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Article

Learning organization elements as determinants of organizational performance of non-profit organizations (NPOs) in Singapore

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A review of the available literature revealed a positive relationship between learning organization (LO) elements and business organization's performance. However, to date very few studies, if any, have attempted to examine how this LO's elements can be exploited namely on non-profit organizations (NPO's). This study thus examines the relationships between the LO elements with performance of non-profit organizations (NPOs) in Singapore. The required information was obtained from 70 NPOs through the use of a survey questionnaire. The regression analysis results revealed that individual learning practices, organizational learning practices and team problem-solving have strong positive relationships with NPO's performance. Conclusions of the study and future research are also discussed.

Key words: Non-profit organization, performance criteria, LO, organizational learning practices.

INTRODUCTION

Studies on learning organization (LO) have received a great deal of interest from researchers, academics and practitioners. These include concept and transformation of organizations into a LO and the benefits it brings about in enhancing competitive advantages and organizational performance (Chodak, 2001). Easterby-Smith et al. (1998) mentioned three reasons for the growing interest on LO, which is due to the speed of change in technology and knowledge management, the global movement and internationalisation, and also the increased competitions among existing corporations and new establishments. However, despite this, there are limited empirical studies concerning LO specifically in the non-profit sector. This paper thus aims to discuss the concept of the LO and examine the relationships between LO elements and NPOs' performance.

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LITERATURE REVIEW

Organizations that subscribe to certain attributes and characteristics of organizational learning are called LOs (Garvin, 1993; Watkins and Marsick, 1994, Marquardt, 2002). Basically, the concept of LO has been advocated as conscious organizational development strategies to acquire competitiveness and superior performance in a highly dynamic environment (Stata, 1989; Senge, 1990), with the assumption that the traditional organizational management and structures are no longer effective in coping with the demands for change and performance (DiBella, 1998; Roth and Kleiner, 1998). LO is relevant to organizations that aspire to increase their chances for survival and strengthen their market positions (Schein, 1993; Hitt, 1995). In broad terms, a LO can be viewed as a social system whose organizational members have acquired the processes for continually generating, retaining and leveraging individual and collective learning.

Various scholars argued that three attributes of organizational learning should be included in developing a LO, which include: (i) individual learning practices, (ii) team learning practices, and (iii) organizational learning practices (Hunt and Morgon, 1996; Watkins and Marsicks, 1997). Goh and Richards (1997) also suggested five strategic elements of LO, which include: (i) clarity of mission and vision, (ii) leadership commitment and empowerment, (iii) experimentation and motivation (iv) effective transfer of knowledge, and (v) team problem solving. These so called ‘building blocks’ are deemed to be essentially acquired by any organizations that wish to become LOs. For the purpose of this study, the aforementioned attributes and ‘building blocks’ will be further discussed and categorised as the LO elements.

LO element 1: Individual learning practices

Individual learning as a strategic component of LO has been determined as a central premise for successful organizational development (McDougall and Beattie, 1998; Beeby and Booth, 2000) and superior organizational performance (Sabherwal and Becerra, 2003; Amy, 2008). From the human resource development perspective, employees with the relevant skills and knowledge tend to be more productive and effective in their work (Guerrero, 2003; Colbert, 2004), whilst organizations that invest considerable amount of resources into staff development are more competitive than those that do not (Barnett and Ceci, 2002; Velada and Cartano, 2007).

In this context, the learning-loop theory (Argyris and Schön, 1996) has been widely mentioned in the field of individual and organizational learning (Elsey and Leung, 2004; Amy 2008). The theory begins from the concept of “single-loop learning” where learning is based on the assumptions or decisions against organizational norms. Essentially, the practice of single-loop learning allows the individuals to measure performance against a specific set of pre-approved standards, which are not open to question. Single-loop learning requires the acceptance of established norms and provides no framework for challenging, rethinking or in any way altering the determined standards (Dodgson, 1993; Eisner, 2003). Hence, it is also being referred to as “lower-level learning” (Fiol and Lyles, 1985), “adaptive learning” (Senge, 1990), or “non-strategic learning” (Mason, 1996). On the other hand, double-loop learning occurs when organizational members examine the long-held assumptions about its customers, products, services and/or corporate strategies, which often include the examination of the espoused theory or existing paradigm of the individuals and the organization (Argyris and Schön, 1996). As mentioned by Huysman (2001), double-loop learning engenders a process by asking “why” questions that challenges the status quo on how things are done in the organization.

People who practice double-loop learning do not compromise on the initial outcome but constantly seek to understand the problem better, and as a result, they are able to generate new and better solutions (Scharman, 2001; Blackman et al., 2004). Hence, it is also being referred to as a “high-level learning” (Fiol and Lyles, 1985), “generative learning” (Senge, 1990), or “strategic learning” (Mason, 1993). Similar to double-loop learning, deutero-learning occurs “when people in the organization examine the essential principles on which the organisation is based; its mission, vision, and culture” (Sun and Scott, 2003, p. 203). It involves “learning how to learn” by reflecting on how we learn in the first place. In this situation, organizational members would reflect on how they think about the existing norms, not only on whether the norms should be changed.

However, double-loop and deutero-learning, commonly known as generative leaning (Senge, 1990) are rare in most organizations. This is because organizational leadership and culture always influences its occurrence (Argyris and Schon, 1996). Unless the leaders practice “consistent generative learning themselves and encourage their staff to do so, such learning practices will not be credible” (p. 12). Very few organizations are able to engage in generative learning practices, as “organizations tend to create learning systems that inhabit such learning practices” (Dodgson, 1993, p. 389). This implies that strategic effort is required for generative learning practices to be implemented in the organization, which then relates to why such proactive learning practices could lead to distinctive organizational competitiveness. From the performance enhancement perspective, people who practise generative learning often view themselves as being curious and prefer challenging tasks (Button et al., 1996). They are proactive learners (Raelee and David, 2004) and critical thinkers (Kim, 1993), whom are likely to learn from mistakes and seek continual improvements in order to enhance the organizational performance (Sujan et al., 1994).

Based on the preceding literature review, it is proposed that H_1**:** there is a significant relationship between individual learning practices and the performance of NPOs.

LO element 2: Team learning practices

According to Gherardi and Nicolini (2001), learning in the organization does not take place solely in the minds of the individuals, but also through teams. Similarly noted by Allan (1999), while "individual learning is important and underpins an organization's development, team learning appears to be a crucial element for knowledge sharing and integration" (p. 11). Specifically, Daft and Weick (1984) defined team learning practices as a group of "skilled-individual, learning through each other's experiences and knowledge" (p. 290). Its main function is to facilitate collective learning, knowledge dissemination and interpretation (Fong, 2005; Vera and Crossan, 2005).

To promote team learning, leaders must engage organisation members on active enquiry, discuss errors and problems, and participate in experimentation and team reflection. Above all, organisational teams would need to have strong sense of team trust in order to pursue effective learning and knowledge sharing (Leitch et al, 1998; Elliott et al., 2000). In addition, research has also shown that team learning is negatively related to formalization and hierarchies (Easterby-Smith, 1997; Goh, 1998) and positively related to the minimization of boundaries between functions, informal networking and dialogue (Nevis et al., 1995; Schein, 1993). In the search of an organisational structure to facilitate team learning practices, Daniel (2002) concluded that the matrix structure is the most appropriate structural design for the fact that it enables and demands learning from all respective team members. Similarly, other scholars have mentioned that in order to facilitate team learning practices, barriers to cross-functional team learning must be removed (Darian and Coopersmith, 2001; Mezias et al., 2001). From the empirical perspective, team learning practices have also been widely mentioned as strategies to enhance organizational performance (Tucker et al., 2002; Jones et al., 2003), product and service quality improvement, innovation enhancement, (Lewis and Moultrie, 2005; Shipton et al., 2005), greater customer and employee satisfaction (Darian and Coopersmith, 2001; Webber, 2002), operating costs reduction, as well as efficient response to technological changes (Chan et al., 2003; Daft, 2004). Based on the above-mentioned literature, it is proposed that H_2: there is a significant relationship between team learning practices and the performance of NPOs.

LO element 3: Organisational learning practices

As much as individual and team learning are critical attributes of organizational learning, "it is more complex and dynamic than "a mere magnification of individual learning" (Kim, 1993, p. 40). It occurs when knowledge of organizational members is institutionalized into an organizational-wide computerized network and knowledge management system (Dalkir, 2005; Anantatmula and Kanungo, 2006). This argument was supported by several scholars who stressed that organizational learning is not simply an aggregate of individual or collective learning (Mezias et al., 2001; Backstrom, 2004); instead, it is a systemic learning process with a strategic emphasis that requires the involvement of the whole organization (Bontis et al., 2002; Maier and Hadrich, 2006). Specifically, Watkins and Marsick (1997) proposed several organizational learning practices which include effective knowledge acquisition processes, whereby knowledge is systematically acquired from both individuals and teams. The acquired knowledge must be distributed throughout the organisation, especially to organisation members who needed them for decision-making. The distribution channels must be simple and effective in nature.

In addition, the organisation members must be engaged in active knowledge interpretation, that incurporate encoding individual and team knowledge into explicit form such as work manuals, standard operating procedures, or decision support systems or expert system (Zollo et al., 2002). In this context, organisations with strong IT infrastructure are able to transform the knowledge for strategic use. As such, organisations that engage in these organizational practices will have some common knowledge sharing structure and system that allow acquisition and storage of explicit knowledge, and above all, utilizing these knowledge to achieve better organisational performance. There should also be a proper system to sustain and secure knowledge acquired as they become essential asset to the organisation. Based on the above contentions, the following hypothesis is proposed, where H_3: there is a significant relationship between organizational learning practices and the performance of NPOs.

LO element 4: Clarity of mission and vision

Mission and vision as essential organizational elements have been widely mentioned in the management literature (Montuori, 2000; Goh, 2002). Specifically, the process to align the main organizational strategy, structure and resources begins from clarifying the fundamental mission and vision of the organization with its respective stakeholders (Goh and Richards, 1997; Liao, 2005). The lack of a clear and widely accepted organizational vision and mission could lead to weak cohesiveness (Stacey, 1993; Harvey, 1998) and resistance towards successful strategies implementation (Hamel, 1997; de Waal, 2007). On the aspect of organizational performance, the correlations between well articulated organizational visions, missions and business performance were established (Nanus, 1992;

Calantone et al., 2002). Other studies have also affirmed that shared vision and well accepted mission could generate positive organizational performance measured in terms of organizational competitiveness (Pearce and David, 1987), as well as financial performance in terms of sales and profits generation (Calantone et al., 2002). Based on the preceding literature review, it is proposed that H_4: there is a significant relationship between the clarity of organizational mission and vision and the performance of NPOs.

LO element 5: Leadership commitment and empowerment

A growing body of evidence also shows that leaders of LO need to be good role-models of proactive learning, as such behaviour tends to facilitate the development of a strong learning culture (Dymock and McCarthy, 2006; Oliver and Kandadi, 2006). Leaders should empower organizational members in knowledge enquiring and sharing (Bell De Tienne et al., 2004; Woodbury, 2006) and the practice of generative learning (Goh, 2002; Politis, 2003). Apart from those stated characteristics and functions, the ability to solicit feedback from organizational members and being open to criticism were also mentioned as important factors of leadership in LOs (Garvin, 2000).

On the aspect of how leadership affects the organizational performance, several scholars advocated that organizations that are able to achieve superior performance have leaders who demonstrate proactive learning behaviours (Bell De Tienne, 2004; Stinson et al., 2006). As there is a considerable relationship between leadership and organizational performance, it is thus proposed that H_5: there is a significant relationship between leaders' commitment and empowerment and the performance of NPOs.

LO element 6: Experimentation and motivation

Experimentation and motivation are strategic building blocks of LO for the purpose of knowledge discovery and sharing among people (Goh, 2002; Tucker et al., 2006). The process of experimentation particularly includes acquiring feedback and correcting potential errors through analysing the experimental outcomes (Pietersen, 2002; Davenport, 2005). As noted by Lee et al. (2004), experimentation, by its nature, will inevitably result in failures. According to traditional measures, an increase in these small failures would be interpreted as a decline in performance. Yet, without these failures, learning cannot occur. This implies that failures in experimentations could be viewed as opportunities to learn from mistakes and an essential process to discover new knowledge. From the empirical perspective, the research conducted by Henderson and Clark (1990) concluded that organizational performance is positively related to teams that experiment frequently. Based on the findings, experimentation as a proactive learning strategy allows team members to explore new concepts in problem-solving. Very often the results obtained from the experiments, be it positive or negative provide additional information and insights for future experiments to be conducted. Through consistent practices, new knowledge created can be used to generate effective solutions and strategies that contribute to the overall organizational performance. While experimentations are strongly advocated in LOs, motivations are also necessary to encourage learning and knowledge sharing among organizational members (Miller et al., 2002; Sirota et al., 2005). More often than not, rewards should be given immediately for continuous improvement and to create a desirable learning behaviour and organizational culture (Schein, 1993; 2004). Specific behaviour can be enforced if it is "reinforced and repeated with the right types of motivations" (Levebof, 1993, p. 85).

Conversely, Bartlett and Ghoshal (1998) argued that management should not reward organizational members solely on financial terms, that is, monetary forms of rewards; as such rewards encourage competitions and create barriers for knowledge sharing. An empirical research published by *IRS* Management Review (2000) affirmed that in order to gain enthusiasm for learning and knowledge sharing, staff will want to see their knowledge contributions been acknowledged and rewarded. In the context of NPOs, there is also a strong inclination of intrinsic motivation for people working in the non-profit sector (Paton and Cornforth, 1992; Mason, 1996). The motivation of people in the NPOs can be greatly enhanced when people feel that they are contributing effectively to the missions of the NPOs and the clients whom they are serving (Matthians, 2005). Extrinsic motivational factors such as financial-based rewards appear not to be the main concern for the organizational members of NPOs; instead, they are more inclined towards personal recognition, clients and management encouragement, as well as mission fulfilment (Schaubroeck and Ganster, 1991).

Similarly as mentioned by Alexander (2000), there is a notion that knowledge and learning acquired within the setting of NPOs has little effects towards personal gain, but rather there is a strong motivating effect towards the NPOs' causes and fulfillment of the community needs. Based on the aforesaid discussions, it is proposed that H_6: there is a significant relationship between experimentation, intrinsic motivation and the performance of NPOs.

LO element 7: Effective knowledge transfer

Effective knowledge transfer focuses on transferring skills, experience and personal knowledge with each other (Hansen et al., 2005; Rhodes et al., 2008). As mentioned by Herbert (2000), LO as an intelligent organization, should be designed to utilise the intellectual power of all its organizational members. Major and Cordey-Hayes (2002) asserted that this process "is a conveyance of knowledge from one place, person, and ownership to a pre-defined unit, it involves two or more parties and there has to be a source and a destination" (p. 411). As a whole, knowledge transfer becomes a strategic component of a LO when it is effectively implemented to enhance organizational competitiveness (Inkpen and Tsang, 2005; Graham and Nafukho, 2007).

Essentially, Goh (1998) also mentioned that communicating past failures and successful practices are also part of knowledge transfer. As everyone holds differing interpretations of their knowledge and practices, sharing of preceding experiences with each other will reduce the possibility of committing similar mistakes and thus result in better decision-making (Goh, 2002). It was further cited by various scholars that knowledge transfer through sharing of personal success and failures can also be found in practices of mentorship, where senior personnel help the junior staff in doing their jobs by coaching them individually (Sosik and Lee, 2002; Smith et al., 2005). While the current literature advocates that effective knowledge transfer could lead to better organizational performance (Martin and Salomon, 2003; Choy et al., 2006), however, there are no empirical findings on how effective knowledge transfer from the multiple-dimensions, which includes effective communication, sharing of past personal failures, successes and experiences can generate positive performance of NPOs. Hence, it is proposed that H_7: there is a significant relationship between multi-dimensional approach of knowledge transfer and the performance of NPOs.

LO element 8: Team problem-solving

The concept of a team as a strategic learning component has been given great emphasis in the literature of LOs (Crossan and Berdrow, 2003; Dymock and McCarthy, 2006). Entrekin and Court (2001) suggested that the use of teams offers two major advantages. First, team encourages people to contribute their unique skills and knowledge for a specific purpose with greater emphasis on group cohesiveness and motivation. Second, the use of teams allows managers to focus on strategic issues rather than supervising the individuals. In the context of NPOs, the utilisations of team problem-solving are common as volunteers and full-time staff collaborate on the specific projects or delivery of programmes and services (Brown and Kalegaonkar, 2002). Studies on team problem-solving have also established its positive relationship with organizational performance, particularly on organizational strategic change, financial performance and effectiveness of decision-making (Dess and Miller, 1993; Combe and Botschen, 2003). As the existing literature is supportive of team problem-solving, it is proposed that H_8: there is a significant relationship between team problem-solving and the performance of NPOs.

The following sections of the literature review focused on the performance measurements of NPOs. Similar to the business organizations, NPOs are subjected to performance measurement. However, NPOs as a sector of society, differs considerably from business profit-making and government public organizations (Young, 1993; Ittner et al., 2003; Roberts, 2003; Poister, 2003; Trussel, 2006). Specifically, they have been characterised as a sector of society that is endowed by voluntary action in order to fulfil the specific social needs identified (Smith and Shen, 1996; Michael, 2002).

PERFORMANCE MEASURES OF NON-PROFIT ORGANIZATIONS IN SINGAPORE

Essentially, NPOs are differentiated in comparison with the commercial organizations. The former has little or no profit maximising focus, low potential for income generation and, generally speaking, no bottom line against which performance can ultimately be measured in the financial terms. The vast majority of NPOs still generate most of their income from the government or the general public (Boland and Fowler, 2000). As noted by Drucker (1990), the single greatest difference between NPOs and government and private organizations is the source of money. Commercial organizations generate income from customers, while government mainly from taxes, but the NPOs receives their main source of income from donors: the money is not their own, but held in trust for the donors. This implied that the goals of NPOs are not to provide profit for their stakeholders, rather to use the donated funds to benefit the intended clients or communities for which these NPOs set to accomplish. Very often the decisions made by the management of a NPO were intended to generate welfare and changing the conditions of lives for their clients or beneficiaries. Consequently, organization's performance is determined by how the NPOs organise and execute their programmes and services (Pfeffer, 1982; Shim and Siegel, 1997).

With the aim to discover appropriate performance criteria of NPOs, Durtina (1984) suggested two key performance measures, which includes: (i) service and programme's effectiveness - the degree to which the programme or service is achieving its intended public purpose, and (ii) organizational efficiency or management's use of resources to achieve programme or service results. Pappas (1996) mentioned that NPOs' performance measures should include indicators on the improvement of the clients' quality of life. This measure refers to the "overall performance of NPOs in delivering high level of quality services (p. 172). Commonly referred to as the results, impact, or achievements of the NPO, which include the following measures: (i) mission performance - the delivery of mission-based programmes and services with tangible, positive outcomes for service users or clients, (ii) knowledge performance - the ability and capability to act on what has been learned in the organization, resulting in continuous improvement and innovation, both internally and in the larger non-profit sector, (iii) financial performance - broad-based financial measures that capture both current and long-term operating perspectives in the non-profit sector that are appropriate for internal management needs as well as external constituents and accrediting, governing agencies. Similar performance indicators were also mentioned by Nathan (1998), where: (i) superior programme and service's quality, (ii) increase in clients or membership, and (iii) increase in funding and larger endowment.

While there were numerous discussions with regards to specific performance measures for NPOs, financial performance indicators have also been recognised as essential components of NPOs as they are accountable to the use of donor's money in advancing the social causes. With reference to the performance indicators recommended by various literatures, this study proposed four financial performance indicators, which include: (i) collection of funds and donations, (ii) funds usage on direct charitable programmes and services, (iii) operating and administrative expenses, and (iv) annual reserve. Specifically, the ability to collect sufficient funds and donations indicates the sustainability of the NPO's programmes and services. As all NPOs in Singapore are subjected to the 30/70 rule in which only 30% of collected funds should be used on operating and administration costs, while 70% to be used on direct programmes and services that contribute to the improvement of client's lives. NPOs that incur high operating and administration expenses would be seen as inefficient and are required to pursue effective cost control.

Finally, annual reserve indicates their ability to fulfil the NPOs' commitment towards their targeted programmes, services and internal operations. This includes organisational sustainability in times of unstable financial condition such as economic crisis which could potentially lead to a decline in donations. In short, positive annual reserve of an NPO indicates its financial soundness and ability to pursue future development.

Apart from the financial measures, five non-financial performance indicators were also included in this study. These indicators are: (i) clients' satisfaction on programmes or services, (iii) increase in clients, (iv) programme and service's quality, and (v) overall programme and service's effectiveness and implementation, where evaluation of impact is taken into close consideration. Essentially, clients' satisfaction evaluates the satisfactory level of clients upon participating in the programmes and services of NPOs (Elaine et al., 2001; Gainer and Padanyi; 2004).

In order to remain relevant to the community in this era of constant change, NPOs are required to "deliver tailored and high-quality programmes and services that fulfil the needs of the clients" (Emanuele, 2004, p. 16). Various scholars have also indicated that in order to obtain clients' satisfaction, the NPOs must develop and deliver programmes and services that fulfil their immediate needs (Stevenson et al., 2002; Vazquez et al., 2002). Programme and service's efficiency aims to determine the amount of time needed for programmes and services to be developed and delivered to the intended clients. As mentioned by Posavac and Carey (2002), the efficiency of NPOs depend on how fast they respond to clients' needs, and develop relevant programmes and services in meeting those identified needs. From the performance evaluation perspective, NPOs that are efficient in generating programmes and services for arising community or social needs can be considered as one that is needs responsive, which is important towards sustaining clients and acquiring of financial supports (Elaine et al., 2001; Bamberger et al., 2004). Thirdly, programme and service's quality determines the quality of a programme or service (Werther and Berman, 2001; Erik, 2006). The proposed performance indicators do not limit on a specific service standard but allow individual NPOs to determine their perceived level of performance and quality standards (Werther and Berman, 2001; Jansen, 2004). Apart from the mentioned indicators, the increase in the number of clients and membership indicates the relevance of programmes and services (Plantz, et al., 1997; Gainer and Padanyi, 2004).

Conversely, a declining in number of clients reflects the end of a programme and service life cycle, which in turn questions the relevance of the NPOs. Parallel to Posavac and Carey's (2002) performance measurement criterion, needs analysis should be performed prior to any programme and service development. This process includes the analysis of the clients' population that may require a particular programme, service or intervention. Lastly, NPOs should also be evaluated on their overall programme and service's effectiveness and implementation (Kaplan, 2001; Elaine et al., 2001), which includes determining the extent of positive changes and the impact of NPO's programmes and services on their clients and the progress toward achieving the broader societal objectives (Mattessich, 2003; Fitzpatrick et al., 2004). As mentioned by numerous scholars, NPOs need to constantly enhance the effects and quality of their programmes and services through regular evaluations in order to meet the social and community needs (Stevenson et al., 2002; Vazquez et al., 2002). It can then be considered as a quality assurance indicator to ensure that resources are allocated to achieve the mission of the NPO (Zahra and George, 2002; Goh and Ryan, 2002). The combination of both financial and non-financial performance indicators provided a holistic approach in evaluating the overall performance of NPOs. Based on the above discussions, the conceptual framework of this study is illustrated in Figure 1.

RESEARCH METHODOLOGY AND PROCEDURE

This study employed mail survey using structured questionnaires based on the Learning Organization Survey (LOS) developed by Goh and Richards (1997), and the Dimensions of LO Questionnaire (DLOQ) developed by Watkins and Marsick (1997). As both instruments were not originally designed for studies involving the non-profit sector, in order to adapt the instruments for use in this study on non-profit sector, additional items derived from literature review were established to examine the independent variables in reference to the human social service NPOs in Singapore). Furthermore, while the LOS and DLOQ have been validated in previous studies, validation was also carried out in order to add support to the face and content validity of the survey instrument for use in NPOs. Specifically, face validity is related to whether the survey instrument is suitable for the intended respondents. It is usually judged by the scientific community that the indicator really measures the construct and suitability of the instrument for the intended respondents. Content validity refers to the degree to which a survey instrument measures an intended content area and is based on the judgement of the representativeness of the items on the instrument (Ary and Razavieh, 1996). This implies that the more the questionnaire items represent the domain or universe of the concept being measured, the greater the content validity. For the purpose of this study, several experienced executive directors of human social service NPOs were engaged as examiners to provide input for the modified survey questionnaires, as to establish the content and face validity of the final survey instrument. As mentioned by Anastasi (1988), experts (subject matters) could be engaged as examiners to evaluate the face and content validity of survey questionnaire. Respondents were solicited on a four-point scale, from “strongly disagree” (coded 1) to “strongly agree” (coded 4).

Respondents which comprises of NPOs were chosen from the sampling frame obtained from online databases of National Volunteers and Philanthropy Centre (NVPC, 2004) and National Council of Social Services (NCSS, 2006). Three criteria were then used to guide the sampling procedures in order to identify the NPOs relevant for this study. First, they must be a registered human social service NPO and a member of NCSS. This was to ensure that the NPOs identified for this study abide to the corporate governance and standards of NCSS. Second, the NPO must have been in operation for a minimum of 5 years. This was to ensure that the NPOs have sufficient experience in programmes and services organization and implementation, which is important for the purpose of performance evaluation. Third, these NPOs must have key performance indicators (KPIs) relevant to this study. This was to ensure that the NPOs are using the appropriate performance indicators that have been specified in this study, as to ensure validity of measure. Out of 150 NPOs, 70 NPOs that fulfilled the above criteria were identified. For the purpose of this study, the executive directors of the 70 NPOs were identified as survey respondents, as they are the key decision-makers in policies setting, programmes execution, performance evaluation and daily running of the NPOs. Most importantly, they have access to the financial information and service standards required in this study. With the help of the comprehensive database provided by NCSS and NVPC, all names of executive directors and NPOs’ addresses can be retrieved accordingly. Out of 70 questionnaires distributed, 60 (85%) were returned and analysed. The high response rate was due to the pre-survey notice and since this study was related to enhancing NPOs’ performance, respondents were keen to be involved.

RESULTS

The reliability of the questionnaire was tested using Cronbach’s alpha (α) measurements. If the Cronbach’s α is greater than 0.7, it will be considered as high reliability, if the Cronbach's α is between 0.5 and 0.6, then the internal consistency of the factor is still acceptable, and if the Cronbach's α is smaller than 0.3, it will be classified as low reliability (Robinson and Shaver, 1973; Wallen and Frenkel, 2001). The reliability coefficients α of each LO elements were as follows: (i) individual learning practices (0.941), (ii) team learning practices (0.917), (iii) organizational learning practices (0.939), (iv) clarity of mission and vision (0.912); (v) leadership commitment and empowerment (0.866); (vi) experimentation and motivation (0.861); (vii) multi-dimensional approach of knowledge transfer (0.847), and (viii) team problem-solving (0.892). The Cronbach’s α of this survey instrument ranging from 0.84 to 0.94, thus, the survey questionnaires were deemed to be reliable for further analysis.

Results from the regression analysis, as shown in Table 1, revealed that organizational learning practices ($\beta = 0.535$, $R^2 = 0.286$, $p <.005$) were significantly associated with the overall performance of NPOs (based on both financial and non-financial performance indicators). The VIF statistics (VIF = 1.0 < 10) indicated that there were no multi-collinearity problems. Thus, in terms of overall performance of NPOs, hypothesis H_3 was supported, while hypotheses: H_1, H_2, H_4, H_5, H_6, H_7, and H_8 were rejected at the significance level of ($p > 0.05$). Further analysis was also carried out in order to determine the relationship between LO elements with performance of NPOs based on financial indicators independently. This was to provide additional understandings on the relationships between LO elements and NPOs performance based on collection of funds and donations, operating and administrative expenses, funds usage on direct charitable programmes and services, as well as annual reserves. The results of this analysis indicated that organisational learning practices ($\beta = 1.025$, $R^2 = 0.294$, $p < 0.05$) was the most significantly associated with the NPOs’ performances. The VIF

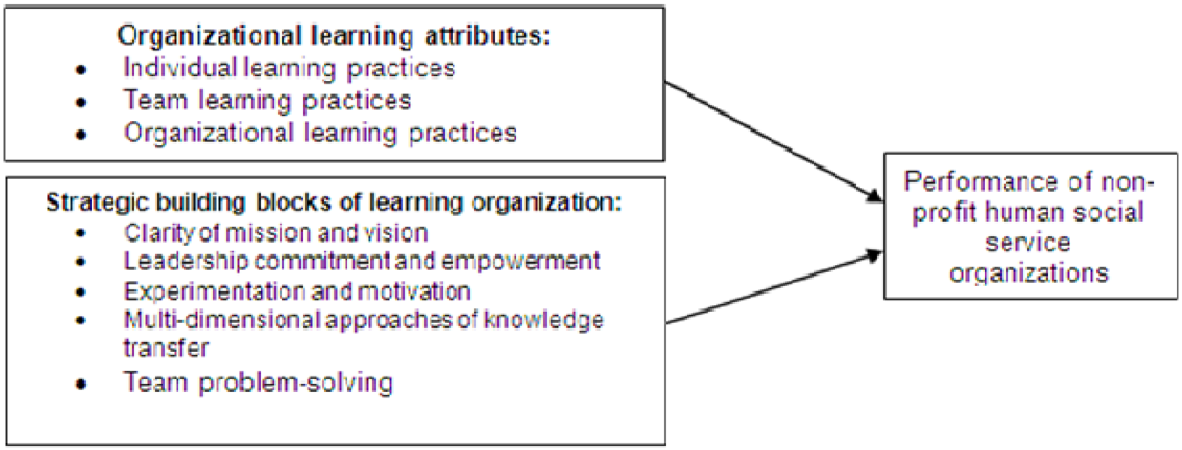

Figure 1. The conceptual framework.

Table 1. Stepwise regression results for LO elements with organisational performance.

Dependent variables	Independent variables	R^2	Standardized beta	F-value	t	Sig.	VIF
Overall performance of NPOs (based on both financial and non-financial performance indicators)	1. Organizational learning practices	.286	.535	21.676	4.66	.000	1.000
Financial performance of NPOs (based on financial performance indicators)	2. Organizational learning practices	.294	1.025	2.445	2.79	.027	8.95
Non-financial performance of NPOs (based on non-financial performance indicators)	3. Organizational learning practices	.750	.405	166.419	3.29	.002	4.39
	4. Team problem-solving	.791	.291	105.324	3.53	.001	2.02
	5. Individual learning practices	.815	.304	81.589	2.77	.008	3.57

statistics (VIF = 8.95 < 10) also showed that there were no multi-collinearity problem. Based on the finding, it can be concluded that there was a significant relationship between organizational learning practices and NPOs' performances (based on the aforementioned financial performance indicators). Subsequent analysis was also carried out on NPOs' performance, based on non-financial performance indicators, which included clients' satisfaction, programme and service's quality, programme and service's efficiency, increase in clients, and overall programme and service's effectiveness and implementation. The results showed that organizational learning practices, team problem-solving, and individual learning practices ($\beta = 0.304$, $R^2 = 0.815$, $p < 0.05$) were significantly associated with the NPO's non-financial performance indicators. VIF statistics (VIF = 3.57 < 10) also indicated that there was no multi-collinearity problem. Based on the finding, it can be concluded that there was a significant relationship between organizational learning practices, team problem-solving, individual learning practices and NPOs' performances (based on the above non-financial performance indicators).

DISCUSSION, CONCLUSION AND FUTURE RESEARCH

The concept of LO has gained the intense interest of both practitioners and academicians over its influence on the learning practices of organizational members and performance (Ortenblad, 2001; Power and Waddell, 2004). Specifically, there were discussions on the aspects of individual learning and team learning practices, facilitative leadership (Ellemers et al., 2004), decentralized strategic planning process (Day, 1994; Mintzberg, 1994), system thinking (Senge, 1990; Garvin, 1993), organizational learning (Watkins and Marsicks, 1997) and strategic building blocks of LO (Goh and Richards, 1997). There is, however, a lack of research on the relationships between LO elements and the performance of NPOs. With the intention to discover the relevancy of LO and its implications towards the NPOs, the objectives of this study was to investigate the relationships between the LO elements and the performance of human social service NPOs in Singapore (based on both financial and non-financial performance indicators).

Essentially, this study revealed that several LO elements were significantly related to the performance of NPOs. First of all, the significant positive relationship between organizational learning practices and the overall performance of NPOs (based on both financial and non-financial indicators) was established. This finding coincided with the existing literature that systemic implementation of knowledge acquisition, utilisation and storing of knowledge will improve the overall performance of organizations (Ellinger et al., 2002; Chou, 2005). This study also shows that comprehensive computerised network and knowledge management systems do exist in the non-profit sectors of Singapore. Specifically, the computerised network and knowledge management systems and the implementation of organizational learning practices were mainly for the purpose of programme and service's evaluation and outcomes management. Although the amount of investment towards computerised network and knowledge management systems may vary among the NPOs, these systems enhanced the capability of NPOs to acquire information and knowledge into a network system, so that other organizational members can have access to the information and knowledge needed for their works, as well as to improve organizational efficiency.

Through this study, three LO elements were found to be significantly associated with non-financial performance of NPOs (based on the non-financial performance indicators), which include also organizational learning practices, individual learning practices, and team problem-solving. The findings further implied that the implementation of organizational learning practices would allow tacit knowledge of the senior staff to be imparted to junior staff, whilst team discussion and problem-solving processes helps to acquire and share knowledge with other people. Furthermore, information on programme and service development and implementation could be stored in the computerised databases. This information often include performances and outcomes of previous programmes and services conducted, which could be retrieved and reviewed in order to improve the quality of the existing programmes and services.

Based on the finding, individual learning practices were strongly encouraged in the NPOs, which allowed organizational members to acquire skills and knowledge needed for their jobs by attending the relevant training programmes. Fundamentally, these findings show how important and basic the learning of individuals is to a NPO as it has direct implications towards achieving the NPOs' missions and objectives. According to Sosik and Lee (2002), Smith et al. (2005), information and valued knowledge are more likely to be transferred through personal sharing and frequent communication. The findings of this study also support the concepts of Zemke (1985) and Marsick and Watkins (1997) concerning the application of multiple learning approaches and knowledge sharing in the organizations, for which organizational performance and competitiveness can be enhanced through multiple learning strategies and overall organizational development. In reference to the findings of this study, the multiple learning approaches include attending structured training programmes, daily problem-solving and knowledge sharing, reviewing information and knowledge through the computerised network and knowledge management systems, as well as through the mentoring sessions.

The main contribution of this study to knowledge was an advancement of the current available knowledge about the relationship between LO elements and the performance of NPOs. It is the first time such research has been conducted in the non-profit sectors of Singapore, and findings of this study could enhance the understanding on how the concept of LO can contribute to NPOs' performance. Furthermore, the increasing demand for performance measures in NPOs demonstrated the need to ensure proper utilisation of charity funds and donations for the benefits of the clients and community. As this study focused only on human social service sector of a developed country, a comparative study could be undertaken among NPOs from different sectors with the objective of uncovering the effects of LO in improving organizational performance. Such an extension may be worthwhile to determine if the findings can be replicated. Additional modifications would need to be made to the survey instruments, particularly the performance measurement segment, depending on the type of NPOs. It would also be insightful to conduct the research on NPOs in other countries as such explorations have great potential in advancing the theory of LO.

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