

# The role of financial management training in developing skills and financial self-efficacy



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**Background:** Financial management is an essential management function for any small business. Short-term financial management is especially crucial for start-ups and established businesses. Owners of small businesses in South Africa often need to perform this function themselves; however, many do not possess the skills and practices required to perform this function effectively. Financial self-efficacy acts as an important motivating factor in managing the finances of a business. Focused training is important in developing financial management skills, but little research has been conducted to determine whether this type of training improves financial management skills and financial self-efficacy.

**Aim:** To determine whether a tailor-made financial management training course improves the development of short-term financial management skills and financial self-efficacy of small business owners in South Africa.

**Setting:** This study sampled small business owners who attended a tailor-made financial management training course that focused on short-term financial management principles.

**Method:** A quasi-experimental study using a pre-test–post-test single-group design was applied using self-administered questionnaires.

**Results:** The results from a one-tailed paired-sample *t*-test show that the training course significantly improved both the development of short-term financial management skills and the financial self-efficacy of participants.

**Conclusion:** Tailor-made financial management training courses enhance the short-term financial management skills of owners of small businesses and also improve their financial self-efficacy. By improving both their skills and self-efficacy, small business owners are likely to make better financial decisions and be more motivated to implement financial management practices.

## Introduction

Small, medium and micro-enterprises (SMMEs) contribute significantly to employment and the economy in South Africa (Groepe 2015:5). However, research shows that the failure rates of SMMEs in South Africa are very high (Petrus 2009:1; Radipere & Van Scheers 2005:402; Van Eeden, Viviers & Venter 2003:13). Internal and external factors contribute to failure of new SMMEs, with lack of management experience and lack of functional skills cited as being important internal factors (Fatoki 2014:926). Rajaram (2008:10) identifies one of the difficulties small business owners face: often they cannot afford to employ managers, and thus owners need the skills to perform management functions themselves. Small businesses in South Africa have low growth rates, and it is estimated that up to half of small businesses do not grow (Ladzani & Van Vuuren 2002:155). Low growth rates in small businesses are impacted by, among many factors, inadequate decisions taken by the owners because of insufficient management skills (Ihua 2009:199).

Financial management skills are critical in operating a business in South Africa (Mamabolo, Kerrin & Kele 2017:9; Roodt 2005:18) and are needed to increase the survival rates of start-up businesses (Orford, Herrington & Wood 2004:3). However, research shows that many small business owners do not have the financial management skills they require to effectively manage their businesses (Orford et al. 2003:48; Rajaram & O'Neill 2009:115; Statistics South Africa 2005:xx). Schwarze (2008:144) suggests that owners of small businesses ought to first develop short-term financial management skills in order to survive and grow, after which long-term financial management skills can be developed.

The literature also reveals that not only financial management skills and resources are necessary for small firms to be successful, so too are attitudinal factors such as financial self-efficacy (or the

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self-confidence to be able to perform a task), which influence the desire to persist and pursue managing the finances of a business (Amatucci & Crawley 2011:24). Lapp (2010:1) identifies financial self-efficacy as the vital connector between financial knowledge and taking financial decisions.

Training is important to develop financial management skills for newly formed and existing small businesses (Maas & Herrington 2006:70). Perks and Smith (2008:156) point out that training programmes for very small businesses need to focus on developing specific skills at an appropriate level in order to be effective. Gaining knowledge or skills from training may not, however, necessarily improve self-efficacy, a lack of which could lead to learners not effectively applying what they have learnt (Gist 1986:254). Wilson, Kickul and Marlino (2007:392) note that self-efficacy is not often used to assess the outcome of educational activities, although it could lead to better feedback on their effectiveness. This argument is supported by Latham (1989:293), who also regards measuring self-efficacy as an important outcome of training. Kirsten (2013:831) found that training improved the perceived knowledge of short-term financial management principles of small business owners, but the research did not measure whether the improvement was in actual understanding of financial management principles or in financial self-efficacy.

The literature shows that, while it is important that focused financial management training develops financial management skills, training also needs to enhance the financial self-efficacy of small business owners in South Africa in order to increase the likelihood of them implementing what they have learnt. Short-term financial management skills should be acquired before long-term financial management skills. The objectives of this study are therefore to determine whether a tailor-made training course improves the participants' understanding of short-term financial management principles, as well as their associated financial self-efficacy.

The rest of this paper is structured as follows. The next section provides a literature review of the financial management skills and practices which small business owners require to manage their business, the role of financial self-efficacy and the importance and nature of the training required to develop skills in small business owners. This is followed by the formulation of the hypotheses, the research methods and design of the study. The results of the study and discussion thereof are presented thereafter. The final section concludes on the findings of the study.

## Literature review

### Financial management skills and practices

Financial management involves acquiring and managing financial resources optimally in order to achieve long-term and short-term objectives (Conradie & Fourie 2002:5). Literature indicates the financial management practices and related skills which small business owners require in order to manage the finances of a business effectively. Marx et al. (2004:7) identify the short-term and long-term financial

management functions that must be in place in order to manage a small business. In the short term, determining profitability and cash flow requirements is important. In the long term, investment, financing and solvency functions are required.

Brijlal, Enow and Isaacs (2014:344) identify financial planning, accounting record-keeping and financial analysis and reporting as important financial management practices that must be in place in SMMES. Orford et al. (2003:48) identify cash book, accounts receivable, inventory records and effective management of debtors as critical practices in reducing the likelihood of cash flow problems in small and medium registered black-owned businesses. Perks and Struwig (2005:184) suggest that record-keeping skills are crucial in enabling owners of very small businesses to track the performance of the business themselves and to manage the finances of the business, especially when they cannot afford accountants to perform this function. Small business owners also need to be able to interpret management accounts, cash flow information and bank statements in order to adequately manage the finances of the business (Collis & Jarvis 2002:108).

Wolmarans and Meintjies (2015:111) found that short-term financial management practices related to working capital and profitability management were more applicable to established small and medium enterprises (SMEs) than long-term financial management practices, such as preparing balance sheets and strategic financial management. It was also found that financial management skills such as cash flow management (as a short-term management concern) and decision making were more applicable to SMEs than planning and detailed financial analysis (which are medium- to long-term management concerns). Also, the increased tax compliance burden (Abrie & Doussy 2006:10) and legal compliance requirements (for small businesses which operate as separate legal entities, such as companies) (Chiloane-Tsoka & Rankhumise 2012:12098) add to the responsibilities of small business owners. These owners need to understand these requirements in order to effectively manage the financial side of their businesses in the short term. Kirsten (2013:827) summarises five key elements of short-term financial management in which small business owners must be proficient: record-keeping; planning for future profitability (forecasting and performing break-even analysis); managing working capital (stock, debtors and cash); measuring past performance (compiling and analysing financial statements); and complying with tax and legal requirements. The literature thus shows the relevance of short-term financial management practices and skills in newly formed and established small businesses.

### Financial self-efficacy

Self-efficacy is a term that was first used in social learning theory by Bandura (1977:193). It refers to confidence in one's ability to perform a specific endeavour. It has been shown to increase the likelihood of engaging and persevering in that endeavour (Bandura 1997:125). Locke and Latham (2002:706)

note that higher self-determined objectives are set by those with higher self-efficacy. Self-efficacy is attributable to a specific domain or area, and thus must be assessed for that specific area to determine the likelihood of a positive outcome in that area (Eccles 1994:594). Research on self-efficacy in the context of entrepreneurship shows that a high level of self-efficacy has positive effects on entrepreneurial intentions to start a business (Boyd & Vozikis 1994:75; Florin, Karri & Rossiter 2007:37; Urban 2006:8). Research on the effect of entrepreneurial education on entrepreneurial self-efficacy has shown varied results. Studies found that entrepreneurship education has a positive effect on entrepreneurial self-efficacy and entrepreneurial intentions (Wilson et al. 2007:398; Zhao, Seibert & Hills 2005:1270). Cox, Mueller and Moss (2002:240) found that entrepreneurial education impacted entrepreneurial self-efficacy differently; some participants' self-efficacy improved while that of others did not, indicating a need to incorporate more activities in entrepreneurial education to further improve entrepreneurial self-efficacy.

More recently, research has extended to investigating self-efficacy in relation to managing personal finances (consumers) and financial management (entrepreneurs). The term used to describe self-efficacy in these studies is 'financial self-efficacy'; it is used in this article to refer to self-efficacy which relates to the financial management of small businesses. Lapp (2010:1) proposed financial self-efficacy to be the motivating factor for low-income individuals making better decisions relating to personal finances. The results of Lown's (2011:54) study illustrated that consumers with low financial self-efficacy needed more assistance from financial advisors with personal finance decisions than those with higher financial self-efficacy. Amatucci and Crawley (2011:23) proved that women entrepreneurs were less confident than their male counterparts, and Fatoki and Oni (2016:186) found that spaza-shop owners did not have sufficient financial self-efficacy to manage some financial management functions.

## Education and training for small businesses

Literature shows the importance of presenting and designing training programmes that suit the needs of small businesses. McGee et al. (2009:984) suggest that educational interventions should not only address 'inspiration' activities (those which attract entrepreneurs to ventures and to search for business opportunities) but also 'perspiration' activities to enhance the crucial implementation skills needed to operate a business. Perks and Smith (2008:153) provide comprehensive considerations to bear in mind when presenting training programmes to support small businesses, the main recommendations being that training programmes ought to be presented in smaller sessions to target specific skills; be appropriate to the participants' skill level; blend with developing a large variety of skills; be widely published; be presented in small groups; combine the knowledge, skills competence, and attitude domains of learning; incorporate mentors (though these are often too expensive and lengthen the process); involve business associations and universities to a greater extent; provide enough time to manage one's

own learning; and focus on the training needs of participants. Some of these recommendations are in line with suggestions stemming from other research. Herrington, Kew and Kew (2009:109) concur that training courses need to be tailor-made to meet the requirements of small businesses. Orford et al. (2004:53) and De Waal (1997:15) suggest that experts in their respective fields ought to present these focused training courses; more specifically related to financial management training. Schwarze (2008:148) recommends that accounting academics could contribute positively to this process by presenting focused training in financial management, as they are experts in this field.

Based on the preceding literature review, the following two hypotheses were formulated relating to a tailor-made training course covering short-term financial management topics:

**H1:** The training course improved the participants' understanding of short-term financial management principles.

**H2:** The training course improved the participants' financial self-efficacy related to short-term financial management.

## Research methods and design

### Study design

In order to determine whether a tailor-made training course improved, firstly, the participants' understanding of short-term financial management and secondly their financial self-efficacy, a quasi-experimental study was applied using a pre-test-post-test single-group design. This design is appropriate as it determines whether expected changes have occurred in the participants according to the objectives of the intervention (Babbie & Mouton 2001:348).

### Population

The target population for this study was South African small business owners who attended a tailor-made financial management training course that focused on short-term financial management principles. Forty-nine participants attended the training and all of them were invited to participate in this study on a voluntary basis. The questionnaires of 43 participants were complete for both the pre-test and the post-test, and these responses formed the basis of this study.

### Intervention

A programme was devised by a municipality in the Cape Winelands region in the Western Cape Province of South Africa to enhance entrepreneurial development in this region. The focus of the programme was to enhance the business and management skills of owners of qualifying small businesses who came from previously disadvantaged communities in this rural region. Beneficiaries were also provided with financial support to grow or start their businesses. This programme was managed by an external not-for-profit organisation and included training and mentoring of participants in areas such as general business management, marketing and financial management. The not-for-profit organisation made use of field specialists to conduct the training and mentoring for each component of the

programme. For the financial management training component of this programme, beneficiaries attended a Sector Education and Training Authority (SETA)-accredited training course which was designed to develop the short-term financial management skills of small business owners.

The training course broadly covered short-term financial management principles, such as record-keeping; planning for future profitability (costing, pricing, break-even); measuring past performance (preparation and interpretation of financial statements); working capital management (stock, debtors and cash flow); and compliance (tax and legal). Participants used a case study (based on a fictional small business that provides both goods and services) for practical application of the short-term financial management principles covered during the training course. A number of toolkits were used during the training to help participants understand the processes involved in applying financial management principles to the case study. Participants could later use these toolkits and apply them to their businesses. The training course was presented over two days at five different training sites in rural towns in the Cape Winelands region. The training courses were facilitated by accounting lecturers from a local university who volunteered to present the training course as part of a social impact initiative.

## Measures

### Understanding of short-term financial management principles

An assessment using simple constructed-response questions was used to measure the participants' understanding of the short-term financial management principles that were covered in the training course. For example, respondents were asked to explain how a small business should keep record of its transactions; what the term 'working capital' means; and what an income statement is, and what it is used for. The same assessment was used for the pre-test and the post-test. Constructed-response questions allow the participants to develop their own answers by reflecting on the knowledge they have gained from the intervention (Tankersely 2007:12). Comprehension (or understanding) is one of the building blocks in the hierarchy of cognitive skills as indicated in Bloom's taxonomy (Bloom 1956:120). Thus, before being able to apply a principle, one must first comprehend or understand the principle. The split-half method, using even and odd items, was used to test the reliability of the assessment. The larger the size of the correlation between the two halves, the more reliable the scale (Coldwell & Herbst 2004:17). The unequal-length Spearman-Brown split-half reliability coefficient of the assessment before the training was 0.681, and after the training was 0.726. The assessment is therefore considered reliable.

### Financial self-efficacy related to short-term financial management

Financial self-efficacy related to short-term financial management was measured using a five-point Likert scale (ranging from 'no confidence' to 'very confident'), combined with a happy-face graphic rating scale in order to complement

the meaning of the response options of the Likert scale. Stange et al. (2016:9) found that it may be advantageous for respondents with lower literacy levels to combine smiley-face graphic rating scales with text-only questions for emotive response options, especially in self-administered questionnaires. The construct used to measure financial self-efficacy relating to short-term financial management was adapted from constructs used by Lown (2011:59) that relate to financial behaviour; from Amatucci and Crawley (2011:28) that relate to successful financial management; and from McGee et al. (2009:978) that relate to implementing finance-related tasks. Respondents were asked to rate how confident they felt about their ability to apply each of the five short-term financial management principles covered in the training course. Cronbach's alphas were computed for the pre-test and post-test financial self-efficacy constructs in order to determine the internal consistency. The scale comprised five items. Cronbach's alpha showed the questionnaire to reach a high reliability,  $\alpha = 0.780$  for the pre-test and  $\alpha = 0.753$  for the post-test (Nunnally 1978:245).

## Data collection

The primary source of data was the self-administered questionnaires. Participants were requested to complete a questionnaire shortly before the commencement of the two-day training course (the pre-test) and to complete the same questionnaire directly after the completion of the course (the post-test). The questionnaire consisted of two sections. One section required participants to rate their financial self-efficacy relating to short-term financial management and the other required participants to complete an assessment to test their understanding of the short-term financial management principles covered during the training course. Demographic data of the participants were obtained from a questionnaire they completed when they initially registered for the entrepreneurial development programme.

## Validity assessment

The internal validity of this study's design may be threatened because of maturation, history, testing and regression effects (Marsden & Torgerson 2012:584). Maturation is growth, change or development over time that is unrelated to an intervention. The history effect is events or influences that could have changed in a participant's environment, which may account for the changes being tested for. Testing effects are effects that influence participants because they are aware of being tested and may change because of any knowledge gained from the pre-test independent of the intervention. Lastly, regression effects are applicable when participants are selected for an intervention based on unusual pre-test scores, which influence the interpretation of post-test scores (Robson 1993:70).

The training course was presented on two consecutive days and participants were tested directly before the training commenced on the first day and directly after the course was concluded at the end of the second day. The threat of maturation and history effects is therefore regarded as low. Participants

may have been alerted to the testing and initiated some form of learning after the pre-test. However, participants did not receive any direct feedback on their answers after completing the pre-test, and no learning which was independent of the training was considered likely by the researcher because of the brief time that elapsed between the pre- and post-testing. The threat of testing effect is, therefore, also regarded as low. Participants were not selected based on their pre-test scores, as all participants who attended the training course were included in the pre-test, as well as the post-test, thus eliminating the regression threat. Thus, the internal validity of this study is considered to be high. Field experiments have a high external validity (Zikmund et al. 2010:274), and thus the external validity will be high for this explorative study.

## Data analysis

The responses from the completed questionnaires were captured onto an Excel spreadsheet by the researcher. The data captured were double-checked for correctness. Numbers were assigned to the participants' responses once the data were captured to ensure anonymity in further data analysis. The assessment of each participant was marked by a single examiner using an analytical scoring rubric, containing six rating score categories ranging from 'no understanding' to 'excellent understanding'. The assessment was moderated by an independent senior colleague. The responses were coded in order to upload them to the statistical package. Possible-code cleaning was performed to examine the distribution of responses to each item in the data set, and any errors detected were corrected. To test the hypotheses that the financial management training course improved the participants' understanding of short-term financial management principles and financial self-efficacy, a one-tailed paired-sample *t*-test was used.

## Ethical considerations

The views expressed in this article are my own and not an official position of the institution or funder.

## Results

### Participant characteristics

The characteristics of the participants who took part in the financial management training course are shown in Table 1. The participants were distributed widely across demographic categories. The majority had school-level education only. A quarter of the participants had start-up businesses and did not have any turnover or assets.

### Testing the hypotheses

The one-tailed paired-sample *t*-test provided the following results:

**H1:** The training course improved the participants' understanding of short-term financial management principles.

Before performing the analysis, the assumption of normally distributed difference scores was analysed. The skew and

**TABLE 1:** Demographic characteristics of the participants in the study.

Variable	<i>n</i>	%
<b>Gender</b>		
Men	22	51.2
Women	21	48.8
<b>Age</b>		
<30	5	11.6
30–39	10	23.3
40–49	17	39.5
50–59	8	18.6
60 and older	3	7.0
<b>Education – highest qualification</b>		
Lower than Grade 7	1	2.3
Grade 7	2	4.7
Grade 10	9	20.9
Grade 12	23	53.5
B Tech degree	3	7.0
Baccalaureus degree	4	9.3
Honours degree	1	2.3
<b>Type of business</b>		
Manufacturing	8	18.6
Service	31	72.1
Retail	4	9.3
<b>Reason for starting business</b>		
Opportunity	33	76.7
Necessity	10	23.3
<b>Form of ownership</b>		
Sole proprietor	22	51.2
Close corporation	10	23.3
Private company	9	20.9
Partnership	1	2.3
Co-operative	1	2.3
<b>Annual turnover</b>		
R0	11	25.6
R1 – R50 000	8	18.6
R50 001 – R100 000	6	13.9
R100 001 – R200 000	10	23.3
R200 001 – R500 000	6	13.9
R500 001 – R1 000 000	2	4.7
<b>Total gross asset value</b>		
R0	11	25.6
R1 – R20 000	10	23.3
R20 001 – R50 000	7	16.3
R50 001 – R100 000	9	20.9
R100 001 – R600 000	4	9.3
R600 001 – R2 500 000	2	4.6
<b>Number of employees</b>		
0	10	23.3
1–5	25	58.1
6–10	8	18.6

kurtosis levels were determined at 0.142 and -0.760, respectively. Thus, the assumption of normal distribution was considered satisfied, as the values were less than the maximum allowable values for a *t*-test (i.e. skew < |2| and kurtosis < |9|) (Posten 1984:97). On average, the participants' understanding of short-term financial management also improved significantly after the training course ( $M = 3.358$ ,  $SE = 0.124$ ), compared to before the course ( $M = 1.958$ ,  $SE = 0.141$ ,  $t(42) = -10.557$ ,  $p < 0.001$ ,  $r = 0.852$ ). The null hypothesis, namely that the training course did not improve the participants' understanding of short-term financial management principles, was therefore rejected. A graphic representation of the means and adjusted 95%

confidence intervals (Loftus & Masson 1994:476) for understanding of short-term financial management principles is presented in Figure 1.

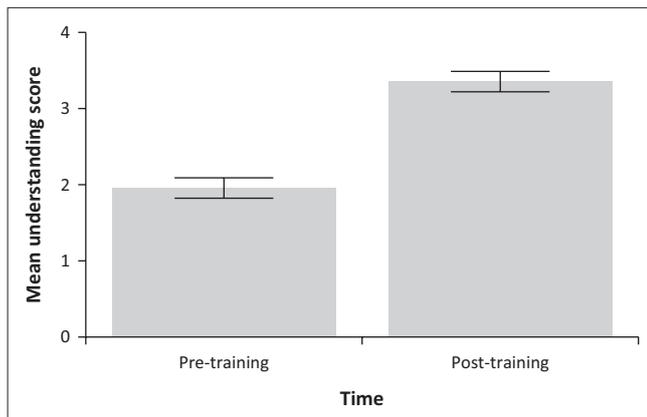
**H2:** The training course improved the participants' financial self-efficacy related to short-term financial management.

The skew and kurtosis levels were determined at 0.285 and 0.542, respectively, which was less than the maximum allowable values for a  $t$ -test and also satisfies the normal distribution assumption. On average, the participants' financial self-efficacy after the training course improved significantly ( $M = 4.047$ ,  $SE = 0.069$ ), compared to before the course ( $M = 2.958$ ,  $SE = 0.137$ ,  $t(42) = -6.754$ ,  $p < 0.001$ ,  $r = 0.722$ ). The null hypothesis, namely that the training course did not improve the participants' financial self-efficacy related to short-term financial management, was therefore rejected. A graphic representation of the means and adjusted 95% confidence intervals (Loftus & Masson 1994:476) for financial self-efficacy is presented in Figure 2.

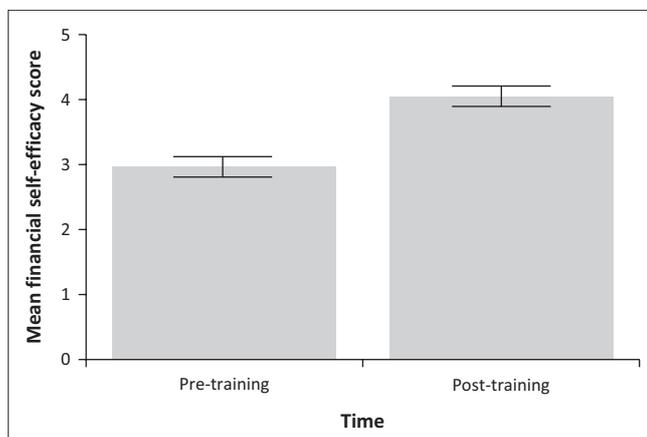
## Discussion

### Discussion of key findings

A key finding of this study was that not only did the focused financial management training course significantly improve



**FIGURE 1:** Means and 95% confidence intervals for understanding short-term financial management principles associated with the pre- and post-training conditions.



**FIGURE 2:** Means and 95% confidence intervals for financial self-efficacy associated with the pre- and post-training conditions.

the participants' understanding of short-term financial management principles, the training was also able to significantly improve the participants' associated financial self-efficacy. Having improved their understanding of short-term financial management principles, the participants are better equipped to manage the finances of their business in the short term. The literature has shown that having gained knowledge or skills through training may not necessarily translate into applying what one has learnt unless self-efficacy is also improved. Thus, having also improved their financial self-efficacy, the participants are likely to better utilise the knowledge gained from the training for financial decision making and be more motivated to implement the financial management practices covered in the training course in their businesses. As the participants are able to better manage the finances of their businesses in the short term, there may be an increased likelihood of their businesses surviving and growing.

### Strengths and limitations

This study was able to determine that the short-term financial management skills actually improved, as the participants' understanding of short-term financial management principles was measured using an assessment and was not based on self-reporting. A limitation of the study is that financial self-efficacy was measured based on self-reporting of participants, which may have caused it to be misrepresented because of 'social desirability bias' (Holbrook 2008:805). The businesses of most participants in this study fell into the categories of micro-business and very small business, as defined by the *Small Businesses Act* (South Africa 1996, s. 1 ss. [xv]). The impact of this type of training on improving the development of short-term financial management skills and financial self-efficacy of people owning businesses that are larger than these categories was not tested. The sample size of the study was small and focused on a specific geographic region, thus it is not representative of all small businesses in South Africa. A larger sample size may present different results.

### Implications and recommendations

By first improving the development of short-term financial management skills and financial self-efficacy through focused training, owners of start-ups and existing small businesses can establish a strong basis on which to make better financial decisions. In order to grow their businesses, small business owners would need to build on their financial management skills and financial self-efficacy and work towards developing financial management skills in order to achieve long-term financial management objectives. Thus, once the initial training has been completed, Schwarze (2008:148) recommends that a needs assessment of each participant should be done to determine the next appropriate intervention to develop their financial management skills. Suggested interventions are follow-up training courses for participants who require additional training or accounting clinics and/or mentoring, which can be facilitated by field specialists such as members of the accounting profession.

Kirsten and Fourie (2012:475) identify the need of existing small business support organisations for accounting professionals to assist in providing financial management training to those organisations' beneficiaries. It is recommended that a tailor-made financial management training course, such as the one used in the present study, be presented by members of the accounting profession to assist other small business support organisations in strengthening the initiatives they offer to their beneficiaries.

A possible area for future research is to determine the extent to which other types of intervention using field specialists improve the development of financial management skills and financial self-efficacy. Research could also investigate the extent to which participants in focused training courses are able to implement financial management practices themselves, or whether they need assistance.

## Conclusion

In summary, this study found that a tailor-made financial management training course improves not only the short-term financial management skills of small business owners but also their financial self-efficacy. After attending this type of focused financial management training, small business owners in South Africa are likely to make better financial decisions relating to their businesses and be more motivated to implement financial management practices. This will have a beneficial impact on both small business owners in South Africa and the success of their businesses.

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## Competing interests

The author declares that she has no financial or personal relationships that may have inappropriately influenced her in writing this article.

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