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Relationship between Service-Learning and Teamwork Skills Development

Abstract

Teamwork is considered amongst the top coveted workplace skills in the current job market. It is important for students to develop teamwork skills before entering the job arena. The existing research has evaluated the relationship between service-learning and teamwork as single construct. This study assesses teamwork as a composite construct having two dimensions such as communication and decision-making skills. Hence, this study provides a greater understanding about the role of service-learning in enhancing communication and decision-making skills of students. A survey questionnaire was used to collect data from 395 students participating in a service-learning project in vocational institutes of Pakistan. Structural Equation Modeling (SEM) was as analysis tool. The results showed that there was a slightly negative relationship between service-learning and decision making skills. The study showed that there was a positive relationship between service-learning and communication skills of students. This study suggested that service-learning did not improve decision-making skills of students, however, it greatly enhanced communication skills of students. It is recommended that further study should test this model in other contexts.

Keywords: service-learning, teamwork, communication skill, decision-making skill

Introduction

Teamwork skills are highly demanded in today's job market. Teamwork is an important leadership trait (Loughry *et al.*, 2014), that enhances the employees' performance in an organization context (Warrick, 2016). Due to this, current employers expect that their employees must be able to (a) plan, organize and allocate resources, (b) possess interpersonal skills, (c) understand and design complicated interrelationships, (d) select and use appropriate technological tools, and (e) critical thinking, creativity and sociability (Hettinger, 2004). Teamwork skills are essential for successful career as well growth of organizations. However, despite this there are mixed results about the role of service-learning towards improving teamwork skills (Falk, 2012). Service-learning is regarded as an educational approach that integrates academic content with service in the community in which students participate collaboratively to provide a community service (Bringle *et al.*, 2012). It provides wider opportunities to students to use and share their skills and knowledge in a real world situation. Moreover, there are many benefits that service-learning accrue to students such as interpersonal, critical, intellectual, personal and social growth (Ahmad *et al.*, 2014).

Service-Learning

As an educational method, service-learning is collaborative and reciprocal in nature that benefits students, teachers and community alike (Hobson *et al.*, 2014). It is an active pedagogy that connects community service with academic learning. This association enhances students' critical thinking skills, problem solving abilities, civic capacities and in a democratic society and teamwork (Bringle & Hatcher, 2007). As a result, students find an opportunity for personal growth, leadership, personal efficiency, teamwork and life skills development (Vandzinskaite *et al.*, 2010). The importance of teamwork in organizations is fast gaining attention of researchers

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and organizational leaders in the present day. Hence, today's organization give importance to teamwork skills and abilities of their prospective employees (Hettinger, 2006).

Organizational effectiveness is closely connected with the culture of teamwork within the organization. Studies have revealed that as a teaching method, service-learning increases teamwork skills of students (Ghorbanhosseini, 2013; Körner *et al.*, 2015). Anderson's ACT theory elaborates that teamwork learning occurs in three different stages such as declarative knowledge: at this stage the team members get themselves familiar with the purpose or goals of the project or activity to be undertake. The second stage is the proceduralized knowledge: at this stage the members of the team try to understand the ways and means about how to conduct the activity. The third and last stage is the skill acquisition (teamwork competencies): at this stage the members of the team apply the skills of teamwork practically (Hettinger, 2006). The theory further explains that teamwork process includes orientating the team to problem-solving situations, organizing and managing team performance, promoting positive team environment, facilitating and managing task conflict and promoting team perspectives.

Teamwork

Teamwork is a leadership and professional work skill. It is mentioned in the literature that there is a close relationship between service-learning and teamwork skill development of students. In addition to professional knowledge, individuals have a variety of skills such as the ability to communicate well (Ghaferi & Dimick, 2016). According to Eyler & Giles (1999) service-learning courses provide students good opportunity to develop their communication skills as well as the art of listening. Service-learning researchers generally agree that communication skills are important for engaged citizens in a democratic society (Yorio & Ye, 2012). In this study teamwork is operationally defined as the ability to make decisions and communicate effectively while working in groups. This section presents a review of literature on two aspects of teamwork i.e decision-making skills and communication as outcomes of service-learning. Based on the literature it can be hypothesised that:

H1: There is a positive relationship between service-learning and teamwork.

Communication skills

Communication is the ability of an individual or a team member to monitor or to share information and procedures effectively and clearly (O'Neil Jr *et al.*, 2003). More specifically, communication means an accurate exchange of information between two or more than two people. It is a two way process in which one person sends the information and the other one receives it. It is the ability to discriminate, clarify or acknowledge the reception of information from the sender. Literature has declared effective communication one of the essential principles of successful teamwork. Effective communication is the overall exchange of clear and correct information from one person to another without any misunderstanding (Kuehl, 2001). Communication skill is defined as the clear and accurate information exchanging between one or more than one individuals. It is the ability to receive and decode information correctly. According to Kuehl (2001) it is an overall exchange of concise and accurate information. It is an important measure of team performance. Communication skill is one of the necessary skills for successful political participation in a democratic society. It is one of the most important components of any civic-oriented service-learning programme. He further says that individuals in a democratic society need to develop essential communication skills understand the places and interest of others in the community and have the ability to solve problem and resolve conflicts (Reader *et al.*, 2007).

Service-learning is an emerging pedagogy that places an emphasis on improvement in interpersonal and communication skills of students. Research (Warren, 2012) found that service-learning improved written communication skills of students. In another quasi-experimental study, Tucker & McCarthy (2001) investigated the effect of service-learning on students' presentation skills. The result of their study showed that participation in service-learning was significantly related to increased students' confidence in their abilities to make presentations to others. Researchers (Eyler & Giles Jr, 1999; Lambright & Lu, 2009) argue that communication skills can be enhanced through consistent practice. Service-learning is a practical pedagogy that effectively meets this requirement, because it has the potential to enhance students' leadership, time management and presentation skills (Battistoni, 2017). For development of communication skills of students it is needed that immerse them in the workplace setting which is characterized by participation. Students' participation in the service context provides them an opportunity to interact and communicate with others. The interaction process contributes toward

improvement in students' communication skills (Hebert & Hauf, 2015). Based on the literature it can be hypothesised that:

H1: There is a positive relationship between service-learning and communication skills.

Decision-making skill

Decision making is the ability of an individual to integrate information by using sound judgment, identifying possible alternatives, selecting the best solution and evaluating the consequences. It is the ability to use the available information effectively to develop team and to take informed decisions. On the basis of decision-making a team becomes able to take a collective decision (Kuehl, 2001). Thus it enables the students to see into the minds of team members. Research (Bernadowski *et al.*, 2013) has found that taking a collective decision is useful and has a positive impact on the team outcomes. It allows all the members to work in closer coordination that leads to common ownership of the team goals and demands. Research has further documented that students develop deeper understanding of subject matter and a practical knowledge of community decision-making as a result of participating in service-learning experience. It is quite natural and logical that during service-learning activity students come across different issues and problems in a complex natural community context and critically reflect on the issues. The process of reflection enables the students to collect information, evaluate it and use it for effective decision-making (Hettinger, 2006).

Decision-making is the ability to collect, integrate and use information to make sound and logical judgments, identify possible alternatives, select the best solution and evaluate the consequences of the decision. It is the ability to make an informed team decision by utilizing the available information (Kuehl, 2001). According to Eyler and Giles (1999) it is important for citizens to know the reasons for taking certain decision and its repercussions. To know this, service-learning develops the expertise of students and enhances their cognitive capacities to make intelligent decisions about what needs to be done, where, how, when and why. Based on the literature it can be hypothesised that:

H1: There is a positive relationship between service-learning and decision-making skills.

Problem Statement

The existing research (Falk, 2012) have examined teamwork as a single construct and its correlation with service-learning. The results are mixed and unclear. Other scholars (O'Neil et al (2003) have treated teamwork as a composite construct having different dimensions. There was no specific empirical evidence on assessing the role of service-learning towards improving teamwork especially its two dimensions decision-making skills and communication skills. This study contributes to this gap in the current literature by testing a new model.

Research Objectives

The main objectives of the study were:

1. Assess the relationship between service-learning and teamwork
2. Evaluate relationship between service-learning and communication skills of students
3. Exmaine relationship between service-learning and decision-making skills of students

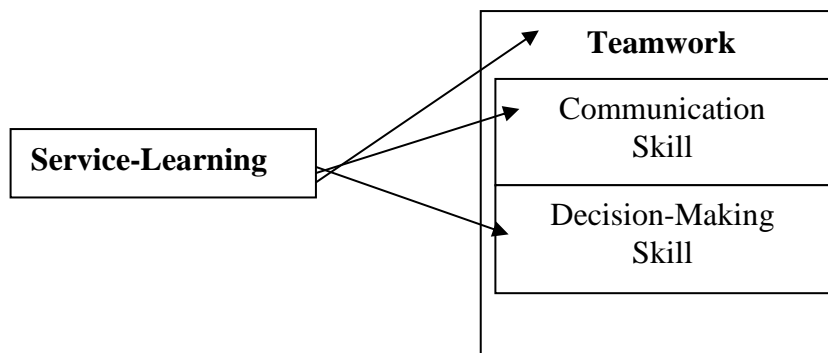


Figure 1: Conceptual Framework

Hypotheses of the Study

In order to test the relationships among the variables of the study, the following three hypotheses were formulated.

H1: There is a positive relationship between service-learning and teamwork.

H1a: There is a positive relationship between service-learning and communication skill.

H1b: There is a positive relationship between service-learning and decision-making skill

Method

A quantitative correlational design was used to based on a survey approach. Survey study is . It is more cost effective and time saving and helps in reaching out to vast number of respondents in less time (Gay, Mills, & Airasian, 2009).

Instrumentation

Two scales were used for data collection. The teamwork scales was adapted from O’Neil et al (2003). The scale consisted of two sub-scales: communication skills (4 items) and decision-making skills (5 items). The scale did not have any previous evidences for reliability. Therefore, it was piloted in the current new context for reliability assessment. Secondly, the service-learning scale was adopted from Lambright & Lu (2009). There were total 15 items in the original scale. The scale has already been validated with an alpha rating of .93 for the construct (Lambright & Lu, 2009). Permission was obtained from the original writers to use the scales in this study.

Reliability

The reliability of the scales were checked through Cronbach’s coefficient alpha testing on Statistical Package for Social Science (SPSS) version 20. The cronbach coefficient alpha for service-learning scale was .82 and for teamwork scale was .78 which were within the acceptable ranges (Gay, Mills, & Airasian, 2009).

Data Analysis

. Table 1 indicates the demographic descriptions of respondents.

Table 1 Demographic Data of Respondents

Gender	Frequency	Percentage %
Male	249	63.03%
Female	146	36.96%
Total	395	100%

Table 1 indicates that out of the total sample (395) of students, 249 constituted male students with a percentage of 63.03% and female students constituted 146 with a percentage of 36.96% in the present study.

Results

For the purpose of data analysis, SEM was performed on AMOS version 21. Figure 2 indicates the path analysis showing the individual relationship of service-learning with teamwork and its two dimensions communication skills and decision-making skills as dependent variables. Figure 3 indicates the structural model showing factor loadings showing a good model fit.

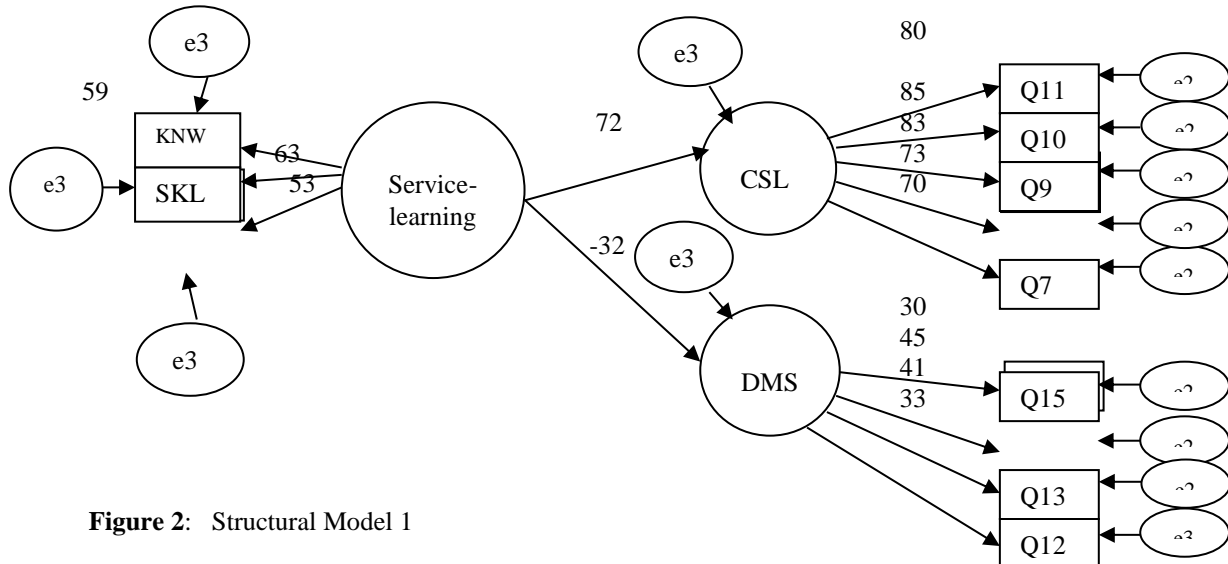


Figure 2: Structural Model 1

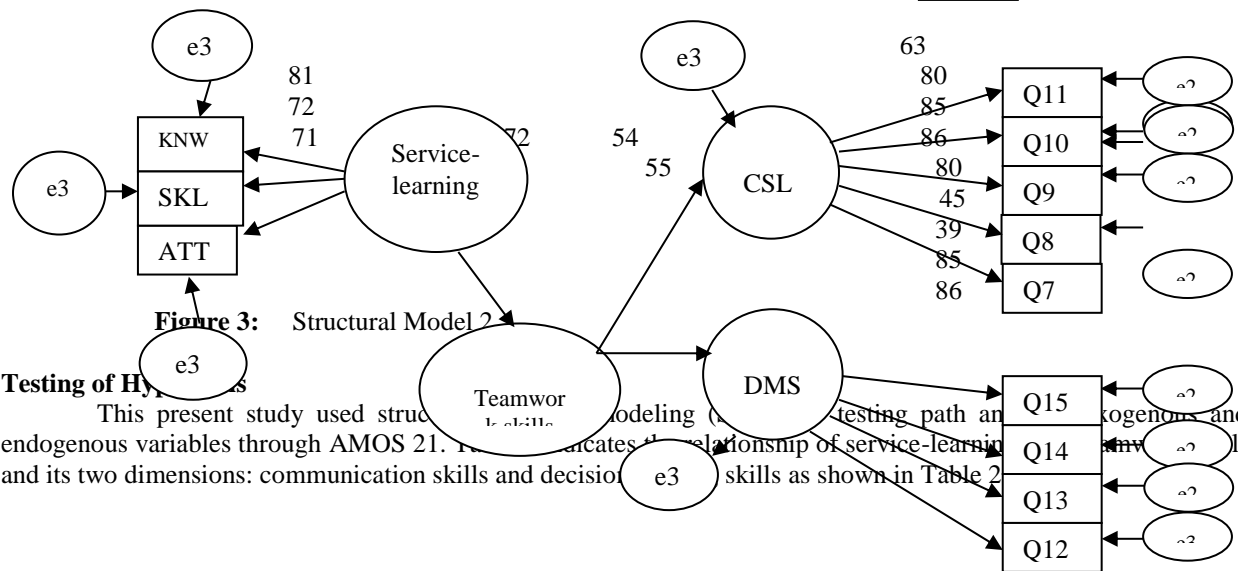


Figure 3: Structural Model 2

Testing of Hypotheses

This present study used structural equation modeling (SEM) to test the relationship of service-learning and its two dimensions: communication skills and decision-making skills as shown in Table 2.

Table 2: Hypothesis Testing 1

			Estimate	S.E.	C.R.	P	Label
Communication Skill	<---	Service-learning	.925	.086	10.779	***	
Decision Making Skill	<---	Service-learning	-.076	.037	-2.050	.060	

Firstly, the relationship of service-learning with communication skills was tested. To achieve this, the proposed hypothesis was *H1: There is a positive relationship between service-learning and communication skills.* Table 2 illustrates the results for the structural model 1. The result demonstrated that the path coefficient value is .925 and critical ratio is 10.779 and p value 0.000. This shows that there is a direct positive relationship between

service-learning and communication skills. It means that service-learning positively contributes towards communication skills of students. Secondly, the relationship of service-learning with decision-making skills was tested. To achieve this, the proposed hypothesis was *H2: There is a positive relationship between service-learning and decision-making skills*. Table 2 illustrates the results for the structural model. The result demonstrated that the path coefficient value is -.076 and critical ratio is -2.050 and p value 0.000. This shows there is a negative relationship between service-learning and decision-making skills. It means that service-learning does not positively contribute towards decision-making skills of students in vocational training institutes of Pakistan. Table 2 shows the hypothesis testing on the relationship between service-learning and teamwork skills development in vocational training institutes of Pakistan.

Table 2: Hypothesis Testing 2

			Estimate	S.E.	C.R.	P	Label
Teamwork Skills	<---	Service-learning	-.725	.043	-7.321	.431	

Thirdly, the relationship of service-learning with teamwork was tested. To achieve this, the proposed hypothesis was *H1: There is a positive relationship between service-learning and teamwork*. Table 2 illustrates the results for the structural model. The result demonstrated that the path coefficient value is -.725 and critical ratio is -7.321 and p value .431. This shows there is a negative relationship between service-learning and teamwork in vocational training institutes of Pakistan.

Discussion

The results of this study showed a positive relationship between service-learning with one dimension of teamwork such as communication skill and however, the study found a negative relationship between service-learning and decision-making as second dimension of teamwork. Moreover the study also found that overall there was a negative relationship between service-learning and teamwork in vocational training institutes of Pakistan. This study found mixed results. Some of its results are in line with the results of previous studies and some are not. For example, previous studies have reported that service-learning improves communication skills and decision-making skills of students (Cashman & Seifer, 2008; Eyler & Giles, 1999; Hettinger, 2006; Tucker & McCarthy, 2001; Tucker *et al.*, 1998). On the contrary, this study found a negative relationship between service-learning and decision-making skill and a positive relationship with communication skills. The former finding supports the findings of previous studies in other contexts on service-learning. The later result supports the findings of studies in the context of Pakistan where researchers have already reported about lack of teamwork skills and decision-making skills among Pakistani professionals and graduates (Anwar *et al.*, 2011; Dean, 2005; Ejaz *et al.*, 2011; Ilias *et al.*, 2012; Khan *et al.*, 2007; Malik *et al.*, 2013). The results of this current study further support the findings of some more studies in the context of Pakistan about decision-making skills and teamwork deficiencies among workers in different fields (Abbas *et al.*, 2013; Ali *et al.*, 2011; Asim & Zaki; Bashir *et al.*, 2011; Hafizullah, 2014; Jan *et al.*, 2014; Rahim, 2010; Raza *et al.*, 2010; Rehman, 2007). This situation can be attributed to boring, ineffective and lecture based teaching and learning in Pakistani classrooms where students are encouraged to rote learn the content rather than critical thinking, discussion, evaluation and application (Hoodbhoy, 1998; Nasir & Nazli, 2010; Shabbir *et al.*, 2014; Uzair-ul-Hassan & Noreen, 2013). However, this situation can be rectified by improving the process of active engagement of students in decision-making process, and adopting practical measures to improve the process of instruction (Rehman *et al.*, 2005; Mustafa *et al.*, 2005; Shakoore *et al.*, 2011; Ansari & Wu, 2013).

Conclusion

The results of this study showed that service-learning did not have positive impact on teamwork skills development of students in the context of Pakistan. More specifically, the study revealed that students communication skills as one aspect of teamwork had improved but, there was negative impact on decision-making as another aspect of teamwork skills. May be in the context of this study, the students did not get enough space for decision-making in the learning place or during teacher instruction. Hence it is suggested that the results of this study may be tested in other contexts to get deeper understanding of the concept.

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