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STUDENTS' TEAM-LEARNING INSPIRES CREATIVITY

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ABSTRACT

Research catalyzes positive change for the economic development of a country which will lead to investments and job opportunities, consequently leading to a high Gross National Product. In recent year's higher education bodies has been emphasizing on embedding research activities within the undergraduate teaching activities leading to better students employability. Current education system transforms its teaching and learning quality using e-learning strategies. Also, past research assessed role of social capital on knowledge sharing behavior in virtual environment; scant research assessed the moderation of positive emotions and gender for (1) higher education sector and (2) developing countries. And, the success of such a statement has not been properly documented in the past research. As the result, the aim of this study is to empirically assess the role of Social Capital Theory on Knowledge sharing, when moderated by positive emotions. This deductive research's literature review identified research gaps; to form research questions and a model with three hypotheses. Multi-correlation analysis was performed using SPSS to test hypotheses thru, data collected from 334 participants: a sample size above required threshold, to generalize population of higher education undergraduate business students of a private university in Bahrain. Findings supported all hypotheses, indicating positive moderation between social capital and knowledge sharing, when students e-learn on Moodle.

KEYWORDS

Social Capital Theory, Knowledge Sharing, Positive Emotions, e-Learning, Higher Education

1. INTRODUCTION

Regarding the significant factors that can affect the learning outcomes successfully, motivation and positive emotions are now being recognized for their impact on learning, especially in higher education degrees (Ainley, 2008; Beard, Clegg, & Smith,2007; Pekrun & Stephens, 2010). Despite these outcomes, few studies have investigated the students' sensitiveness of positive emotions in relation with knowledge sharing and social capital theory. In addition, the Self-directed learning is "*a process in which individuals take the initiative with or without the help of others in diagnosing their learning needs, formulating goals, identifying human and material resources, selecting appropriate learning strategies and evaluating learning outcomes*" (Rager, 2013). When it comes to positive emotions in leaning, studies of the role of positive emotions in learning goals achievement show that pride, joy and hope positively correlate with students' academic self-efficacy, academic interest, and overall achievement. Therefore, this research aims to study how factors such as positive emotions affect social capital theory and knowledge sharing.

The objectives of this research is to examine: (1) is it important that students experience positive emotions during learning; (2) Is positive emotions affecting knowledge sharing; (3) Is positive emotions affecting social capital theory. This study used quantitative method whereby a questionnaire was spread amongst university students across Bahrain such as, Ahlia University, Royal University for Women, AMA University and University of Bahrain. Literature review on the relationship between the variables used in this research is presented in the next chapter. Chapter 3 and 4 consists of the research methodology and the data analysis including hypotheses. The findings, discussion and conclusion will be presented in chapter 5.

2. LITERATURE REVIEW

2.1 The Role of Positive Emotions on Student Success

Currently emotions are playing a big role in learning especially for higher education students. By joining emotions with growing recognition of the impact of emotional well-being on student's academic success will help in introducing new ways of teaching which will lead to a successful change in learning theory and practices (Rowe, 2013). In addition, according to Williams (2013): All the studies of positive emotions show that whenever a student is positive this will lead him to glorious achievements and it also shows that the emotions of the student affects his concentration and the way he receives knowledge and how much focus he gives to the tutor. Positive emotions and emotional intelligence play in experiential learning. Students' field practicum journals were analysed using the Linguistic Inquiry and Word Count Program (LIWC) and a measure of emotional intelligence was obtained using the Mayer–Salovey–Caruso Emotional Intelligence Test (MSCEIT) (Abe, 2011). Moreover, Research on multimedia learning has begun to consider the influence of affective processes, such as emotions based on the established fact that emotions influence cognitive learning processes (Park, 2015). On the other hand, Emotional intelligence describes and operationalizes adaptive emotional functioning Perception, understanding, and managing emotions effectively in the self and others are described as core competencies in most operationalization's of emotional intelligence, Higher levels of emotional intelligence are associated with a variety of general positive intrapersonal outcomes (Schutte, 2014). According to Vulpe (2011) "*Concerning the relationship between positive emotions and creative thinking, it was found that people who were positively manipulated showed higher performances in terms of general creative thinking and its three dimensions: fluency, flexibility and originality, than did the neutral group. It was also found that there were no differences concerning the performances with regard to creative thinking*." Another emotions concept is discussed in an article by Rahimi et al. (2014). It mentions the Broaden-and-Build theory, one of the primary focuses in the field of English language teaching is on interventions, either at the level of material development or teaching strategies and learning tasks, aimed at not only fostering positive emotions in language learners and but also preventing or minimizing negative emotions. On the other hand, Bondarenko (2017) explains that some studies of the role of positive emotions in learning goals achievement show that pride, joy and hope positively correlate with students' academic self-efficacy, academic interest, and overall achievement. Another explanation to this indirect relationship between positive emotion and academic achievement can be provided through activation. Bondarenko also explains that Pekrun's cognitive-motivational model proposes to differentiate between emotions of enjoyment of learning, hope for success or pride, which are considered positive emotions, and emotions of relief, relaxation after success and contentment, which are positive deactivating emotions.

In his article "*The effect of experiential learning on subsidiary knowledge and performance*", Bhatti, (2016) mentioned, "*For subsidiary growth to exist, firms must store, transfer, and manage knowledge, and learn and share that knowledge through socialization. A growing interest exists in the process of acquisition of knowledge, but this topic lacks an in depth investigation regarding the internationalization of firms*". Chang (2016) mentioned that investment in Human Resources is basic to the improvement of human capitals. To encourage better learning and training activities, the use of online resources have been blended successfully with education. Rovai (2002) explained in his article that the purpose of this study was to explore the factors that influence students' community experiences, to develop and field-test the Classroom Community Scale and to determine its validity and reliability for use with postsecondary students taking online courses. When educational researchers are armed with an effective tool to measure community in a learning environment, they will be better be equipped to conduct research on how to design and deliver instruction at a distance in order to promote community. Additionally, by implication, to promote satisfaction and instructors, and other learners, but without the requirement to be online at the same time. Seeking into (Putnam, 1995, p. 67). Social support can also be recognized as a form of social capital in the workplace. The term of Social capital is defined as ''features of social organization such as networks, norms, and social trust that facilitate coordination and cooperation for mutual benefit.

2.2 Emotional Exhaustion

A brief introduction to what emotional exhaustion is defined. It is defined as being overstretched and exhausted, and this has a huge mental impact on students while they are learning. Students who work while attending college may face time limitations and other added stressors, which may ultimately lead to emotional exhaustion. Additionally, an increasing number of non-traditional and re-entry students are attending college. These individuals may be required to juggle work, school, and family life (King & Bannon, 2002).

2.3 Instructor Attributes

Research has found that the desired characteristics of effective teachers have been consistent during the past three decades. For example, communication and understanding skills are essential characters that characterize effective teachers (Kelley, Conant, & Smart, 1991; Smart, Kelley, & Conant, 2003). Going through in order for a teacher to have a good attribute among his students he need to be fair and equal towards his students (Grunenwald & Ackerman, 1986). Having a good time throughout the lesson and not sticking into teaching only, and is the main reason of students getting bored, during the lesson and having some entertaining time makes it more interesting for students. (Dana, Brown, & Dodd, 2001) creating more than one teaching technique to keep then enthusiastic towards the course they are studying (Badrinarayanan & Madhavaram, 2008; Paraskevas & Sigala, 2003). Furthermore, the more the teacher interacts and makes the student interested in the course, this will cause positive emotions towards not only one student but the whole class. Creating such positive environments inside a classroom are more likely to make students ready and motivated and this should lead to greater intellectual involvement. Therefore, the roles of the instructors have a huge impact and a big way to test how positive emotions can affect the way of teaching the students and keeping the environment of the class positive like it should be and this may lead to success.

3. SAMPLING AND DATA COLLECTION

This research focuses on undergraduate university students in Bahrain. The questionnaire was distributed amongst undergrad students at Ahlia University, and the focus was particularly to gain feedback from those students who had indulged in face-to-face and e-learning education using Moodle, as well as, have experienced positive emotions during their course of study. The males concluded to be 166 which is 53.2% and females concluded to be 146 which is 46.8%, which brings the total to 312 participants, as shown in Table 1.

Table 1. Gender

Gender	Frequency	Percent
Male	166	53.2
Female	146	46.8
Total	312	100

4. DATA ANALYSIS

The total number of participants was 312, SPSS 23.0 was used for data analysis. Before the analysis was carried out, however, the data was filtered to meet the research needs of students who have experience with positive emotions during the course of their studies. All variables referred to in Table 2 are used for testing hypotheses.

4.1 Hypothesis Testing

4.1.1 Correlation Analysis

Table 2 shows that if significant levels fell below 0.05, the variables would be statistically correlated. A significant positive correlation exists between social capital theory and sharing of knowledge, r^2=0.291, p<0.05. In addition, there is a positive correlation between social capital theory knowledge sharing moderated by positive emotions r^2=0.319, p<0.05. As shown in the table, gender moderation has a significant impact on the relationship between SCT and KSQ, with gender (male) representing 29.1 percent and increasing to 32.2 percent, particularly when male gender has been introduced as a moderator. This is not the case for women since r^2 fell from 29.1 percent to 25.6 percent and therefore the gender as a whole (male and female): r^2 fell from 29.1 to 2.5 percent. This therefore demonstrates support for the hypothesis 4 that males moderate to make it easier for social capital to share knowledge while experiencing positive emotions.

4.1.2 Regression Analysis

To test the hypothesis, multiple regression tests were performed as shown in Table 2. Hypothesis 1, 2 and 4 are significantly accepted and hypothesis 3 and 5 are rejected. There is a positive relationship between the theory of social capital and the sharing of knowledge, B= 0.540, p < 0.05. In addition, since there is a positive relationship between the theory of social capital and the sharing of knowledge, the addition of positive emotions as a moderating variable enhanced the relationship, which shows that they all have a strong effect on each other, B=0.565, p<0.05. However, adding gender as a moderator significantly reduces all values from B=0.540 to B=0.159, p<0.05. To further investigate why gender has a negative impact on the relationship, each gender has been separated and interpreted to discover the root of the problem. When the female gender was introduced as a moderator, however, it showed a negative relationship with SCT and KSQ, B=0.506, p<0.05. Respectively, when male gender was introduced as a moderator, it showed a positive relationship with SCT and KSQ as the beta increased to B=0.568, p<0.05. Which shows the problem lies with the female gender findings.

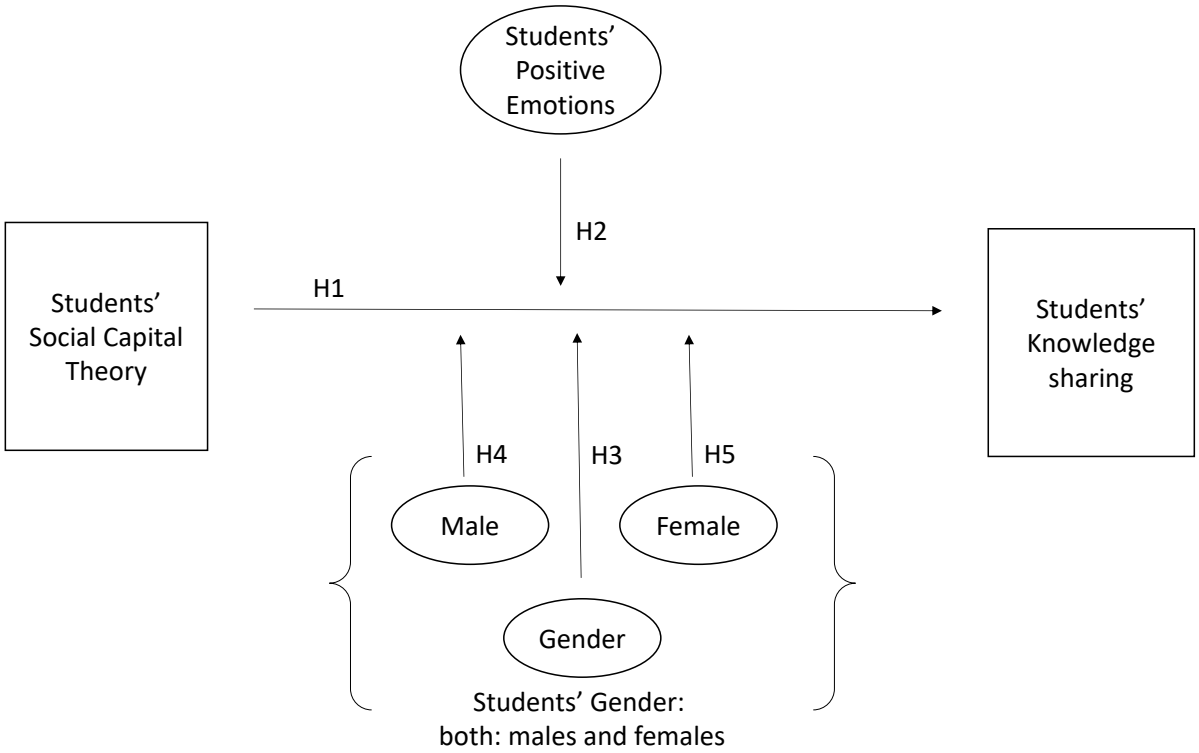

Figure 1. Concept Model

Table 2. Regression results

Model	Relationship between variables	F	t	R^2	B
M1	Social Capital theory → Knowledge Sharing	127.431 Sig 0.00	11.289 Sig 0.00	29.1%	0.540
M2	Positive emotions * Social Capital theory → Knowledge Sharing	145.478 Sig 0.00	12.061 Sig 0.00	31.9%	0.565
M3	Gender * Social Capital theory → Knowledge Sharing	8.060 Sig 0.005[b]	2.839 Sig 0.005[b]	2.5%	0.159
M4	MaleGender * Social Capital theory → Knowledge Sharing	77.936 Sig 0.00	8.828 Sig 0.00	32.2%	0.568
M5	FemaleGender * Social Capital theory → Knowledge Sharing	49.564 Sig 0.00	7.040 Sig 0.00	25.6%	0.506

H 1: *There is a positive relationship between social capital theory and knowledge sharing.*
H 2: *There is a positive relationship between social capital theory and knowledge sharing with the assist of positive emotion.*
H 3: *There is a positive relationship between social capital theory and knowledge sharing whilst moderated by both genders.*
H 4: *There is a positive relationship between social capital theory and knowledge sharing whilst moderated by only the male gender.*
H 5: *There is a positive relationship between social capital theory and knowledge sharing whilst moderated by only the female gender.*

4.2 Advance Discerption Analysis

Male counts are 166 and female counts are 146, bringing the total to 312. As shown in Table 3, there is a slight difference between men and women, as the male findings precede the female, but nothing that would have a major impact on the study. Both genders have nearly the same results.

Table 3. Difference between genders

Variable:	Gender	Mean	Standard Deviation
Positive emotion	Male	4.0206	0.74205
	Female	4.0049	0.64353
Social capital theory	Male	4.0608	0.59613
	Female	4.0138	0.62180
Knowledge Sharing	Male	4.2740	0.66328
	Female	4..2089	0.61520

5. DISCUSSION & CONCLUSION

This research is a study of the effect of positive emotions in university institutes such as Ahlia University, AMA University and University of Bahrain. A correlation of the quality structure can be seen in this paper, which is the theory of social capital and the sharing of knowledge. Four other moderating variables that have been tested to see the impact on the theory of social capital and the sharing of knowledge are positive emotions, gender as whole and constructing women and men apart. This paper will focus on positive emotional effects on Social Capital Theory and Knowledge Sharing. Firstly, a positive relationship exists between Social Capital Theory and Knowledge Sharing, as evident in the analysis of data, $B= 0.540$, $p < 0.05$. This makes social capital a valuable mechanism through which universities can share knowledge. For this reason, universities are suggested to increase confidence, networks and standards between lectures in order to facilitate knowledge sharing. The process of knowledge sharing could be accelerated through such a strong relationship (Harjanti, 2017). This outline stresses the importance of the contextual point of view in information and the sharing of knowledge. In particular, the dimensions of social capital mean the roles of structures and relationships that

differ according to context (Widen, Gunilla, 2011). The second quality of construct is the outcome of positive emotions on Social Capital Theory and Knowledge Sharing. Which likewise presented a positive relationship between them. As shown by Pearson (2016), almost 78 percent of lecturers admit that digital education has benefited their students in their classrooms, encouraging them to integrate e - learning into their daily classes.

The third construction quality is the impact of both genders on Social Capital Theory and Knowledge Sharing. This structure showed a negative connection. The Beta for Social Capital Theory and Knowledge Sharing was B= 0.540 which fell to B=0.159 when both genders were commenced. To broaden our understanding as to why it happened, Genders were divided into their own constructs. Either the two genders have a negative relationship between the first construction or one of them. When the male gender was tested, a positive relationship existed between it and Social Capital Theory and Knowledge Sharing, B= 0.568, $p < 0.05$. On the other hand, When the female gender was tested, a negative relationship existed between it and Social Capital Theory and Knowledge Sharing, B= 0.506, $p < 0.05$. This concludes that the main problem lies with the findings of the female gender. This could indicate that women do not accept the theory of social capital and the sharing of knowledge as men.

This research is a study of the effect of positive emotions in university institutes. As an outcome of the data analysis, three hypotheses (H1, H2 and H4) are accepted and (H3 and H5) are rejected. The findings of this research encourage the relationship of Social Capital Theory and Knowledge Sharing. And it showed how sharing knowledge has to do with academic performance. Similarly, positive emotions presented positive relationship between Social Capital Theory and Knowledge Sharing, which shows that Social Capital Theory and Knowledge Sharing foster positive emotions. On the other hand, when gender was presented to analyze the result on Social Capital Theory and Knowledge Sharing, it displayed a negative relationship. When further tested, it showed that men do not accept the theory of social capital and the sharing of knowledge.

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