ANW	emoji_10	0,01
AW	emoji_12	vs	M	emoji_12	0,01
AW	emoji_12	vs	ANW	emoji_12	0,00
AW	emoji_15	vs	M	emoji_15	0,01
AW	emoji_6	vs	T	emoji_6	0,00
AW	emoji_8	vs	M	emoji_8	0,00
M	emoji_12	vs	AW	emoji_12	0,01
M	emoji_12	vs	T	emoji_12	0,03
M	emoji_13	vs	T	emoji_13	0,01
M	emoji_15	vs	AW	emoji_15	0,01
M	emoji_15	vs	ANW	emoji_15	0,03
M	emoji_6	vs	T	emoji_6	0,00
M	emoji_6	vs	ANW	emoji_6	0,02
M	emoji_8	vs	AW	emoji_8	0,00
M	emoji_8	vs	T	emoji_8	0,00
M	emoji_8	vs	ANW	emoji_8	0,00
T	emoji_10	vs	ANW	emoji_10	0,00
T	emoji_12	vs	M	emoji_12	0,03
T	emoji_12	vs	ANW	emoji_12	0,01
T	emoji_13	vs	M	emoji_13	0,01
T	emoji_13	vs	ANW	emoji_13	0,01
T	emoji_6	vs	M	emoji_6	0,00
T	emoji_6	vs	AW	emoji_6	0,00
T	emoji_8	vs	M	emoji_8	0,00

ADDENDUM M**STATISTICALLY SIGNIFICANT AGE*EMOJI LSD POST HOC TABLE**

Emoji	Age group		Age Group	p-value
2	<25	vs	55>	0,02
2	25-39	vs	55>	0
2	40-54	vs	55>	0
16	25-39	vs	40-54	0,01
16	25-39	vs	55>	0,01
10	<25	vs	40-54	0,02
10	<25	vs	55>	0,02
10	25-39	vs	40-54	0,02
10	25-39	vs	55>	0,03
8	<25	vs	55>	0,03
8	25-39	vs	55>	0,02
12	<25	vs	40-54	0
12	<25	vs	55>	0
12	25-39	vs	40-54	0
12	25-39	vs	55>	0,02
5	<25	vs	40-54	0
5	<25	vs	55>	0
5	25-39	vs	40-54	0
5	25-39	vs	55>	0
7	25-39	vs	55>	0,03
7	40-54	vs	55>	0,03

ADDENDUM N**STATISTICALLY SIGNIFICANT GENDER*EMOJI LSD POST HOC TABLE**

Emoji	Gender 1		Gender 2	P-Value
13	Male	vs	Female	0,02
16	Male	vs	Female	0

ADDENDUM O**STATISTICALLY SIGNIFICANT RACE*EMOJI LSD POST HOC TABLE**

Emoji	Race		Race	P-Value
12	Coloured	vs	White	0,04
5	African	vs	White	0,04
4	African	vs	White	0,04
13	African	vs	Coloured	0
13	African	vs	White	0
6	African	vs	Coloured	0
6	African	vs	White	0

ADDENDUM P**STATISTICALLY SIGNIFICANT HIERARCHY*EMOJI LSD POST HOC****TABLE**

Emoji	Hierarchy		Hierarchy	p-value
12	Prof	vs	Top	0
12	Middle	vs	Top	0,01
5	Prof	vs	Middle	0
5	Prof	vs	Top	0
5	Middle	vs	Top	0,01
7	Prof	vs	Middle	0,02
7	Prof	vs	Top	0,03

ADDENDUM Q

NOTICE OF APPROVAL BY REC HUMANITIES



NOTICE OF APPROVAL

REC: Social, Behavioural and Education Research (SBER) - Initial Application Form

1 October 2019

Project number: 10608

Project Title: Interpretation of Emojis and Organisational Computer-Mediated Communication (CMC) Contexts

Dear Miss Talita Du Plessis

Your REC: Social, Behavioural and Education Research (SBER) - Initial Application Form submitted on 6 September 2019 was reviewed and approved by the REC: Humanities.

Please note the following for your approved submission:

Ethics approval period:

Protocol approval date (Humanities)	Protocol expiration date (Humanities)
1 October 2019	30 September 2022

GENERAL COMMENTS:

Please take note of the General Investigator Responsibilities attached to this letter. You may commence with your research after complying fully with these guidelines.

If the researcher deviates in any way from the proposal approved by the REC: Humanities, the researcher must notify the REC of these changes.

Please use your SU project number (10608) on any documents or correspondence with the REC concerning your project.

Please note that the REC has the prerogative and authority to ask further questions, seek additional information, require further modifications, or monitor the conduct of your research and the consent process.

FOR CONTINUATION OF PROJECTS AFTER REC APPROVAL PERIOD

Please note that a progress report should be submitted to the Research Ethics Committee: Humanities before the approval period has expired if a continuation of ethics approval is required. The Committee will then consider the continuation of the project for a further year (if necessary)

Included Documents:

Document Type	File Name	Date	Version
Informed Consent Form	Revised_Consent Form_Electronic Survey_v2.0_05092019	05/09/2019	2
Data collection tool	Revised_Qualtrics Survey_v3.0_05092019	05/09/2019	3
Data collection tool	Revised_Qualtrics Survey_Lucky Draw_v1.0_05092019	05/09/2019	1
Request for permission	Revised_Institutional Permission_v2.0_05092019	05/09/2019	2
Request for permission	Revised_Institutional Permission_v2.0_05092019	05/09/2019	2
Request for permission	Revised_Institutional Permission_v2.0_05092019	05/09/2019	2
Request for permission	Revised_Institutional Permission_v2.0_05092019	05/09/2019	2
Request for permission	Revised_Institutional Permission_v2.0_05092019	05/09/2019	2
Request for permission	Revised_Institutional Permission_v2.0_05092019	05/09/2019	2

permission		
Request for permission	Revised_Institutional Permission_v2.0_05092019	05/09/2019 2
Default	Revised_Request for Research Permission_v2.0_05092019	05/09/2019 2
Default	Revised_Survey Distribution_Email template_v3.0_05092019	05/09/2019 2
Research Protocol/Proposal	Revised_Research Proposal_Emoji Interpretation_Organisational CMC_TduPlessis_v2.0_05092019	05/09/2019 2
Default	Revised_DESC Report_Talita du Plessis_06092019	06/09/2019 1

If you have any questions or need further help, please contact the REC office at cgraham@sun.ac.za.

Sincerely,

Clarissa Graham

REC Coordinator: Research Ethics Committee: Human Research (Humanities)

National Health Research Ethics Committee (NHREC) registration number: REC-050411-032.
The Research Ethics Committee: Humanities complies with the SA National Health Act No.61 2003 as it pertains to health research. In addition, this committee abides by the ethical norms and principles for research established by the Declaration of Helsinki (2013) and the Department of Health Guidelines for Ethical Research: Principles Structures and Processes (2nd Ed.) 2015. Annually a number of projects may be selected randomly for an external audit.

Investigator Responsibilities

Protection of Human Research Participants

Some of the general responsibilities investigators have when conducting research involving human participants are listed below:

1. Conducting the Research. You are responsible for making sure that the research is conducted according to the REC approved research protocol. You are also responsible for the actions of all your co-investigators and research staff involved with this research. You must also ensure that the research is conducted within the standards of your field of research.

2. Participant Enrollment. You may not recruit or enroll participants prior to the REC approval date or after the expiration date of REC approval. All recruitment materials for any form of media must be approved by the REC prior to their use.

3. Informed Consent. You are responsible for obtaining and documenting effective informed consent using **only** the REC-approved consent documents/process, and for ensuring that no human participants are involved in research prior to obtaining their informed consent. Please give all participants copies of the signed informed consent documents. Keep the originals in your secured research files for at least five (5) years.

4. Continuing Review. The REC must review and approve all REC-approved research proposals at intervals appropriate to the degree of risk but not less than once per year. There is **no grace period**. Prior to the date on which the REC approval of the research expires, **it is your responsibility to submit the progress report in a timely fashion to ensure a lapse in REC approval does not occur**. If REC approval of your research lapses, you must stop new participant enrollment, and contact the REC office immediately.

5. Amendments and Changes. If you wish to amend or change any aspect of your research (such as research design, interventions or procedures, participant population, informed consent document, instruments, surveys or recruiting material), you must submit the amendment to the REC for review using the current Amendment Form. You **may not initiate** any amendments or changes to your research without first obtaining written REC review and approval. The **only exception** is when it is necessary to eliminate apparent immediate hazards to participants and the REC should be immediately informed of this necessity.

6. Adverse or Unanticipated Events. Any serious adverse events, participant complaints, and all unanticipated problems that involve risks to participants or others, as well as any research related injuries, occurring at this institution or at other performance sites must be reported to Malene Fouche within **five (5) days** of discovery of the incident. You must also report any instances of serious or continuing problems, or non-compliance with the RECs requirements for protecting human research participants. The only exception to this policy is that the death of a research participant must be reported in accordance with the Stellenbosch University Research Ethics Committee Standard Operating Procedures. All reportable events should be submitted to the REC using the Serious Adverse Event Report Form.

7. Research Record Keeping. You must keep the following research related records, at a minimum, in a secure location for a minimum of five years: the REC approved research proposal and all amendments; all informed consent documents; recruiting materials; continuing review reports; adverse or unanticipated events; and all correspondence from the REC

8. Provision of Counselling or emergency support. When a dedicated counsellor or psychologist provides support to a participant without prior REC review and approval, to the extent permitted by law, such activities will not be recognised as research nor the data used in support of research. Such cases should be indicated in the progress report or final report.

9. Final reports. When you have completed (no further participant enrollment, interactions or interventions) or stopped work on your research, you must submit a Final Report to the REC.

10. On-Site Evaluations, Inspections, or Audits. If you are notified that your research will be reviewed or audited by the sponsor or any other external agency or any internal group, you must inform the REC immediately of the impending audit/evaluation.