Macrothink Institute™

Journal of Public Administration and Governance
ISSN 2161-7104
2018, Vol. 8, No. 3

SME Managers and Financial Literacy; Does Financial Literacy Really Matter?

Shamim Akhtar (corresponding author)

School of Economics and Management

Xidian University Xian, Shaanxi, China

Dr. Yanping Liu

School of Economics and Management

Xidian University Xian, Shaanxi, China

Received: Aug. 22, 2018 Accepted: Sep. 13, 2018 Online published: Sep. 21, 2018

doi:10.5296/jpag.v8i3.13539 URL: https://doi.org/10.5296/jpag.v8i3.13539

Abstract

The purpose of this study is to examine the level of small and medium (SMEs) business owners-managers' financial literacy and its effect on the firm's performance. The study applied random sample and structural equation modeling approaches in measuring the impact of SME firm owners-managers' level of financial literacy in the context of Pakistan. The findings reveal the complete influence of firm owners- manager's financial attitude, financial knowledge and financial awareness in adapting financial literacy to upsurge in firm performance. Results indicate that financial awareness and financial knowledge of SME managers are evidently not a precondition to SMEs performance, yet entrepreneur tactics in making decisions and association to financial attitude have a contrast with financial literacy. Findings would be valuable for the SME owners, investors and service providers.

Keywords: SMEs, financial literacy, financing, firm growth

1. Introduction

Managers take various decisions as part of their routine arrangements. They are anticipated to decide many issues containing those apprehensive with firm's strategy, configurations, development systems, performance evaluation procedures and workflow, among others (Ireland & Miller, 2004). Notably, managerial decisions may have significant consequences for the firm performance and success (Hart, Milstein & Caggiano, 2003). These dealings have unsurprisingly financial features. Then to perform efficiently, it is important to be financially literate for the owners-mangers of the firms. The significance of financial decisions is evident from the higher failure rate among small firms because of their weak financial management (Van Praag, 2003). Owners of SMEs often do not have robust finance expertise and thus they may not completely comprehend the influence of their decisions on the firm. Financial literacy of owners for the growth of firms seems really crucial (Adomako, Danso & Damoah, 2015). Bad decisions threatens the firms sustainability and leaves the wide spread operational problems (Timmons and Spinelli, 2004).Certainly decisions of managers have significant impact on their firms, a decision can enhance firms' capability to respond to the competitive challenges or may lead to failure. Ayyagri, Beck and Demirguc-Kunt (2007) argued that if SME managers are not acquainted with proper knowledge about the need of the business, surely they will not satisfy them. This specifies the effect of financial literacy in taking right decision to mandate for effective services. SME managers and individuals with low financial literacy are likely to make wrong decisions regarding to capital structure of the firm, for instance contributing less in formal financial system and borrowing at higher rates of interest in relation to their financially literate counterparts (Lusardi and Tufano, 2009; Lusardi, Mitchell and Curto, 2010; Lusardi and Bassa Scheresberg 2013). Financial literacy explicates differences in financing decisions by the borrowers (Kidwell and Turrisi, 2004).

SME managers generally do not have robust skills and have poor appreciative about preparing and understanding the financial statements in the perspective of forming imperative business decisions (Van Auken, 2005). Moreover, small and medium enterprises time and again form decisions in the vague environment, deprived of all-inclusive information, which is an unfeasible ultimate for them (Beck & Demirguc-Kunt, 2006). Various studies put emphasis on small and medium enterprises that they require to obtain reliable, precise information for making accurate decisions (Van Auken 2013; Shields & Shelleman, 2011). Conversely the flow of information among SMEs tend to be limited due to some constraints that rise from the limited experience of managers, lack of creativeness, poor quality of information and insufficient resources and the higher agency cost (Madrid, Garcia &Van Auken, 2009). SMEs are primarily vulnerable towards the effect of poor and weak financial decisions because of their limited admittance to the financial markets and the restricted alternate means of capital. The managers those have the financial knowledge and value the financial data are projected to be use financial statements more differing to those who do not have financial understanding (Carraher and Van Auken, 2013). Hence, financial literacy of SME owners-managers is crucial for the survival of their business. This has been an apprehension with extreme challenges confronted by the SMEs with the wave that the poor financial literacy is one of the fundamentals causing poor financial decisions and that those decisions may possibly, in turn, have terrific negative spillovers.

A chain of concrete trends prop-up the growing global interest in financial literacy as a vital life skill. The United States has the Financial Protection Bureau for consumers (CFPB) and office of Financial Education (OFE) with directives of endorsing financial literacy and financial knowledge for supporting SME owners-managers in forming rational financial decisions. Similarly Indian government recognized the Financial Stability and Development Council (FSDC) with accountabilities of educating and helping entrepreneurs on diverse sources of financing edges. In Ghana government has approved a national strategy in alliance with international agencies on agenda of financial literacy and consumer awareness in supporting SMEs' owners-managers. Likewise Malaysian government implemented a three-divided methodology by forming a financial functioning committee to administer the financial literacy programmes for SME owners and for the individuals in (a) proper briefing and circulating information on products of financial nature by means of print media and via internet; (b) institutional programmes with all sides of educational arrangements about money managing; and (c) outreach programmes focusing on women and disables ones with continues trainings and briefing sessions (Ketley et al., 2012). However, financial literacy level is still low in most of the developing countries.

The involvement of financial literacy has gathered mounting attention in developed as well as developing world as a force of human development deliverance. Various scholars, for instance Drexler, Fischer and Schoar (2014), mentioned that SME managers are asked to take demanding financial decisions in various aspects of their business life. According to Freiling and Laudien (2013), lack in skills adds especially to the failure of startup businesses. Ebiringa and Okorafor (2010) worked on personal financial knowledge, concepts and terms of finance along with financial skills to analyze financial literacy and the financial decision making capability in the gender balance problem among university students of Nigeria. Largely it is acknowledged that small and medium enterprises have great participation in the economic development. Certainly SMEs play a key role in the progress of any economy still this sector is ignored and fails to get sufficient attention from researchers' side especially in the developing countries like Pakistan. The failure percentage of SMEs growth in developing countries is much higher than in the developed countries (Arinaitwe et al., 2006). Therefore, it is crucial to develop SME sector, particularly managers who can effect running the business of their firms along with their employees in relation to awareness, knowledge and attitude. According to Khawaja (2006) the regulatory processes in Pakistan are much conducive in nature; Government policies are mainly concentrated on the large firm's advancement. Noticeably it is evident that there are various issues associated with the growth of SMEs and managers require acting more intelligently.

Nowhere is financial literacy needed more than in the small to medium size business community. SMEs sector is reflected as backbone of the Pakistan economy. SME sector contribute 40% in the annual GDP of Pakistan (SMEDA Pakistan, 2010). The role of this sector is vigorous in boosting up economy and the only subsistence in the times of worst economic conditions. It is fair to claim that Pakistan economy is the economy of SMEs. According to the economic survey of Pakistan, Approximately this sector constitutes 90% of all the business sectors, 77 percent of the total industrial employment is covered by this sector. Meanwhile the failure percentage of SMEs is very high in a country like Pakistan. A vigorous financial literacy is crucial to the growth, survival and good health of businesses of all type. The beneficial characteristics of the financial literacy of SME owners-managers adds to economic and social deliverance in rising productivity, income, investment, savings and consumption. Therefore financial literacy of SME managers is necessary. Research publicized that no study has investigated empirically the financial literacy in capacities for instance knowledge, awareness and the assertiveness of SME managers in Pakistan. Thus, this study aimed at filling this gap in analyzing the impact of financial literacy (financial knowledge, financial attitude and financial awareness) on SMEs' growth with respect to Pakistan.

2. Literature Review

Theory Development----Resource Based View (RBV)

Reformed from the USAID (2009) a financially educated SME manager-owner defined as somebody who identifies what are the appropriate financing decisions for the business enactment at the different growth phases of the business, identifies where to get the supreme services and products and cooperates with self-assurance with the suppliers.

Financial literacy, in the glare of new business practice, is the ability to effectively oversee financial means over the business life cycle and interlink efficiently with the financial services and financial products. According to Remund (2010) financial literacy is the degree to which one apprehends significant financial concepts and holds the capability and self-confidence to deal personal funds through suitable channel with effective decision making which gives long term results.

Joo and Grable (2000) specified that the full pictures why business people form incorrect, insufficient and unproductive financial decisions are due to lack of subjective financial knowledge, shortage of time to study personal financial management, complications in financial transactions and wide-ranging choices in financial services and products. Dearth in business management abilities can amplify financial hurdles for SMEs. Low levels of financial literacy can avert the level of SMEs performance from effectively gauging and comprehending various financing provision and for the sight-seeing radical loan application process. SME owners who lack the independent financial information cannot limit the prospective impact of their decision on their business, thus they might sort out choices that superfluously generate hostile situations, greater risk, or the concentrated returns (Van Auken, 2005). Therefore financial literacy is crucial in today's commercial world.

This study backings the resource-based view that put emphasize on the way in which firms utilize their resources to advance performance. The resource based view proposed that insufficiency of financial, organizational, human resources and capabilities diminish the firms' advance activities (Hewitt Dundas, 2006). The inaccessibility of resources particularly financial resources is a main limitation to SME growth and development because it averts them from gaining the advanced technology that would lead them towards productivity and competitiveness (UNCTAD, 2002). Resources are anything that could be considered as strength or weakness to a given firm, consisting tangible assets for instance (financial capital, physical capital) and intangible assets for instance, entrepreneurial knowledge, experience, financial skills, organizational process and goodwill (Eniola & Entebang, 2014). Current research in strategic business management and finance has ongoing to study the link between firm strategy and the capital structure (Eniola & Entebang 2014).

Conferring to Eniola and Entebang (2014), the physical resources for instance the machinery, plant, equipment, production technology and capacity add positively to SMEs' competitive advantage and ultimately result in higher firm performance. Likewise, human resources in relation of knowledge and abilities, trust, managerial expertise, procedures and practices of higher and middle management and organizational and production workforce were also capable to explicate the degree of firm's competitive advantage and the subsequent SME firm's growth.

Barney (1991, 2001, and 2002) and Barney and Hesterly (2015) indicated that the human capital resources comprise the training, experience, knowledge, intelligence, assertiveness, associations and insights of individual managers-owners in a firm. Confirmation from preceding empirical studies of administrative and entrepreneurial wisdom advocates that the venture decision-making in SMEs is on the origins of pragmatic learning, instead of dignified methods (Ekanem and Smallbone, 2007).

Knowledge and experience are tremendously significant, as they make available time to be aware of opportunities, advance contacts and pick up how to access and to interrelate with suppliers comprising banks and venture capitalists. Therefore, enormous part of entrepreneurial learning is pragmatic (Deakins and Freel, 1998). While some research studies stated that only a few number of SME managers apply the subsequent knowledge proactively to form competitive advantage (Matlay, 2000), although other scholars find out that as firms traffic from upper level learning style, this is supplemented by competency development that may lead to higher organizational competency (Chaston Badger, Mangles & Sadler–Smith, 2001). On these grounds, the human capital concerning knowledge is an essential source of keeping viable advantage for a firm. Using resource-based view to knowledge means that gaining skill or expertise can deliver financial knowledge for business managers-owners, this may swift advanced firm performance.

Entrepreneur's attitude and behavior considers as vital part as a negotiator among strategy and firm performance as deliberated by Schuler and Jackson (1987) and Schuler (1989). The models do emphasis on organization's attitudinal behaviors instead of only skills, knowledge or capabilities because the firm owners and employee behaviors and promises may have more effect on firm's performance. Therefore, business owner-manager's role and attitude are influential in gaining competitive advantage (Thang, Quang & Buyens, 2010). Attitude has lots to do with firm owners and managers' financial decision making and their financial outcomes. Though there are lot of reasons that effect entrepreneurs' attitude comprising their emotions and environment. Entrepreneurs who are usually impatient incline towards swift and snappy attitudes that are risky for accurate decision taking for the reason that such individuals act on impulsive rather than rational thinking.

Bosma and Harding (2006) suggested that various SMEs fail for the reason of dearth in financial literacy, inadequate business insight which challenges the entrepreneurial activity. Financial management is noted as one of the dire managerial proficiencies in SME firms' advancement (Spinelli et al., 2011). Scholars believe that entrepreneurs, irrespective of their age, are constantly involved in decision-making practices regarding resource finding, allocation and usage. Such undertakings always have financial consequences and consequently, in order to stay effective, entrepreneurs should be financially literate (Oseifuah, 2010).

Drexler et al. (2014) theorized that entrepreneurs normally undergo inadequate financial literacy to make challenging financial decisions, resulting poor outcomes. Financial literacy adds profoundly to entrepreneurship skills (Oseifuah, 2010). Entrepreneurs need to grow financially they should feel confident concerning to their finances, also be sufficiently knowledgeable (Kotzè & Smit, 2008b). If managers/owners are not literate regarding their organizational finances, the financial capabilities of their business will also be missing and will central to decline in inventiveness that can convert into viable capability, inaccessibility to finance because of unawareness, this behavior will ultimately cause failure of SMEs (Kotzè & Smit, 2008a). Thus these viewpoints all appear to agree on one point that entrepreneurs undergo from a dearth of financial literacy and such deficiency weakens the chances of obtaining various sources of financing which can result into viable advantage and the higher firm performance.

Research Design and Operational Model Definition

The definition of the expressions and variables of the operational model used for the study are presented in this segment. The proposed model (figure1) formed as a manner to answer the research question, connecting the financial literacy and performance. This study argues that financial literacy has a positive impact on performance of the firm and that the pooled effect of three; awareness, attitude and knowledge is higher than the entirety of individual effects.

1. Small to Medium Size Enterprise: There is no even definition of SMEs in Pakistani context (Dasanayaka, 2008; Mustafa and Khan, 2005; Rana et al., 2007). The SME Bank, Small and Medium Enterprise Development Authority Pakistan (SMEDAP), Pakistan Bureau of Statistics (PBS) and the State Bank of Pakistan (SBP) have demarcated SMEs in differently. General criteria to define SME in Pakistan lies on number of employees up to 250, the paid up capital up to Rs.25 million and annual sales up to 250 million rupees (Kureshi et al., 2009).

2. Firm performance (FP) can be regarded as the firm's capability to generate adequate results and engagements: viable productivity is connected with some measuring items for instance return on assets (ROA), return on sales (ROS) and return on equity (ROE). Therefore, equity is the first alternate of financing provision. Where SME owner/manager

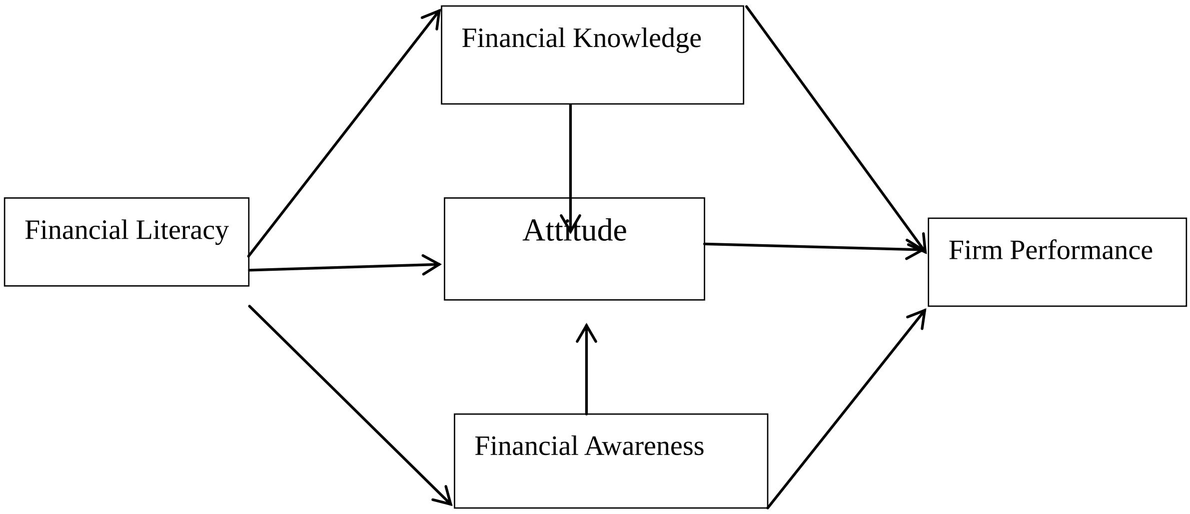

Figure 1. Conceptual Model

be deficient in ample equity financing, in replenish, debt would be applied. Similarly, in SME owner-manager business development, a debt would be used. The proportion of debt-equity would therefore be suggestive of the owner-manager's select of bases of financing provision at a specific time period (Abouzeedan, 2010; Diagne and Zeller, 2001; Eniola and Entebang, 2015; Mac an Bhaird, 2010).

Financial knowledge (FK) is the comprehension of fundamental financial models of how business condition and business performance be measured by means of mental model to assist, support and enrich decision making (Lusardi & Bassa Scheresberg, 2013; Lusardi and Michell 2007a, 2007b; Moore, 2003). People who financially literate are more involved in financial markets for the reason that they are well-aware about financial issues. Financial knowledge needed to create an extent of financial capability for the competitive advantage and to stay well-informed about the financial difficulties (Lusardi and Michell, 2006). Financial literacy of SME owners and managers lead them to be more financially sophisticated and it is inferred that this may lead an individual more competent (Hung Parker & Yoong, 2009). According to Marcolin and Abraham (2006) financial knowledge has great impact in amplifying total source of financing of a firm. An individual can considered financially literate only if he or she capable enough to apply the knowledge (Moore, 2003; Huston, 2010).Moore (2003) argued that knowledge is attained through practice and vigorous incorporation of knowledge. In former words, owners-managers will become more refined in relation to finance when they are more literate. Huston (2010) also put emphasis on that, organization or an individual with financial literacy and knowledge along with this ability to use that knowledge may not express the anticipated behavior or increase financial health as an effect of former influences for instance behavior and cognition that is biased, family, peers, self-control issues, economic and organizational conditions that may affect financial conducts and financial health. Yet, both researchers Huston (2010) and Moore (2003), coincided in clarifying that financial literacy cannot be directly measured, and no established instrument is present for the measurement of financial literacy. Some researchers advised that there is moderation effect between attitudes and knowledge (Eagly and Chaiken, 1993), Jacobs-Lawson and Hershey (2005) noted the degree to which an individuals' knowledge about retirement planning, future time perception and financial attitude impact the saving practices. That means knowledge influence the strength or direction of the association between attitudes and firm performance (Baron and Kenny, 1996). In United States studies showed low levels of financial knowledge (FK) by way of attitudinal behavior amongst youth (Mandell 2007; Lusardi et al., 2010). Still, regardless of the orthodox wisdom that financial knowledge is criterion for positive financial attitude (Hathaway and Khatiwada, 2008); the pragmatic correlation between attitude and financial knowledge is not deep-rooted.

Financial attitude (FAT) mentions that the ability to analyze the new and refined financial tools and construct refined decision in every option of mechanisms and amount of deployment that may be contribute to their long term wellbeing (Mandell, 2007). Attitude headed for decision making methods has become feature of many enterprises that are prosperous. This can be regarding strategic position that allows companies to appeal on entrepreneurial skills and abilities in order to grab chance (Covin and Slevin, 1989). SME managers and owners with remarkable attitudinal approach have a propensity to initiate, take risks and act proactively, though conservative business owners-managers like better to escape risk and are more averse to take initiatives and perform responsively (Lumpkin and Dess, 1996; Sabri & MacDonald, 2010). Whereas attitude is concerning to risk-taking, refers that firm deliberately compelling resources to projects with prospects of higher returns but may also involve a high probability of failure (Miller and Friesen, 1982; Lumpkin and Dess, 1996). Yet, risk taking is also normally connected with entrepreneurial behavior and that mostly prosperous entrepreneurs are seemed risk takers (Kuratko and Hodgetts, 2001). Likewise Lusardi and Tufano (2009) deliberate on a specific array of financial literacy—debt literacy. Cude (2010) analyzed actual influences on financial literacy of individuals and witnessed that added work experience, appetite for risk, higher levels of education, parental vocation, higher age, family earnings and joining training programs will enhance financial literacy. Credit terms also determined the degree of financial accessibility by SMEs; Bond and Meghir (1994) observed that when credit terms is encouraging, SME manager's attitude in gaining access to that credit incline to be progressive and they are stimulated to borrow, and thus extension of capital base leading to better business doings takes place. In this study, it is argued that people with higher financial literacy are more effective in their businesses. Financial literacy has inverse relation with financial restrictions (Sabri and Macdonald, 2010).

Financial awareness (FAW) is the competency to comprehend and to handle different financial fusion strategies, know further and be conscious about the external service suppliers. It is the abstract knowledge of financial product submissions by the institutions and the capability to make accountable investment decisions to assist the attainment of one's financial objectives. The competency allows business owners to be watchful, set and objectify new systems to encounter the firms' enactment as business objective through responding to the varying economic condition (Sulaiman, 2014). Awareness derives beneath administrative sector, where it is the liability of the manager to oversee organization for the good health of the business. The capability to read, evaluates, accomplish and confer different financial situations ultimately clues to individuals' economic welfare (Lusardi and Tufano, 2009; Rahmandoust, Shah, Norouzi, Hakimpoor & Khani, 2011; Vitt et al., 2001). According to Deakins Logan and Steele (2001) initiate that managers have dynamic attitudes relating to business planning. Primarily, planning seemed crucial to those firms in phases of growth and swift deviations. Yet, Mandell (2007) and Lusardi and Tufano (2009) focused on the capability and decision making feature of financial literacy. Financial literacy should be part of every business ethos (Berman and Knight, 2008). According to Audet and St-Jean (2007) the SME owners and managers who professed more and are fully aware about outside service suppliers, practice those services more than the owners who do not have any information about such services. Therefore, financial awareness has positive correlation with the financial attitude.

3. Data and Methodology

The study was conducted among SMEs within Lahore, Faisalabad and Gujranwala cities of Pakistan. A quantitative method is utilized with cross-sectional framework. As the study is about SME managers/owners' financial literacy therefore, survey is directed in such a way that examinees cannot deduct at first glance that the aim of the survey is to analyze their low levels of financial knowledge or financial literacy. The rational is that the survey must not have negative influence on respondents' vanity so that they would not reject to interact. Generally, the owners and managers of SMEs are not much helpful on this notion that somebody judges their level of financial literacy and knowledge. Thus, the manner of this survey was pretty delicate. We come up to SME managers through private links. Questionnaire dissemination was to 670 respondents, with return of 250 responses. However, key references adapted from are used for the concept measures. According to the definition of development authority of Pakistan (SMEDAP) definition of SME of small and medium enterprise, having employees up to 250, the paid up capital up to Rs.25 million and annual sales up to 250 million rupees (Kureshi et al., 2009). A pilot test relating 25 owners of SMEs in trade and commerce sector executed to analyze the reliability of study variables (dependent & independent). The data groundwork includes data entry into database, data sifting and verdict the missing values.

From some key references, the three latent variables are employed. SME performance adapted from the study of Mac an Bhaird (2010) and Diagne & Zeller (2001). Financial Knowledge referred to the work of Lusardi and Bassa Scheresberg (2013). Financial awareness (FAW) adapted from Oseifuah (2010) and Sulaiman (2014). Financial attitude has reference from the work of Covin and Slevin (1989), Cude (2010) and Sabri and MacDonald (2010).Next proceeded with analysis, two statistical techniques used to examine the data. The SPSS, Statistical Package for Social Sciences version 21.0 was used to obtain descriptive results while in measurement and structural model the partial least squares technique to structural equation modeling (PLS-SEM) was employed. PLS is considered and with the flexibility to the model analysis or latent variable examination. Partial least squares technique is good to check the relationship among latent variables. To accomplish such tendency and assessment, every construct's value of (AVE) must be higher than the square correlation between the constructs (Hair, Sarstedt, Ringle & Mena, 2012); for the composite reliability

(CR) recommended value is 0.7, the average variance extracted (AVE) suggested value is greater than 0.5 (Hair et al., 2010), and there is the report of t-value and p-value. The ultimate model decided after dipping out insignificant values with factor loadings of less than 0.5 because the significant value for loadings is at 0.5 which considered significant (Hair et al., 2010). The analysis performed via Smart PLS.3.0 software.

4. Empirical Results

The collected data represents SMEs of three major cities (Lahore, Faisalabad, and Gujranwala) in Pakistan. Sixty percent of sample firms were with more than 5 million assets. This proposes that most of the observed firms characterize small firms. Likewise, as of figure of sales, data trends show that 62 percent of them footing a sales gross revenue less than 10 million, which advocates that the established data comes from small enterprises. The mean values, correlations and standard deviation among the perceived variables presented in the table1.

Table 1. Correlation and Descriptive statistics

Variable	Mean	SD	1	2	3	4
Financial Attitude	2.710	0.950	1.000			
Financial Awareness	3.190	0.902	0.892***	1.000		
Financial Knowledge	3.524	1.067	0.429***	0.386***	1.000	
Firm performance	2.924	0.769	0.617***	0.641***	0.817***	1.000

Note: *** Significance level at 1%

Table 2. Composite reliability values

Variable	CR	AVE
Financial Attitude	0.891	0.878
Financial Awareness	0.856	0.768
Financial Knowledge	0.792	0.795
Firm Performance	0.8310	0.714

Table 3. Discriminant validity

Discriminant validity				
Financial Attitude	1.0000			
Financial Awareness	0.878	1.0000		
Financial Knowledge	0.796	0.816	1.0000	
Firm Performance	0.858	0.821	0.816	1.0000

Note: Values in diagonal are the square roots of average variance extracted whereas off diagonal values are correlations

Table 4. Loadings and Alpha values summary

Constructs	Cronbach's alpha	VIF	R^2	Measuring Items
Financial Attitude	0.894		0.524	4
Financial Awareness	0.738		0.000	5
Financial Knowledge	0.718		0.000	7
Firm Performance	0.875		0.574	8
Equity		2.103		
Debt		1.795		

The modest company performance is averaged at 2.924 as it has its range among 1 to 5. The Financial awareness and financial knowledge show quite reasonable values, moderate level with range at 3, while financial attitude exhibits the average value of 2. To test the convergent validity as proposed by (Hair et al., 2010) factor loadings, average variance extracted and composite reliability is used. CR values depicted in table 2 depicting those loadings of all items surpassed the recommended value 0.5 (Hair et al., 2010).The construct values of CR range (0.792-0.891) confirming the suggested value 0.7. Thus the results deduce that all variables of study have accepted reliability.

The average variance extracted (AVE) tells the variance taken by the indicators relative to measurement error, value must be higher than 0.60 (Hair et al., 2010). The AVE values ranges of (0.714 -0.878), all variables ensure pretty good convergent validity. Similarly, we calculated VIF as '1/tolerance'. As suggested, it requires to take in VIF value 5 or less (value comes 1.795-2.0) to evade the problem of collinearity (Hair et al., 2010). Resulting values shows that there is no collinearity problem (see Table 2).

Next we continued with the discriminant validity; Table 5 depicts the presence of discriminant validity as the diagonal values are greater unlike the off-diagonal values. As rule of thumb, the correlation coefficient between every pair of independent variables must not exceed 0.90 (Hair et al., 2010). Table 5 shows that the uppermost value of correlation coefficient is 0.831.Table 6 exhibits that in equity, the utmost value of correlation coefficient is 0.721 among the financial awareness and financial knowledge. Likewise, all the four variables found with significant correlations, which specified that they measured the proposed concept.

Table 4 comprises key results of the study, the R^2 value 0.574 signifying that 57 percent of the model variance in firm performance can be described by the financial literacy extents, which includes financial attitude, financial knowledge and financial awareness. Moreover financial awareness and financial knowledge together explained financial attitude 52 percent. When the critical ratio >1.96 for regression weight, this shows path significant at 0.05 or better (i.e.., its projected path parameter is significant) (Bian 2011).

Table 5. Correlations for Debt

Discriminant Validity				
Financial Attitude	1.000			
Financial Awareness	0.831	1.000		
Financial Knowledge	0.815	0.817	1.000	
Firm Performance	0.819	0.746	0.807	1.000

Table 6. Correlations for Equity

Discriminant Validity				
Financial Attitude	1.000			
Financial Awareness	0.714	1.000		
Financial Knowledge	0.720	0.721	1.000	
Firm Performance	0.496	0.341	0.340	1.000

Table 7. Path analysis (Modelling Analysis)

Relationship	Original Sample	Sample Mean	St. Error (STERR)	T-value	P-value
Financial Attitude→Firm performance	−0.411	−0.405	0.100	3.007	0.002
Financial Awareness →Financial Attitude	−0.792	−0.864	0.019 4	46.070	0.000
Financial Awareness→Firm Performance	−0.715	−0.631	0.083	6.931	0.000
Financial Knowledge→Financial Attitude	−0.025	−0.023	0.027	0.560	0.577
Financial Knowledge→Firm Performance	−0.641	−0.610	0.0371	16.308	0.000

Table 8. Path analysis for Equity

Relationship	Original Sample	Sample Mean	St. Error (STERR)	T-value	P-value
Financial Attitude→Firm performance	−1.481	−1.140	0.704	2.087	0.024
Financial Awareness →Financial Attitude	−0.887	−0.870	0.027	48.071	0.000
Financial Awareness→Firm Performance	−1.147	−0.939	0.481	2.732	0.007
Financial Knowledge→Financial Attitude	−0.085	−0.073	0.037	2.569	0.017
Financial Knowledge→Firm Performance	−0.391	−0.490	0.230	2.918	0.005

Table 9. Path analysis for Debt

Relationship	Original Sample	Sample Mean	St. Error (STERR)	T-value	P-value
Financial Attitude→Firm performance	−0.215	−0.140	0.205	0.873	0.240
Financial Awareness →Financial Attitude	−0.689	−0.760	0.057	10.014	0.000
Financial Awareness→Firm Performance	−0.849	−0.852	0.061	7.902	0.007
Financial Knowledge→Financial Attitude	−0.375	−0.313	0.078	4.267	0.003
Financial Knowledge→Firm Performance	−0.371	−0.291	0.078	3.962	0.000

The table 7-9 results conclude that the effect of financial attitude by utilizing both financing sources for firm performance and expending only equity for firm performance with the t-statistics of 3.007 and the $p<0.002$ for mutually sources and 2.087 along with $p>0.024$ for the equity is significant. Both sources of financing showed significant results whereas the financial attitude of pursuing debt financing for firm performance with the t-statistics 0.873 and p- value 0.240 is insignificant. Therefore, for the debt financing source results are rejected.

The path analysis (table 7-9) shows significant relationship between the financial awareness and financial attitude with the three groups by utilizing both bases of financing and every source likewise. For the t-statistic values are 46.070, 10.014 and 48.071 correspondingly and thus the p<0.000 for the three groups respectively. Hence result is acknowledged. In table 7-9 there is also a significant relationship among financial awareness and the firm performance for the three groups with t- test value of 6.931, 7.902 and 2.732 correspondingly and p< 0.000 and 0.007 respectively. This finding shows that the significance level of the correlation is accepted, which infers that there is a direct impact between the firm performance and financial awareness. However results display a unlike variance for the relationship between financial knowledge and financial attitude for three groups, findings disclose that relationship is significant between financial knowledge and financial attitude to using equity and debt for firm performance with t-test of 4.267 and 2.569; and p< 0.003 and 0.017, correspondingly; thus results are accepted. Whereas, no significant relationship seems between financial knowledge and financial attitude to utilizing both financing sources as the t-test shows value of 0.560 and p<0.577 for the firm performance. Therefore significance between financial knowledge and financial attitude is rejected.

Tables 7-9 bootstrapping results indicate the effect of financial knowledge and firm performance for the three group as t-test values 16.308, 3.962 and 2.918 for each group and (p<0.000 and 0.005), respectively. Thus, findings reveal that financial knowledge has direct impact on the firm performance and the results are accepted for the all three groups.

5. Discussion and Conclusion

The purpose of this study was to investigate the relationship between financial literacy and firm performance from SME's managers-owners perspective within the Pakistani context. To analyze the intended model we used three dimensions for the construct financial literacy that includes financial knowledge, financial awareness and financial attitude. Results indicate that financial attitude has no direct effect on the firm performance to decision-making regarding debt source of financing. These findings reiterate that the insignificant relationship amongst financial attitude and the firm performance rests on some elements, along with the risk aversion and business cycle frame (Sadler Smith Hampson, Chaston & Badger, 2003; Padmore & Newman 2012; Sulaiman, 2014). Outweighing the impact of former variables could be one more base behind such insignificant relationship between financial attitude and firm performance (Runyan, Droge and swinney, 2008). Similarly, managerial effect is also very crucial, for instance dearth of management professionalization, lack of owners-manager's human capital diversification and the responsive bond which owner has with firm; like mainstream are averse to dilute the ownership structure of the business for the reason that they can continue with the control over assets and other operations (Anthony Abiodun Eniola and Harry Entebang, 2017). Furthermore, the cost of borrowing, legal structure and the size of the reacting firms are the elements deliberated in the application measures which work as preventive and bent the attitudinal lack of concern in getting debt as a financing source. Thus, the cause for the significant and direct impact of financial attitude on firm performance headed for decision-making about equity financing sources (Michaelas, Chittenden & Poutziouris, 1998).

Though the business owners and managers eager to put on both sources of financing for the efficient firm performance, yet they picked then in the existence of the other factors. Although financial awareness is significant to the firm performance, the surprising fact is that the entrepreneurs level of awareness in debt sourcing for the firm performance is greater related to awareness formed for the equity financing and merging both. This infers that owners and managers of SMEs are entirely aware by the variances and various financial products which are beneficial to them. Yet, outer financial backing will not be strained if there is an upshot that is hard to access and will not be chased by firm managers-owners, although whether or not the insight is correct and will be flattened from evolving an impeccable pattern. Therefore, their attitude in manipulating them is confined because of supply-sides' behavioral factors.

Though business owners-managers have adequate and vigorous financial knowledge, yet they need financial attitude to convert those human assets into viable and practical business products or services. Previous literature coincides with the argument that financial attitude of managers can convey positive consequences in the firms (Reijonen and Komppula, 2007) and financial knowledge of managers do matter, as outcome show that it has significant effect on firm performance (Sulaiman, 2014). The implication of this impact advises that SME owners and managers must give more consideration to their approach towards the financing provision. Devising a positive attitude and financial sophistication does a lot more to avoid financial issues than devouring financial skills only.

The financial literacy and firm performance relationship is wide. An excessive deal can, therefore, be through by centering more on the attitudinal insight towards of SME owners-managers and exactly how to modify it, particularly in training courses through the tactical placement. The supply-side behavioral assertiveness should have a tendency towards transparency and inspiring training of business owners and managers in fundamental business expertise, for instance capacity building aspect, financial management, leadership development and networking.

Our insights lead to the deduction that people can resolve issues by themselves better than any other erudite procedural and scientific engineering. For flourishing business and entrepreneurship, it is important to have encouraging environment that empower business people to resolve their issues, nurture and progress further. This essentially postures the question whether the advanced level of financial knowledge and intelligence considerably averts decease and closure of SMEs. The government ought to be in pole position to create a positive attitude headed for entrepreneurship favorable to environment.

The study likewise provides an important extension to the resource based viewpoint (RBV), which describes on the whatsoever manner it is supreme for firm's owners-managers that human capital, for instance the entrepreneur's capabilities, experience and further personal features, are the main resource endowments. Business owners-managers' tactical choices, attitudes and performances are influenced largely by the demographic aspects, their social links, perceptions of environment and their styles of decision-making. Managerial attitude impacts the assortment of actions and retorts to encounters, motivation and performance. This study gains support from the advanced RBV theory that stresses the locus of capability to cope resources. Business managers with the factual attitude and ability to manage unique resources and to manage the business potency have enormously competitive advantage to realize superior profits.

Implications for theory and practice

This research emphasized on the financial literacy of SME owners-manager's viewpoint in the context of Pakistan where small and medium enterprises considered as the backbone of economy. Certainly, SMEs plays an important part in the development of any economy thus, it is vital to put more emphasize on this sector. The implication of this impact advises that SME owners and managers must give more consideration to their approach towards the financing provision. Devising a positive attitude and financial sophistication does a lot more to avoid financial issues than devouring financial skills only. This study will also facilitate the policy makers regarding the level of financial literacy in this particular sector and how much policy intercession is needed to impart financial trainings and financial programs in order to develop the level. Likewise the upshots of this research will prove advantageous for the SME owners and the service provider to SMEs. It is significant to have adequate of amount of financial knowledge that would help SME owners to comprehend the financial system and financial markets. Similarly investors can also develop some insight from this study to lessen the risk of failure.

Limitations and future directions

The study limitation rises from the cross section statistics observation, which suggests snapshot observation. Moreover, encouraged to encounter the analysis gap is panel data analysis. The data source pivots on the firm owners and managers only. Different sources of statistics from the observed firms, for instance the workers, suppliers and other stakeholders must be applied in the future research studies.

References

Abouzeedan, A. (2010). The Factorial Mirror (FAM) concept of small and medium-sized enterprises (SMEs) and the firm impact sphere (FIP): The connection to the business bridging tactics. *Global Business Review, 11*(1), 35–64.

Ainuddin, R. A., Beamish, P. W., Hulland, J. S., & Rouse, M. J. (2007). Resource attributes and firm performance in international joint ventures. *Journal of World Business, 42*(1), 47–60.

Audet, J., & St-Jean, E. (2007). Factors affecting the use of public support services by SME owners: Evidence from a periphery region of Canada. *Journal of Developmental Entrepreneurship, 12*(2), 165–180.

Ayyagari, M., Beck, T., & Demirguc-Kunt, A. (2007). Small and medium enterprises across the globe. *Small Business Economics, 29*(4), 415–434.

Balakrishnan, S., & Fox, I. (1993). Asset specificity, firm heterogeneity and capital structure. *Strategic Management Journal, 14*(1), 3–16.

Barney, J. (2002). *Gaining and sustaining competitive advantage* (2nd ed.). Upper Saddle River, NJ: Prentice Hall.

Barney, J. B. (1991). Firm resources and sustained competitive advantage. *Journal of Management, 17*(1), 99–120.

Barney, J. B. (2001). Is the resource-based "view" a useful perspective for strategic management research? Yes. *Academy of management review*, *26*(1), 41-56.

Barney, J. B., & Hesterly, W. S. (2015). *Strategic management and competitive advantage: Concepts and cases*.Boston: Pearson.

Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology, 51*(6), 1173–1182.

Beck, T., & Cull, R. (2014). *Small- and medium-sized enterprise finance in Africa: Africa Growth Initiative*.Washington, DC: The Brookings Institution.

Berman, K., & Knight, J. (2008). *Financial intelligence for entrepreneurs: What you really need to know about the numbers.* Boston, MA: Harvard Business Press.

Bian, H. (2011). *Structural equation modeling with AMOS II*. Retrieved 27 February 2015, from https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&ved=0CCIQFjABahUKEwjhgvfHxJfIAhVDBo4KHZfPAm8&url=http%3A%2F%2Fcore.ecu.edu%2Fofe%2FStatisticsResearch%2FSEM%2520with%2520AMOS%2520II.pdf&usg=AFQjCNGrkwUK6zP51HyqOV8WcDRvwJ-TvQ&sig2=Jj6FB8gtzNZ_vKVzhAHIng&bvm=bv.103388427,d.c2E&cad=rjt

Bond, S., & Meghir, C. (1994). Financial constraints and company investment. *Fiscal Studies, 15*(2), 1–18.

Bosma, N., & Harding, R. (2006). *Global entrepreneurship monitor: GEM 2006 summary results*. London, UK: Babson College London Business School.

Chaston, I., Badger, B., Mangles, T., & Sadler–Smith, E. (2001). Organisational learning style, competencies and learning systems in small, UK manufacturing firms. *International Journal of Operations & Production Management, 21*(11), 1417–1432.

Covin, J. G., & Slevin, D. P. (1989). Strategic management of small firms in hostile and benign environments. *Strategic Management Journal, 10*(1), 75–87.

Cude, B. J. (2010). Financial literacy 501. *Journal of Consumer Affairs: Official Publication* *of the American Council on Consumer Interests, 44*(2), 271–275.

Deakins, D., & Freel, M. (1998). Entrepreneurial learning and the growth process in SMEs. *The Learning Organization, 5*(3), 144–155.

Diagne, A., & Zeller, M. (2001). *Access to credit and its impact on welfare in Malawi. Research report.* Washington, DC: International Food Policy Research Institute.

Donzelli, P., Alfaro, N., Walsh, F., & Vandermissen, S. (2006). Introducing competency management at ESA. *ESA Bulletin, 126*, 72–76.

Drexler, A., Fischer, G., & Schoar, A. (2014). Keeping it simple: Financial literacy and rules of thumb. *American Economic Journal: Applied Economics, 6*(2), 1–31.

Eagly, A. H., & Chaiken, S. (1993). *The psychology of attitudes.* Fort Worth, TX: Harcourt Brace Jovanovich College Publishers.

Ebiringa, O. T., & Okorafor, O. E. (2010). Financial literacy and financial decision making capacity: The gender balance issue. *Journal of Sustainable Development in Africa, 12*(7), 222–232.

Eisenhardt, K. M., & Martin, J. A. (2000). Dynamic capabilities: What are they? *Strategic Management Journal, 21*(10–11), 1105–1121.

Eniola, A. A., & Entebang, H. (2014). SME firms performance in Nigeria: Competitive advantage and its impact. *International Journal of Research Studies in Management, 3*(2), 75–86.

Eniola, A. A., & Entebang, H. (2015). Government policy and performance of small and medium business management. *International Journal of Academic Research in Business and Social Sciences*, *5*(2), 237.

Eniola, A. A., & Entebang, H. (2017). SME managers and financial literacy. *Global Business Review*, *18*(3), 559-576.

Fatoki, O. (2014). The financial literacy of micro entrepreneurs in South Africa. *Journal of Social Sciences*, *40*(2), 151–158.

Fitzgerald, L. (1991). *Performance measurement in service businesses.* London, UK: Chartered Institute of Management Accountants.

Freiling, J., & Laudien, S. M. (2013, April 11–12). *Explaining new venture failure: A competence-based approach*. Paper presented at the AIMS 2013 Conference, Nice, France.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate data analysis: A global perspective* (7th ed.). Upper Saddle River, NJ and London, UK: Pearson Education.

Hair, J. F., Sarstedt, M., Ringle, C. M., & Mena, J. A. (2012). An assessment of the use of partial least squares structural equation modeling in marketing research. *Journal of the Academy of Marketing Science*, *40*(3), 414–433.

Hart, S. L., Milstein, M. B., & Caggiano, J. (2003). Creating sustainable value [and executive commentary]. *The Academy of Management Executive (1993–2005)*, *17*(2), 56–69.

Hathaway, I., & Khatiwada, S. (2008). *Do financial education programs work?* (Working Paper No 08–03). Ohio: Federal Reserve Bank of Cleveland. Retrieved 20 April 2015, from https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1118485

Hewitt-Dundas, N. (2006). Resource and capability constraints to innovation in small and large plants. *Small Business Economics*, *26*(3), 257–277.

Hung, A.A., Parker, A. M., & Yoong, J. (2009). *Defining and measuring financial literacy*. Santa Monica, CA. Retrieved 27 March 2015, from http://www.rand.org/content/dam/rand/pubs/working_papers/2009/RAND_WR708.pdf

Huston, S. J. (2010). Measuring financial literacy. *Journal of Consumer Affairs*, *44*(2), 296–316.

Ihua, U. B. (2009). SMEs key failure-factors: A comparison between the United Kingdom and Nigeria. *Journal of Social Sciences*, *18*(3), 199–207.

Ireland, R. D., & Miller, C. C. (2004). Decision-making and firm success. *The Academy of Management Executive (1993–2005)*, *18*(4), 8–12.

Jacobs-Lawson, J. M., & Hershey, D. A. (2005). Influence of future time perspective, financial knowledge, and financial risk tolerance on retirement saving behaviors. *Financial Services Review-Greenwich*, *14*(4), 331–344.

Joo, S. H., & Grable, J. E. (2000). Improving employee productivity: The role of financial counseling and education. *Journal of Employment Counseling*, *37*(1), 2–15.

Kauffmann, C. (2005). *Financing SMEs in Africa*. Policy Insights No 7. Paris, France: OECD Development Centre.

Kidwell, B., & Turrisi, R. (2004). An examination of college student money management tendencies. *Journal of Economic Psychology: Research in Economic Psychology and Behavioral Economics*, *25*(5), 601–616.

Kotzé, L., & Smit, A. (2008). Personal financial literacy and personal debt management: the potential relationship with new venture creation. *The Southern African Journal of Entrepreneurship and Small Business Management*, *1*(1), 35-50.

Kotzè, L., & Smit, A. (2008a). Personal finances: What is the possible impact on entrepreneurial activity in South Africa? *Southern African Business Review*, *12*(3), 156–172.

Kuratko, D. F., & Hodgetts, R. M. (2001). *Entrepreneurship: A contemporary approach* (5th ed.). Fort Worth, London: Harcourt College Publishers.

Lumpkin, G. T., & Dess, G. G. (1996). Clarifying the entrepreneurial orientation construct and linking it to performance. *The Academy of Management Review*, *21*(1), 135.

Lusardi, A., & Bassa Scheresberg, C. D. (2013). *Financial literacy and high-cost borrowing in the United States* (Working Paper Series/National Bureau of Economic Research).

Cambridge, MA: National Bureau of Economic Research.

Lusardi, A., & Michell, O. S. (2006). *Financial literacy and planning: Implications for retirement wellbeing* (Pension Research Council Working Paper No. 1). Amsterdam: Wharton School, University of Pennsylvania.

Lusardi, A., & Tufano, P. (2009). *Debt literacy, financial experiences, and overindebtedness* (Working Paper Series/ National Bureau of Economic Research). Cambridge, MA: National Bureau of Economic Research.

Lusardi, A., Mitchell, O. S., & Curto, V. (2010). Financial literacy among the young. *Journal of Consumer Affairs: Official Publication of the American Council on Consumer Interests, 44*(2), 358–380.

Matlay, H. (2000). Organisational learning in small learning organisations: An empirical overview. *Education + Training, 42*(4–5), 202–211.

Michaelas, N., Chittenden, F., & Poutziouris, P. (1998). A model of capital structure decision making in small firms. *Journal of Small Business and Enterprise Development, 5*(3), 246–260.

Oseifuah, K. E. (2010). Financial literacy and youth entrepreneurship in South Africa. *African Journal of Economic and Management Studies, 1*(2), 164–182.

Rahmandoust, M., Shah, I., Norouzi, M., Hakimpoor, H., & Khani, N. (2011). Teaching financial literacy to entrepreneurs for sustainable development. *OIDA International Journal of Sustainable Development, 2*(12), 61–66.

Reijonen, H., & Komppula, R. (2007). Perception of success and its effect on small firm performance. *Journal of Small Business and Enterprise Development, 14*(4), 689–701.

Remund, D. (2010). Financial literacy explicated: The case for a clearer definition in an increasingly complex economy. *Journal of Consumer Affairs, 44*(2), 276–295.

Runyan, R., Droge, C., & Swinney, J. (2008). Entrepreneurial orientation versus small business orientation: What are their relationships to firm performance? *Journal of Small Business Management, 46*(4), 567–588.

Sadler-Smith, E., Hampson, Y., Chaston, I., & Badger, B. (2003). Managerial behavior, entrepreneurial style, and small firm performance. *Journal of Small Business Management, 41*(1), 47–67.

Schuler, R. S. (1989). Strategic human resource management and industrial relations. *Human Relations*, *42*(2), 157–184.

Schuler, R. S., & Jackson, S. E. (1987). Linking competitive strategies with human resource management practices. *The Academy of Management Executive (1987–1989), 1*(3), 207–219.

Simpson, M., Padmore, J., & Newman, N. (2012). Towards a new model of success and performance in SMEs. *International Journal of Entrepreneurial Behavior & Research, 18*(3), 264–285.

Tushabomwe-Kazooba, C. (2006). Causes of small business failure in Uganda: A case study from Bushenyi and Mbarara Towns. *African Studies Quarterly, 8*(4), 36–44.

UNCTAD. (2002). *Proceedings of the symposium on modalities for financing SMEs in Uganda*. Geneva, Switzerland: United Nations Conference on Trade and Development, Palais des Nations. Retrieved 22 February 2015, from

Vitt, L. A., Anderson, C., Kent, J., Lyter, D. M., Siegenthaler, J. K., & Ward, J. (2001). *Personal finance and the rush to competence: Financial literacy education in the US.* Middleburg, VA: ISFS, Institute for Socio-Financial Studies.

Wiklund, J., & Shepherd, D. (2005). Entrepreneurial orientation and small business performance: A configurational approach. *Journal of Business Venturing, 20*(1), 71–91.

Wright, P. M., & McMahan, G. C. (1992). Theoretical perspectives for strategic human resource management. *Journal of Management, 18*(2), 295–320.