Revista Brasileira de Gestão de Negócios
ISSN: 1806-4892
gestnegocios@fecap.br
Fundação Escola de Comércio Álvares Penteado
Brasil

Chiun Lo, May; Chai Wang, Yin; Justin Wah, Constance Rinen; Ramayah, T.
Fatores críticos de sucesso para o desempenho organizacional de PMEs na Malásia: uma abordagem parcial de mínimos quadrados
Revista Brasileira de Gestão de Negócios, vol. 18, núm. 61, julio-septiembre, 2016, pp. 370-391
Fundação Escola de Comércio Álvares Penteado
São Paulo, Brasil

Available in: http://www.redalyc.org/articulo.oa?id=94746846003

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RBGN REVISTA BRASILEIRA DE GESTÃO DE NEGÓCIOS
REVIEW OF BUSINESS MANAGEMENT
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ISSN 1806-4892
e-ISSN 1983-0807

The critical success factors for organizational performance of SMEs in Malaysia: a partial least squares approach

May Chiun Lo
Universiti Malaysia Sarawak, Faculty of Economics and Business, Kota Samarahan, Malaysia

Yin Chai Wang
Universiti Malaysia Sarawak, Faculty of Computer Science and Information Technology, Kota Samarahan, Malaysia

Constance Rinen Justin Wah
Universiti Malaysia Sarawak, Faculty of Economics and Business, Kota Samarahan, Malaysia

T. Ramayah
Universiti Sains Malaysia, School of Management, Minden, Malaysia

Received on
03/10/2016
Approved on
06/21/2016

Responsible editor:
Prof. Dr. João Maurício Gama Boaventura

Evaluation process:
Double Blind Review

Abstract

Purpose – This paper seeks to examine the relationship between the determinants of organizational performance such as top management support, customer focus, employees' orientation, technology orientation, and entrepreneurial orientation in Malaysia.

Design/methodology/approach – A quantitative research design was applied for this study. Data was collected through survey questionnaires applied to business owners and senior managers working in SMEs located in three Malaysian states, using purposive sampling technique. SmartPLS 2.0 (M3) was applied to test the hypotheses.

Findings – The findings suggest that both technology and entrepreneurial orientations are significant success factors for SMEs in terms of financial and non-financial performance. In addition, top management support is found to be significantly and positively related to financial performance.

Originality/value – The empirical analysis indicates that technology orientation and entrepreneurial orientation add more value to organizational performance. Therefore, it is vital for SMEs to focus on these two critical success factors in order to improve their performance.

Keywords – Top management support, customer focus, employee orientation, technology orientation, entrepreneurial orientation

Review of Business Management

DOI:10.7819/rbgn.v18i61.3058

1 Introduction

Small and Medium Enterprises (SMEs) are considered as one of the cornerstones of Malaysian's engine of economic growth. Therefore, Malaysian Government has introduced several development programs in helping local SMEs to grow with the intention to realize its vision to be one of the high income nations with developed status by 2020. However, Malaysian SMEs are still losing their competitive advantage in the global business environment due to their low productivity and poor performance (Tehseen, Sajilan, Ramayah, & Gadar, 2015). Furthermore, Malaysian SMEs are found to provide a lower contribution to the nation's GDP and exports as compared to SMEs of many neighboring nations such as Japan, South Korea, and Singapore (Halim, Ahmad, & Ramayah, 2013). Taking cognizance of the importance of Malaysian SMEs as the building blocks of economic growth, it is therefore crucial to identify critical success factors that can improve competitiveness and reduce the gap between Malaysian SMEs and SMEs in these countries in term of contribution to the economy.

Prior research has emphasized the importance of various strategic orientations such as technology orientation, learning organization, market orientation, customer orientation, top management support and competitor orientation in determining the firm performance and the development of a sustainable competitive advantage (Day, 1994; Gatignon & Xuereb, 1997; Zhou & Li, 2010). In continuation, Salaheldin (2009) proposed a framework to identify the critical success factors of total quality management implementation, and evaluate their effects on operational performance, financial and non-financial performance among the SMEs in Qatari. The results revealed that strategic factors such as leadership, top management support, and organizational culture have strong positive impact on overall performance, while operational factors such as customer orientation, process control, product and service design have a strong positive impact on operational and financial performance, and lastly tactical factors such as supplier relationships, employee training and empowerment have a strong positive impact on operational performance only. Moreover, Chong, Shafaghi, and Tan (2011) critically explored critical success factors for SMEs operating in China and they suggested a combination of internal critical factors (successful customer relationships, security and trust, transparency of information, IS/IT infrastructure, top management support, supply chain facilities) and external critical factors (global competitiveness, government commitments, cultural considerations) in developing and sustaining the success of business to business e-commerce. A recent study conducted by Vyas, Raitani, Roy, and Jain (2015) found that critical success factors such as supportive organizational factors, fast and responsive services, target-based marketing, SME banking policy and model, and enhanced customer services are important for the success of SMEs operating in the banking industry in India.

In view of the above, it is clear that research on critical success factors for SMEs' success is still at a developing stage. Currently, there is still lack of a validated and solid critical success factors framework for SMEs as a guide to improve their competitiveness in the market (Chong, Shafaghi, & Tan, 2011). This study intends to fill the gap by identifying critical success factors for SMEs in the context of Malaysia, and studying the relationship between identified critical success factors and organizational performance (financial and non-financial performance). The outcome of this study will be useful for entrepreneurs as well as scholars in generating a framework that can improve overall organizational performance in an emerging economic context. The research objectives of this study are twofold:

1. To investigate the relationship between critical success factors (Top Management Support, Customer Focus, Employee Orientation, Technology Orientation, and Entrepreneurial Orientation) and non-financial performance of the SMEs.

2. To investigate the relationship between critical success factors (Top Management Support, Customer Focus, Employee Orientation, Technology Orientation, and Entrepreneurial Orientation) and financial performance of the SMEs.

The rest of the paper is structured as follows: the first part reviews the existence of empirical literature. Secondly, the research methodology is described. Then, the third part represents the data analysis and respective results. Finally, the results are discussed and conclusions are presented.

2 Literature review

This study investigates the relationship between the determinants of organizational performance in SMEs in Malaysia. A review of related literature was undertaken with the primary focus on defining the variables as well as the theoretical relationships between them.

2.1 Organizational performance

Organizational performance refers to a concept that measures a firm's position in the marketplace and the firm's ability in meeting its stakeholders' needs (Griffin, 2003; Lo, Mohamad, Ramayah, & Wang, 2015). It can also be known as the degree to which the operation fulfils the performance objectives (primary measures) and meets the needs of the customers (secondary measures) (Slack, Chambers, & Johnston, 2010).

Previously, the concept of organizational performance normally referred to financial ratios such as profitability, return on assets (ROA), return on investments (ROI), and return on equity (ROE). Nevertheless, there is increasing criticism on the short-term thinking of traditional performance measurement systems that only employs financial measures (Kaplan & Norton, 1996). Consequently, many researchers have employed a more balanced approach of performance measurement by including both financial performance and non-financial performance measures (Ho, Ahmad, & Ramayah, 2016; Simon et al., 2015). Financial performance has been seen by many as the ultimate aim of any company and it reflects how well a company uses its assets to generate revenues (Chen, Tsou, & Huang, 2009). On the other hand, non-financial performance measures refer to long-term operational objectives of a company or, in other words, future performance indicators that are not presentable by contemporary financial measures (Blazevic & Lievens, 2004; Prieto & Revilla, 2006).

The critical success factors for SMEs are identified by combining literature review and focus group. First, the researcher critically reviewed relevant papers in order to identify critical success factors that have been found to contribute to business success. Then, a focus group consisting of senior executives from the industry was established to rank the identified factors that they perceived as most critical for the success in the current business environment. Among the determinants, five factors have been selected as variables to be studied in this study: top management support, customer focus, employee orientation, technology orientation, and entrepreneurial orientation. These five important determinants of organizational performance serve as the critical success factors for this study.

2.2 Top management support

The concept "top management support" has been studied by many scholars and unarguably it is known as one of the most important critical success factors underlying the success of companies (Bryde, 2008; Hung, Lien, Fang, & McLean, 2010). Top management support refers to backing and commitments by highest ranking executives for projects as well as strategies implementation (Garrett & Neubaum, 2013).

Flynn, Schroeder and Sakakibara (1995) as well as Powell (1995) likewise argue for the need of top management commitment, as it has a large influence towards the overall strategic direction of the organization. The importance of top management support is further acknowledged

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in the recent empirical literature. General consensus stated that top management support must be verified and demonstrated, by actively communicating the mission and vision throughout the organization (Demirbag et al., 2006; Fotopoulos & Psomas, 2009; Salaheldin, 2009; Turkyilmaz, Tatoglu, Zaim, & Ozkan, 2010). Many other aspects should be focused by managers to align the quality objectives with the vision, to commence quality and a corporate culture, and to create a culture with continuous improvements, minimizing the reluctance towards change.

Sexton and Upton (1987) supported the strategic choice perspective by arguing that the performance of a firm is not a natural phenomenon, but rather the choices and social interactions made by the firms' top manager. Top management is empowered with the most influential decision making role in the organization. Furthermore, top management plays a key role in creating conditions in the work environments that are favorable for an integration of learning and work (Noe & Wilk, 1993). The responsibility of the top management includes communicating the company strategy to all members of the organization, providing financial support for training programs, and motivating employees to innovate and solve problems (Al Shaar, Khattab, Alkaied, & Manna, 2015; Umble, Haft, & Umble, 2003). The discussed empirical literatures provide evidence that displaying top management support is essential, and how it remains critical in order to reap the benefits. In this regard, Iqbal, Long, Fei, Ba'ith, and Bukhari (2015) revealed that top management support plays a crucial role in ensuring project success by facilitating the provision of timely resources. Similarly, Fernandes, Lourenço, and Silva (2014) found that leadership attitude and support of the top management can promote organizational innovation. Therefore, the following hypotheses are formulated:

H1: *Top management support is positively related to non-financial performance.*

H2: *Top management support is positively related to financial performance.*

2.3 Customer focus

Customer focus is similar to market orientation, both looking for innovative solutions that can create superior customer value. However, customer focus and market orientation are different to those businesses that actively attempt to understand their markets (Slater & Narver, 1998). Customer focus places the customer as the top of the organizational chart, whereas market orientation gives equal weight to customer needs, competitive context, and inter-functional coordination (Narver & Slater, 1990).

Having a customer focus is essential as it is known as a strong contributor to business profitability, competitive advantage, and a hallmark of successful business (Nwokah & Maclayton, 2006; Ziggers & Henseler, 2015). Also, the construct of customer focus is vital for the organization relationship as it refers to the process of identifying and establishing, maintaining, enhancing and when necessary terminating relationships with customers and other stakeholders (Gronroos, 2004). Today's business entrepreneurs must always make sure that they have a strong customer focus so that they are able to respond to rapid changing customer preferences and needs (Saravanan & Rao, 2006).

In general, firms' profits result from how well the customer needs and wants are satisfied, the path from customer focus and firm profitability is often not straightforward as it becomes evident based on the mixed empirical findings in the literature (Noble, Sinha, & Kumar, 2002). According to Fernandes, Lourenço, and Silva (2014), it requires efforts on identifying customer current as well as future needs in order to offer products adapted to the evolution of market requirements. In determining the quality, customer is regarded as the king in the organization (Deming, 1986). As a facet of the organizational strategy (Gatignon & Xuereb, 1997), customer focus provides a basis for

obtaining customer information, which can be used to develop and deploy supply-chain relationship capabilities, referring to the stock of knowledge-based competencies for effective managing a firm (Chen, Paulraj, & Lado, 2004; Kirca, Jayachandran, & Bearden, 2005; Liu, Ke, Wei, & Hua, 2013). The support of having a high degree of customer focus in SMEs is likewise addressed in the study conducted by Ahire and Golhar (1996), who further argue that the focus of customers may be stronger in SMEs due to their proximity to and close relationship with the customers. The SMEs' organizations should not view customers only as a source of firm's revenues and profits, but also as resources for gaining and sustaining competitive advantage. Therefore, the following hypotheses are proposed:

H3: *Customer focus is positively related to non-financial performance.*

H4: *Customer focus is positively related to financial performance.*

2.4 Employee orientation

Employee orientation or employee focus is in numerous studies referred to as one of the most important factors underlying a successful employment. Employee orientation can be defined as the familiarization with a new work environment. The first few months are a critical period for employees to perform and become a high performer. Many managers view the employee orientation as a very mechanical information gathering exercise (Bernardin & Russell, 1993). Sharing internal and external information across functional groups can encourage employees to feel more responsible for quality decision and improvements. Sun (2000) argued that the essence of involving employees in the decision making process or empowerment is that the employees nearest a potential opportunity or a problem are in the best position of making the necessary decisions, if they have control over the process. Ensuring an efficient flow of feedback is thus essential to remove barriers to performance improvements. As stated by Yusof and Aspinwall (2000), SMEs often have flattened organizational structure and a shorter decision making process, enabling a faster information flow and improved communication. Apart from engaging employees with empowerment, continuous education and training are essential for the sustainability of their personal and organizational growth. As the provision of employees training and empowerment is associated with costs of the organization, it must be aligned with employee's evaluations in order to examine the effectiveness of the event (Hendricks & Singhal, 1997).

Employee orientation is imperative for better organizational performance as it can create higher level of job satisfaction and employee retention while decreasing employee's turnover rate (Awan, 2013). Firms which display high level of employee orientation will gain trust and appreciation from employees that ultimately lead them to perform and achieve better financial performance than others (de Bussy & Suprawan, 2012). Therefore, the following hypotheses are developed:

H5: *Employee orientation is positively related to non-financial performance.*

H6: *Employee orientation is positively related to financial performance.*

2.5 Technology orientation

Technology orientation aids firms in acquiring a substantial technological background and using it to come out with new solutions in response to their customer needs (Gatignon & Xuereb, 1997; Grinstein, 2008). Therefore, it is often known as the fundamental source of sustainable competitive advantage. Previous researchers stated that consumers prefer products and services that maintain technological superiority (Zhou, Yim, & Tse, 2005). Therefore, technology-oriented firms which have ability to accumulate rich technological information

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through R&D intensity as well as to quickly adapt to new technologies have an increased chance of achieving superior performance (Zhou & Li, 2010).

Furthermore, invention and creativity in adopting technology may provide the guidelines to the firms on what strategic implementation to be executed. SMEs that focus on technology leadership offers advanced products difficult to be imitated by their competitors, thus increasing the switching costs. Therefore, technology orientation is linked to enhance new product success and profitability (Gatignon & Xuereb, 1997; Song & Parry, 1997; Trainor, Rapp, Beitelspacher, & Schillewaert, 2010). Moreover, a number of researchers found a significant and positive relationship between technology orientation and innovation (Al-Ansari, Altalib, & Sardoh, 2013; Lee, Choi, & Kwak, 2015). On the other hand, Gatignon and Xuereb (1997) recommended firms to foster technology orientation in both high and low market growth situations for a competitive advantage in product development. Although high technology-applied solutions are presented, sometimes the customers could not benefit from the implementation. If the firm failed to adapt the advanced technology into customers' benefits, the business performance of the firms could not happen. Therefore, any high technology adaptation should align with the high organizational performance. Based on the literatures discussed above, the following hypotheses have been formulated:

H7: *Technology orientation is positively related to non-financial performance.*

H8: *Technology orientation is positively related to financial performance.*

2.6 Entrepreneurial orientation

Entrepreneurism is an essential role in the society, performing businesses and contributing towards the growth of organizational performance. Due to the changing environment in which most organizations are now competing, it is essential to consider the importance of top managers from the standpoint of how their entrepreneurial preferences and value may impact decision making. Entrepreneurial orientation refers to tendencies, processes and behaviors that lead to new markets (or existing) goods or services via the existing (or new) ones (Walter, Auer & Ritter, 2006). At the organization level, entrepreneurial orientation is defined as the strategy making processes that provide organizations with a basis for entrepreneurial decision and actions (Rauch, Wiklund, Lumpkin, & Frese, 2009). On the other hand, Lumpkin and Dess (1996) stated that entrepreneurial orientation is said to be a company's strategic orientation, having certain entrepreneurial aspects, styles, methods and decision attributes (Wiklund & Shepherd, 2005). Based on different models of corporate entrepreneurship, entrepreneurial orientation includes five features such as innovativeness, riskiness, proactiveness, competitive aggressiveness and autonomy (Walter et al., 2006). Apart from that, innovativeness has been considered as one of the most important strategic orientations of firms to achieve long-term success (Noble et al., 2002), and having a significant effect on venture performance (Baum, 1995; Rauch & Frese, 2000; Utsch & Rauch, 2000).

Entrepreneurial orientation is crucial as it captures the process through which organizations explore opportunities for new innovations leading to market entry and advantage (Covin & Miles, 1999; Lumpkin & Dess, 1996). It represents an important means through which firms identify new opportunities and take calculated risks to innovate for growth and renewal (Ireland, Hitt, & Sirmon, 2003; Wales, Parida, & Patel, 2013). A significant amount of strategy research has focused on the importance of top management (Hambrick & Mason, 1984) and entrepreneurial behavior (Covin & Slevin, 1989) in determining firm performance. It has been studied predominantly in its relation to the firm performance and has been consistently shown to be highly significant

(Gupta & Batra, 2015). In a meta-analysis of 51 studies, Rauch et al. (2009) observed a generally positive and moderately large (r=0.242) correlation between entrepreneurial orientation and firm performance across measures of both growth and profitability. Furthermore, Jabeen and Mahmood (2014) elucidate that firms who adopt entrepreneurial orientation can frequently innovate and are willing to take risks in their strategies that ultimately leads them to superior performance. Based on these discussions, the following hypotheses have been developed:

H9: *Entrepreneurial orientation is positively related to non-financial performance.*

H10: *Entrepreneurial orientation is positively related to financial performance.*

3 Methodology

A quantitative research design was applied for this study. The population of this study consists of business owners and senior managers currently working in SMEs in the states of Selangor, Kuala Lumpur, and Sarawak. In selecting the respondents, we adopted a method of purposive sampling. SME directory provided by SME Corporation Malaysia was utilized to determine the sample that meet the following inclusion criteria: (1) the firm must have less than 200 full time employees for the manufacturing sector and 75 full time employees for the service sector; and (2) the firm must be a standalone firm, not a franchise or part of a larger organization.

The measuring instrument for data collection was in the form of a questionnaire, and all scales were adapted from previous studies which validated them in the contexts of developed as well as developing economies. The questionnaire was divided into three sections. Section 1 required the respondents to rate a total of 25 items on five critical success factors, namely top management support, customer focus, employee orientation, technology orientation, and entrepreneurial orientation. For the purpose of this study, the items for measuring top management support were adapted from the work by Ar and Baki (2011). As for customer focus, items by Das, Paul, and Swierczek (2008) were adapted. In addition, the items for another three critical success factors, namely employee orientation, technology orientation, and entrepreneurial orientation, were adapted from the work by Zhang (2010), Kim, Im, and Slater (2013), and Mu and Benedetto (2011) respectively. Section 2 required respondents to assess their perceived non-financial performance as well as financial performance. Non-financial performance measures were adapted from studies by Aron and Liem (2011), Zebal and Goodwin (2011), Lee, Kim, and Choi (2012), Chong, Chan, and Sim (2011), and Vazquez, Silva, and Ruiz (2012). On the other hand, financial performance measures were drawn from previous empirical studies such as those by Ganeshasundaram and Henley (2007), Slater, Hult, and Olson (2010), and Zebal and Goodwin (2011). All of the items in Section 1 and Section 2 are anchored on a Likert scale of 7-points (1 = strongly disagree and 7 = strongly agree). Lastly, Section 3 covers the personal profile and demographic data of respondents.

Before data collection, a pre-test through personal interview with 15 senior executives of SMEs was conducted to check whether the questions were clearly understood by the respondents and to determine if any further modification of the items and format was necessary. After refining the wording of some of the measures, a total of 500 questionnaires were distributed personally to selected SMEs. Initially, the researcher visited the selected SMEs to get the approval from the SMEs to conduct the survey. After a brief personal communication concerning the topic and the goals of the study, the questionnaires, together with the cover letters seeking their cooperation and explaining the purpose of the study as well as self-addressed envelopes for the completed questionnaires, were all personally handed to the respondents. The researcher ensured the anonymity of respondents

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before they participated in the survey in order to reduce socially desirable responses. Out of the 500 distributed questionnaires, 180 questionnaires were returned and used for statistical analysis, indicating a response rate of 36%.

Data was collected from a single informant in each SME, and thus common method variance could potentially have affected the results. Following Podsakoff, MacKenzie, Lee, and Podsakoff's (2003) suggestion, Harman's single-factor test was used as a diagnostic to assess the risk. The results revealed five distinct factors that accounted for 72.28% of the total variance, with the largest factor accounting for only 46.94% of the variance. Consequently, it can be concluded that common-method variance is not likely to be a significant problem in this study.

Data were analyzed using Statistical Package for Social Sciences (SPSS) 20.0 and SmartPLS 2.0 developed by Ringle, Wende, and Will (2005). Partial Least Squares (PLS) were employed as it presents the benefit of permitting the complete research model to be tested just once (Halawi & McCarthy, 2008). First, the demographic profiles of the respondents were analyzed by using descriptive statistics in SPSS. Then, the SmartPLS 2.0 which is based on path modeling and bootstrapping (Chin, 1998; Tenenhaus, Esposito Vinzi, Chatelin, & Lauro, 2005; Wetzels, Odekerken-Schroder, & van Oppen, 2009) was used to measure the model as shown in Figure 1. The analysis in PLS was divided into two stages: measurement model and structural model. Measurement model involves the assessment of the reliability and validity of the measures. In the measurement model, reliability was assessed by examining the Composite Reliability (CR) while validity was assessed in convergent validity and discriminant validity. Once the measurement model was done, structural model testing with 500 re-samples was applied to test the hypothesized relationships between critical success factors and organizational performance.

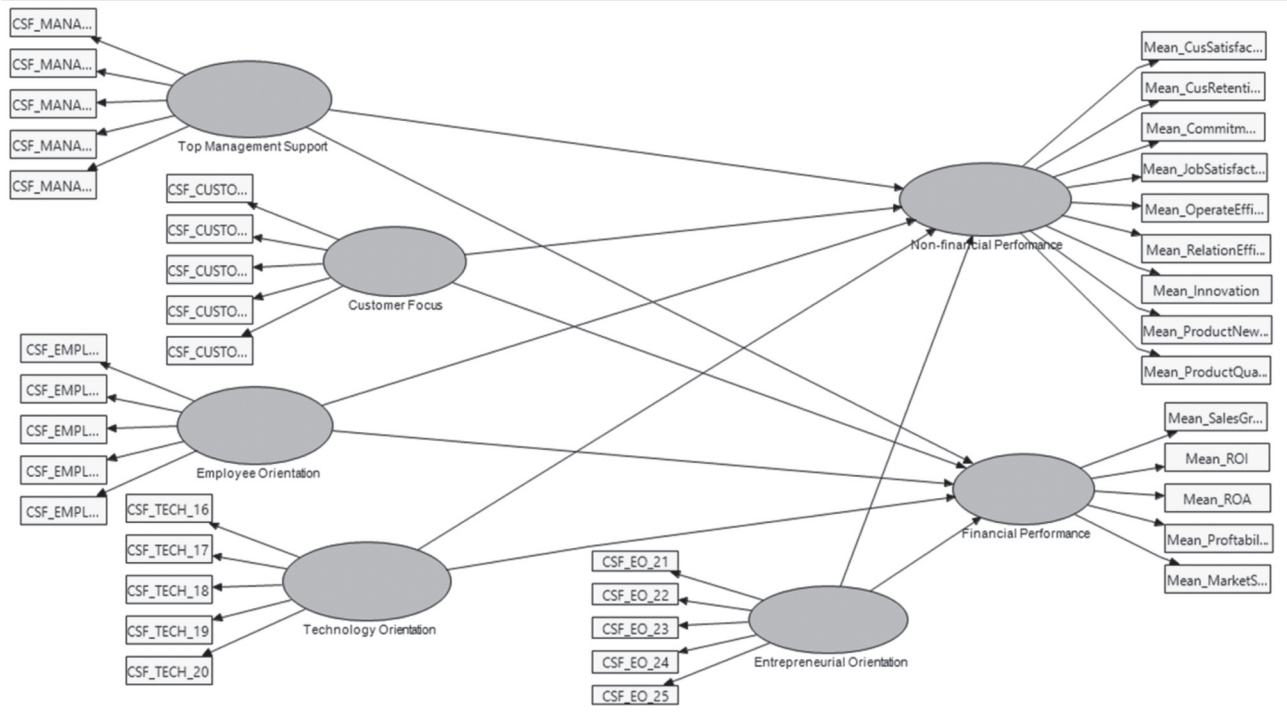

Figure 1. Research model

4 Findings

4.1 Respondent profile

Table 1 shows the demographic information of the 180 respondents. The number of female respondents was higher than male respondents with 94 female respondents (52.2%) and 86 male respondents (47.8%). The majority of the respondents held degree or professional qualification (108 or 60%), followed by diploma (32 or 17.8%), postgraduate (24 or 13.3%), and high school or below (16 or 8.9%). In terms of industry, 30 (16.7%) of them were from manufacturing industry and 150 (83.3%) were from service industry. Most of the firms which responded have between 3-75 employees (125 or 69.5%), 29 (16.1%) firms have less than 5 employees, and 26 (14.4%) firms have more than 75 employees. With regard to the year of establishment, 74 (41.1%) firms were established for 2 years or less, 64 (35.6%) firms were established for between 3 to 5 years, 28 (15.6%) firms were established for between 6 to 10 years, and only 14 (7.8%) firms were established for 11 years or more. Most of the respondents of the survey were senior manager (141 or 78.3%), followed by business owner (39 or 21.7%).

Table 1
Demographic profile of respondents

Demographic variables	Category	Respondents (N=180)	
		Frequency	Percentage (%)
Gender	Male	86	47.8
	Female	94	52.2
Academic qualification	High school or below	16	8.9
	Diploma	32	17.8
	Degree or professional qualification	108	60.0
	Postgraduate	24	13.3
Industry	Manufacturing	30	16.7
	Service	150	83.3
Number of employees	Less than 5	29	16.1
	Between 5 and 75	125	69.5
	More than 75	26	14.4
Years of establishment	2 years or less	74	41.1
	3 to 5 years	64	35.6
	6 to 10 years	28	15.6
	11 years or more	14	7.8
Position in the company	Business owner	39	21.7
	Senior manager	141	78.3

4.2 Assessment of the measurement model

Firstly, confirmatory factor analysis (CFA) was conducted to test the reliability, convergent validity, and discriminant validity of the measures. Hair, Black, Babin, and Anderson (2010) suggested the use of factor loadings, Average Variance Extracted (AVE), and Composite Reliability (CR) to assess convergent validity. As indicated in the Table 2, most item loadings were close to or larger than 0.5 (significant at $p < 0.01$), all Average Variance Extracted (AVE) exceeded 0.5 (Bagozzi & Yi, 1988), and the Composite Reliability (CR) for all the variables exceeded 0.7 (Gefen, Straub, & Boudreau, 2000).

In addition, the square root of the AVE was tested against the intercorrelations of the construct with the other constructs in the model to ensure discriminant validity (Chin, 1998, 2010; Fornell & Larcker, 1981) and, as indicated in Table 3, all the square roots of the AVE

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exceeded the correlations with other variables. Thus, the measurement model was considered satisfactory with the evidence of adequate reliability, convergent validity, and discriminant validity.

Table 2
Result of measurement model

Construct	Loadings	CR[a]	AVE[b]
Top Management Support		0.915	0.687
CSF_MANAGERSUPPORT_1: Top management researches the new technologies, processes and product ideas.	0.835		
CSF_MANAGERSUPPORT_2: Top management actively seeks innovative ideas.	0.870		
CSF_MANAGERSUPPORT_3: Top management encourages innovation activities.	0.902		
CSF_MANAGERSUPPORT_4: Top management promotes the advantages of new solutions and ideas enthusiastically.	0.902		
CSF_MANAGERSUPPORT_5: Mistakes regarding creative and innovative efforts of individuals are tolerated by top management.	0.597		
Customer Focus		0.900	0.643
CSF_CUSTOMER_6: Our company has developed a program to maintain good customer communication.	0.812		
CSF_CUSTOMER_7: Our company collects extensive complaint information from customers.	0.814		
CSF_CUSTOMER_8: Quality-related customer complaints are treated with top priority.	0.845		
CSF_CUSTOMER_9: Our company conducts a customer satisfaction survey every year.	0.794		
CSF_CUSTOMER_10: Our company always conducts market research for collecting suggestions for improving our products.	0.740		
Employee Orientation		0.884	0.607
CSF_EMPLOYEE_11: In our company, people are rewarded in the proportion to the excellence of their job performance.	0.761		
CSF_EMPLOYEE_12: Our company has a promotion system that helps the best persons to rise to the top.	0.843		
CSF_EMPLOYEE_13: Our company is characterized by a relaxed, easygoing working climate.	0.616		
CSF_EMPLOYEE_14: There is a lot of warmth in the relationships between management and workers in this company.	0.832		
CSF_EMPLOYEE_15: The philosophy of our management emphasizes the human factor, how people feel, etc.	0.821		
Technology Orientation		0.928	0.721
CSF_TECH_16: Our company uses advanced technologies in new product development.	0.805		
CSF_TECH_17: Our company uses the latest technologies in new product development.	0.844		
CSF_TECH_18: Our products are on the leading edge of the industry standard.	0.875		
CSF_TECH_19: Our company uses systematic scanning for new technologies inside and outside the industry.	0.900		
CSF_TECH_20: Our company reinvests a significant portion of profit in R&D.	0.817		
Entrepreneurial Orientation		0.938	0.751
CSF_EO_21: Our company has built capacity to react to market changes.	0.871		
CSF_EO_22: Our company protects our advantages from industry changes.	0.910		
CSF_EO_23: Our company prepares for radical industry changes.	0.899		
CSF_EO_24: Our company believed that wide-ranging acts were necessary to achieve objectives.	0.788		
CSF_EO_25: Our company initiated actions to which other organizations respond.	0.859		

Construct	Loadings	CR[a]	AVE[b]
Non-financial Performance	0.752	0.956	0.812
Mean_CusRetention			
We have more repeat sales in our company.			
It is easy to see repeat clients in our company.			
If a client trade with us at least once, he/she remains with us forever.			
Mean_CusSatisfaction	0.724		
Our company ensures that customers´ product and/or service preferences are satisfied.			
Our company delivers products and/or services that are exactly what customers want.			
Our company delivers products and/or services that exceed customers' expectations.			
Mean_Commitment	0.731		
Our employees would be happy to make personal sacrifices if it is too important for the company's well being.			
The bonds between our company and our employees are strong.			
Our employees have little or no commitment to this company.			
Mean_JobSatisfaction	0.850		
Most of our employees like their jobs in this company.			
Most of our employees think their supervisor treats them well.			
Most of our employees do not intend to work for a different company.			
Overall, our employees are quite satisfied with their jobs.			
Mean_OperateEfficiency	0.782		
Our product development cycle time has been reduced.			
Overall, our product development costs have been reduced.			
Our project duration has been reduced.			
Mean_RelationEfficiency	0.858		
Our company has more open sharing of information with our customers.			
Our company has a more effective working relationship with our customers.			
Our company has an enhanced commitment to work with our customers in the future.			
Our company has an overall more productive working relationship with our customers.			
Mean_Innovation	0.854		
Our company is fast in adopting process with the latest technological innovations.			
Our company uses up-to-date or new technology in the process.			
Our company has enough new products introduced to the market.			
Our company is able to produce products with novelty features.			
Mean_ProductNewness	0.462		
It required a major learning effort or experience by customers to use our product.			
It took a long time before customers could understand our product's full advantages.			
The product/service concept was difficult for customers to evaluate or understand.			
Mean_ProductQuality	0.794		
The quality of our products/services compares well with competitor products.			
Our products/services are of higher quality than competing products/services.			
The quality of our current products/services compares well with others we have offered in the past.			

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Construct	Loadings	CR[a]	AVE[b]
Financial Performance		0.925	0.585
Mean_ROA	0.870		
Our company generates a relatively higher return on assets than our competitors do.			
Our business unit has a cost advantage compared to our major competitor.			
Mean_ROI	0.906		
Our company is highly effective in terms of capital investments.			
The return on investment of our company has improved over the past three years.			
Mean_SalesGrowth	0.923		
Our company has remarkable customer growth over the past three years.			
The sales volume of our product offerings has increased over the past three years.			
Mean_MarketShare	0.911		
Our company is more effective in opening up new markets or expanding existing markets than our competitors.			
Our company is able to change the market or lead customers' needs in new directions.			
Mean_Proftability	0.895		
The profit of our company grew over the past three years.			
Our company achieves higher profit margins, even when charging comparable prices, than our major competitors.			

Notes: [a] Composite Reliability **(CR)** = (square of the summation of the factor loadings)/{(square of the summation of the factor loadings) + (square of the summation of the error variances)}

[b] Average Variance Extracted **(AVE)** = (summation of the square of the factor loadings)/{(summation of the square of the factor loadings) + (summation of the error variances.

Table 3
Discriminant validity of constructs

Construct	Customer Focus	Employee Orientation	Entrepreneurial Orientation	Financial Performance	Non-financial Performance	Technology Orientation	Top Management Support
Customer Focus	**0.802**						
Employee Orientation	0.680	**0.779**					
Entrepreneurial Orientation	0.569	0.631	**0.867**				
Financial Performance	0.459	0.470	0.568	**0.901**			
Non-financial Performance	0.505	0.548	0.601	0.818	**0.765**		
Technology Orientation	0.643	0.678	0.617	0.613	0.645	**0.849**	
Top Management Support	0.687	0.612	0.469	0.325	0.464	0.543	**0.829**

Note: Diagonals (in bold) represent the square root of the average variance extracted while the other entries represent the correlations.

4.3 Assessment of the structural model

Secondly, Figure 2 and Table 4 present the results of the hypotheses testing. It was revealed that three hypotheses were found to be significantly related to the attitudes. The results have revealed that three hypotheses, namely, H2, H7, H8, H9, and H10 were supported whereas H1, H3, H4, H5, and H6 were not supported.

We also conducted a global fit measure (GoF) assessment for PLS path modeling, which is defined as the geometric mean of the average communality and average R^2 for endogenous constructs (Tenenhaus et al., 2005) following the procedure used by Akter, D'Ambra and Ray (2011). Following the guidelines of Wetzels et al. (2009), we estimated the GoF values which may serve as cut-off values for global validation of PLS models. The GoF value of 0.566 (average R^2 was 0.466, average AVE was 0.687) for the (main effects) model, which exceeds the cut-off value of 0.36 for large effect sizes of R^2. As such, it allows us to conclude that our model has better explaining power in comparison with the baseline values (GoF_{small}=0.1, GoF_{medium}=0.25, GoF_{large}=0.36) (Akter et al., 2011). It also provides adequate support to validate the PLS model globally (Wetzels et al., 2005).

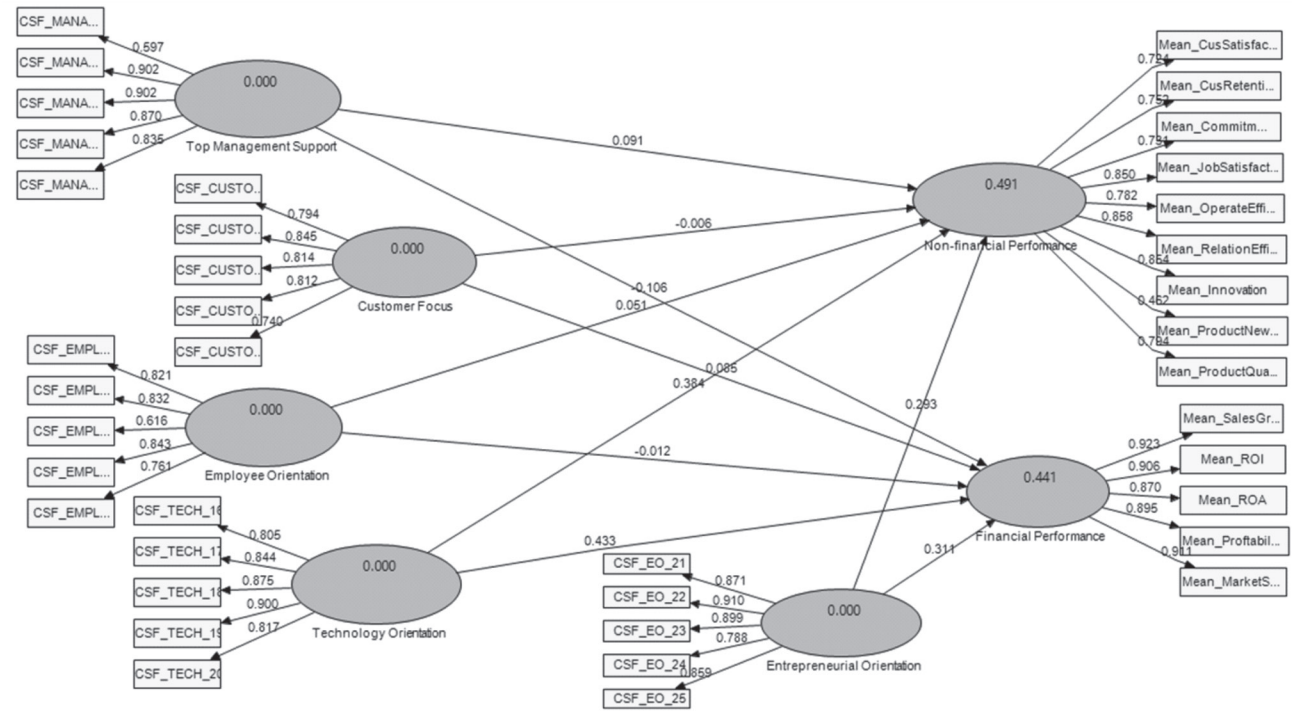

Figure 2. Results of the path analysis

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Table 4
Path coefficients and hypothesis testing

Hypothesis	Relationship	Standard Beta	Standard Error	t-value	Supported
H1	Top Management Support -> Non-financial Performance	0.091	0.059	1.542	NO
H2	Top Management Support -> Financial Performance	-0.106	0.065	1.647*	YES
H3	Customer Focus -> Non-financial Performance	-0.006	0.074	0.081	NO
H4	Customer Focus -> Financial Performance	0.085	0.073	1.172	NO
H5	Employee Orientation -> Non-financial Performance	0.051	0.077	0.668	NO
H6	Employee Orientation -> Financial Performance	-0.012	0.079	0.155	NO
H7	Technology Orientation -> Non-financial Performance	0.384	0.067	5.729**	YES
H8	Technology Orientation -> Financial Performance	0.433	0.072	5.981**	YES
H9	Entrepreneurial Orientation -> Non-financial Performance	0.293	0.076	3.828**	YES
H10	Entrepreneurial Orientation -> Financial Performance	0.311	0.074	4.206**	YES

Note: *p<0.05, **p<0.01

5 Discussion

The present study was conducted among SMEs in Malaysia with a twofold research objective in mind. First, to examine the relationship between critical success factors and non-financial performance; second, to investigate the relationship between critical success factors and financial performance.

First, the statistical results have underlined that top management support is significantly and positively related to financial performance. Consistent with previous findings, financial performance could be improved if top management emphasizes communicating the mission and vision throughout the entire organization, providing direction for employees to achieve and increase their level of performance (Demirbag et al., 2006; Fotopoulos & Psomas, 2009; Turkyilmaz et al., 2010). However, the findings of the present study have determined that top management support was not significantly related to non-financial performance. This could be due to the high power distance culture and hierarchical organizational structure in Malaysia, which means employees unlikely to voice their opinions and approach their bosses directly, thus limiting the development of relationship between top management and employees, and open communication required for innovation.

Contrary to expectation, customer focus and employee orientation were not found to have any significant effect on non-financial performance and financial performance. The findings seem to contradict previous researches which contend positive relationship between these success factors and organizational performance (Awan, 2013; de Bussy & Suprawan, 2012; Nwokah & Maclayton, 2006; Ziggers & Henseler, 2015). The nature of the firms studied in the present study provides reasonable justifications for these findings. Although creating satisfied customers are essential for firms to success, customer focus strategy seems to be too costly for small capital SMEs. Today's

customers are more demanding than ever before, and thus it is increasingly difficult for SMEs to create valuable relationships with the customers in order to improve their performance. On the other hand, small number of employees in SMEs might be the reason which makes employee orientation less relevant in helping firms to achieve superior performance.

The analysis has indicated that technology orientation is significantly and positively related to both non-financial performance and financial performance. As evidenced by previous research, firms that are technology-oriented have better chance to achieve superior performance (Al-Ansari et al., 2013; Trainor et al., 2010; Zhou & Li, 2010). This is because technology orientation can provides firms with capability to acquire rich technological information and new technologies that are useful for firms to come out with new solutions that are difficult to be imitated by their competitors (Gatignon & Xuereb, 1997; Grinstein, 2008).

As for entrepreneurial orientation, the results have shown that entrepreneurial orientation is positively related to both non-financial performance and financial performance. This result is consistent with previous findings that found that organizational performance could be improved if the firms put a strong emphasis on innovativeness, riskiness, proactiveness, competitive aggressiveness, as well as on autonomy in response to market changes (Gupta & Batra, 2015; Walter et al., 2006). This is further supported by Jabeen and Mahmood (2014) who state that firms adopting a strong entrepreneurial orientation are willing to take risks and thus they can innovate quickly, which would result in more innovative products and leading to superior performance.

6 Implications

This paper recognizes the relationship between the critical success factors determinants as the drivers of the effectiveness and success of organizational performance in Malaysia SMEs. In continuation hereof, the adoption of the CSFs should not only be seen as a mean to satisfy external stakeholders, but similarly, the CSFs proved to be beneficial in optimizing internal processes of the organization.

From the managerial perspective, this research offers a number of policy implications for SMEs managers and policy makers. The instrument used in this paper will be very useful to policy makers in SMEs as a tool for evaluating the effectiveness of their current organizational practices. Furthermore, SMEs managers should be aware that the intermediating impact of organizational performance (financial and non-financial performance) could only be enhanced by improving the critical success factors determinants. This study can help entrepreneurs, especially SMEs owners who often lack capital, to identify critical success factors, with which they can add most value to their business. The findings of this study suggest that, for the context of SMEs in Malaysia and current business environment, technology orientation and entrepreneurial orientation are the most important factors for entrepreneurs to improve their performance, and therefore entrepreneurs should prioritize their investments in these success factors.

This study contributes to the body of knowledge by demonstrating that different critical success factors have different degrees of impact on organizational performance. The findings show that technology orientation and entrepreneurial orientation are positively related to both non-financial performance and financial performance, while top management support is positively related to financial performance only. In contrast, the results do not support any relationship between customer focus, employee orientation and organizational performance. By comparing several critical success factors in a model, this study revealed the most significant critical success factors that can contribute to better organizational performance. Hence, this study has successfully developed some guidelines for scholars who are interested in this field to further

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test the relationships among these constructs, especially in SMEs and emerging country context.

7 Limitations and suggestions for future research

Future studies may replicate this effort with slight modifications. This study has relied primarily on samples of SMEs entrepreneurs in Malaysia. Therefore, it is not certain that the results can be generalized to larger organizations or other countries. Moreover, this study used cross-sectional data and thus it can only provide a static perspective on fit. Comparative studies across industries, cultures, and professions, including control variables such as size and industry, should be sought in the future in order to improve understanding on the relationship between constructs included in this study. Besides that, several research approaches that can be conducted, such as case studies, focus group discussions, may permit deeper insights. Wherever possible, future research should endeavor to determine a more holistic quality management model. Research efforts could examine the effect of total quality management critical success factors on organizational performance. Another important avenue for future research is to carry out an in-depth interview with the senior management in order to gain more detail information. It is further suggested that research efforts should seek to complement the subjective measures by objective data in order to gain more reliable findings.

8 Conclusions

As point of departure in the stated research objectives, it was sought to investigate the critical success factors on the organizational performance (financial and non-financial) of the SMEs Malaysia companies. From the empirical analysis, five critical success factors on organizational performance were analyzed. It was revealed that two (technology orientation and entrepreneurial orientation) out of five proposed CSFs have significantly contributed to the organizational performance of the SMEs. The implication of the empirical analysis indicates that having a high degree of technology orientation has direct impact on the organizational performance. This indicates that to improve the firm performance, it is essential for SMEs to cultivate technology orientation through the active acceptance of new technology. Particularly, having a high degree of entrepreneurial orientation in the SMEs is vital as it wields a positive influence on organizational performance. Entrepreneurial orientation implies it can create competency in the firms that lead to improve performance in areas such as marketing, R&D, organizational renewal and delivering new products and services. These findings thus indicate that it may be beneficial for SMEs firms to place special emphasis on technology orientation and entrepreneurial orientation.

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Supporting Agencies:
This research was supported by Universiti Malaysia Sarawak and Ministry of Higher Education, Malaysia under the Exploratory Research Grant Scheme [ERGS/SS05 (01)/1013/2013(10)].

About the authors:
1. May Chiun Lo, PhD in Management from Universiti Sains Malaysia, Malaysia. E-mail: mclo@unimas.my
2. Yin Chai Wang, PhD in GIS from Universiti Sains Malaysia, Malaysia. E-mail: ycwang@unimas.my
3. Constance Rinen Justin Wah, MSc in Business Administration, Universiti Malaysia Sarawak, Malaysia. E-mail: rwjconstance@unimas.my
4. T. Ramayah, MSc in Business Administration, Universiti Sains Malaysia, Malaysia.
E-mail: ramayah@usm.my

Contribution of each author:

Contribution	May Chiun Lo	Yin Chai Wang	Constance Rinen Justin Wah	T. Ramayah
1. Definition of research problem	√			
2. Development of hypotheses or research questions (empirical studies)	√			
3. Development of theoretical propositions (theoretical work)	√		√	
4. Theoretical foundation / Literature review			√	
5. Definition of methodological procedures				√
6. Data collection	√	√		
7. Statistical analysis	√			√
8. Analysis and interpretation of data		√		√
9. Critical revision of the manuscript		√		
10. Manuscript writing	√		√	