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Does Learning Emotion Associated with Psychological Factors among University Students

Abstract

This study analyzed the relationship between psychographic factors and learning emotions among university students. The population and sample were drawn from undergraduate students in Saudi Arabia. Quantitative method using survey technique implemented in this study for data collection process from 209 students. The model fit was analyzed by using several data analysis techniques criteria's. Results indicated that learning emotions significantly correlated with achievement motivation and leisure attitude. Furthermore, a significant correlation also found between the study variables for both genders. Based on these results, academicians and decision makers at university level, need to arrange counseling sessions for students to promote positive learning emotions as well as improving psychological outcomes.

Keywords: Learning Related Emotions, Psychographic Factors, University, Students.

Introduction

Providing education to the youth is a major requirement and ensuring successful education is significant to satisfying both the global economy and people well-being. In recent years, universities considered the main sources for providing students with the necessary skills in all fields (Jdaitawi, 2020; Jdaitawi, 2020; Mitsis & Foley, 2012). For example, Saudi Arabia's Ministry of Education recommends several activities to promote students skills such as intellect, creativity and communication (Ministry of Education, 2008). Hence, in order to realize the development of the country's aims, a proactive educational plan should focus on the requirement of educational enhancement. People generally go through different stress forms that negatively impact their personalities such as their psychology, social outlook, and cognitive and behavioral features. These stresses bring about effects that differ from one person to the next and thus the individuals' responses to them differ. Literature highlighted that students characterized having issues related to their personal, social, cognitive and adjustment problems (Appleton, Christenson, & Furlong, 2008; Raver & Knitzer,

2002; Jdaitawi, 2013). Several authors (e.g. Jdaitawi, 2013) also revealed that adolescents are faced with several life challenges. A few studies in this context have identified issues of adolescents including emotional and behavioral and social issues (Jdaitawi, 2013).

However, students' success is evidenced to be impacted by several related factors such as Psychographics and learning variables. In their studies, Noor et al. (2013) and Lim (2009) demonstrated that psychographic attributes are important in determining overall students' success and their learning process. Additionally, Lim, Noor, Nor and Basri (2015) illustrated how the elements of psychographic variables such as leisure attitude influenced students' university success. Emotions are also highly important, since described to guide students' behaviors and their learning experiences (Pekrun, 2006). However, the interplay between students learning and their psychographic variables have been highlighted in literature as a part of achievement theory. Empirical studies on the relationship between these variables was sparse and rarely examined. Although, the last few years showed an increase in examining students' emotions with

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other variables, recent development literature tests the relationship between psychographic variables and learning emotions have not been deeply examined. Therefore, this research used a structural equation model to study the relationship between learning related to emotions and three psychographic factors which are achievement motivation and leisure attitude among university students.

Literature Review

Several researchers contended that emotional experiences of students are directly associated with their subjective well-being and, as such; it is a significant research topic (Goetz, Frenze, Pekrun, & Hall, 2005). Additionally, based on empirical evidence students go through a variety of positive and negative emotions within the classroom, including enjoyment, pride, anxiety, anger and boredom (Goetz, Frenzel, Pekrun, Hall, & Ludtke, 2007). For many reasons, such emotions are quite significant and are determining factors for students' learning behavior in the classroom. One example is that the level of enjoyment encourages self-regulated learning and impacts on achievements (Pekrun, 2006) as well as reflects on the well-being of the student (Pekrun et al., 2002). Furthermore, Pekrun et al. (2006), several assumptions in literature and empirical evidence revealed that several characteristics may play a role as major antecedents to the academic emotions experienced by students. For example, Goetz, Ludtke, Nett, Keller, & Lipnevich (2013) demonstrated that several cognitive appraisals including personal control perceptions, situation value, and expectations of others are significantly linked to certain emotions in specific situations. Similarly, McClelland et al. supported that the need for achievement stems from an emotional clash between the hope to reach success and the desire to steer clear of failure. Also, attitude towards emotions predicts the emotional situation that the individuals opt for (Harmon-Jones, Cindy, Amodio, & Glabe, 2011). They stated that although many individuals would prefer joy and dislike fear, disgust, anger and sadness, the levels to which individuals like and dislike these emotions differ. Leisure time also is important for young people specifically because of its link to personal and community development as evidenced by prior studies. Based on the report published by the World Youth (2003), leisure time is the waking hours within which youth is neither in school nor at home. In other words, activities related to school including homework, extra classes and extra semester are often considered as school activities extension. According to Aznina et al. (2013), leisure attitude is a significant player in the student's university achievements.

Researchers reached the conclusion that psychographic attributes like achievement motivation, self-efficacy, and attitude and among other factors are important in the realm of student's learning and performance (Goetz et al., 2013; Hassanzadeh, Ebrahimi, & Mahdinejad, 2012).

Related Work

While there exist several functional similarities between the concepts (emotions and psychographic variables), few studies investigated its relations in university settings (Hayat, Shateri, Amini, & Shokrpour, 2020; Hassanzadeh, Ebrahimi, & Mahdinejad, 2012; Harmon-Jones et al., 2011). Previous studies investigated the link between this study variables on each other separately (Mega, Ronconi, & Beni, 2014), or they focused on settings rather than university (Colomeischi & Colomeischi, 2015). For example, Hayat et al. (2020) revealed that self-efficacy impacted students' emotions related to learning. Sakiz and Education (2017) also indicated that teacher effective support was an effective factor in enhancing student's self-efficacy beliefs. Pekrun, Lichtenfeld, Marsh, and Murayama, (2017) also revealed that positive emotions predicted student's achievement. To the researcher knowledge, studies investigated how emotions related to learning linked with psychographic variables only few. Therefore, this study was developed to minimize these gaps in literature by integrating important research domains. The hypothesis is that a direct relation exists between learning related to emotions and psychographic factors which are achievement motivation and leisure attitude.

Research Method

This study involved quantitative survey research. The population and sampling of the study were undergraduate preparatory year students at Imam Abdulrahman Bin Faisal University. The study used stratified sampling technique to collect data from the study participants. This method guarantees that every student gets an equal opportunity to be selected and to access all information (Khunsoonthornkit & Panjakajornsak, 2018). Since the researcher plan to use structural equation modeling, the researcher followed Hair, Black, Babin, and Anderson (2010) as a guideline for the appropriate sample composition. This decision is grounded on the basic recommendation of a minimum sample size of 200-250 as being adequate for structural equation modeling (Hair et al. 2010). The researcher therefore used stratified sampling to collect data from 209 undergraduates' students.

Outcome Measurements

This study used survey method to collect data from the study participants. The study applied Azniza et al. (2013) measurement to measure psychographic elements. The measurement ranged based on 5 point likert-scale based on rank justification that ranged from 1 strongly disagree – 5 strongly agree. As for the learning related emotions, the research used the measurement of Pekrun's et al. (2005). The measures used in the present study are from the achievement motivation scale proposed by Aznina et al. (2013) which measure students' perceptions of challenging tasks, their competitiveness as well as their desire to win in interpersonal relationships. This scale used in this study is proven to have high internal reliability and significant validity in the previous study and as indicated in this research finding with an alpha coefficient of 0.89. In addition, leisure attitude scale which consists of 18 items was used which distributed on three dimensions which adopted from Raghed and Beard (1982). The scale confirmed the reliability value of 0.79. Lastly, the learning related emotions scale used in the

present study is from Pekrun et al. (2005). The scale measured emotions experienced by students in their class and during tests and achieved reliability value coefficient of 0.74.

Reliability and Validity

Several validity and reliability process were used to finalize the study instruments. First the instruments were translated to Arabic by English experts, then seven education experts were reviewed the instruments for content validity, the instruments were then adjusted based on the reviewer's comments. A pilot study then was carried out in order to identify the clarity and readability of the instruments. Then reliability and internal consistency using coefficient alpha were achieved as shown in the measurement section above. Data were collected from 209 university students. The sample include both male and female students (120 male and 89 female students). The study age ranged from 18-19 years old. Descriptive analysis and confirmatory factors analysis for the study tools illustrated in table 1.

Table 1.

Overall Measurement Model Fit for Research Model

Fit Index	Achievement Motivation	Leisure Attitude	Learning-Related Emotions
Cronbach Alpha	.89	.92	.84
(RMSEA)	.067	.077	.070
(CFI)	.984	.944	.967
(TLI)	.973	.934	.956
($\chi^2 = \text{chi}$)	1.921	2.21	2.01
Mean	3.20	3.33	3.30
SD	1.10	.895	.898
Skewness	-.382	-.559	-.517
Kurtosis	.027	-.009	-.008

Results of the Study

Regarding the objective of the study, the analysis of data and testing of hypothesis required the use of statistical tools and methods provided by the statistical package of social science (SPSS) and structural equation modeling (SEM). Table 1 presents the results of the confirmatory factor analysis and descriptive statistics results of students based on their learning related emotions, psychological factors. As for the objective of the present study which is to determine the relationship between the learning-related emotions and psychographic attributes of the students, the research used Maximum-Likelihood Structural Equation Modeling. However, the model showed a good fit to data as evidenced by the following results: ($\chi^2= 254.949$), ($CFI=.936$), ($TLI=.921$), and ($RMSEA=.080$), confirming that the model had adequate fit. The results in table 2

showed that a significant positive correlations among the variables; specifically, leisure attitude correlated with learning related emotion at (0.86**), achievement motivation-leisure attitude at (0.81**), and lastly achievement motivation correlated with learning related emotion at (0.81**).

The study conducts a comparison between gender levels on the psychographic variables-learning related emotions using multi-group analysis. The male and female models and the correlation result are presented in the tables below, in which it is evident that the overall model presented a good fit to the data with the results; ($\chi^2= 1.989$), ($CFI=.906$), ($TLI=.888$), and ($RMSEA=.069$), confirming adequacy of the model fit. Although, the relationship between psychographic variables and learning-related emotions exists, both male and female models appear to be reliable paths between variables and

with no significant differences between them as shown in tables 3 and 4 below.

Table 2.

Correlations for the Variables in the Study ($p < .01$)

	Achievement Motivation	Self-Efficacy	Leisure Attitude	Learning-Related Emotions
Achievement Motivation	-----	0.95**	0.81**	0.81**
Leisure Attitude	0.81**	0.80**	---	0.86**
Earning Related Emotions	0.81**	0.83**	0.86**	-----

Table 3.

Male Correlations for the Variables in the Study ($p < .01$)

	Achievement Motivation	Self-Efficacy	Leisure Attitude	Learning-Related Emotions
Achievement Motivation	-----	0.89**	0.85**	0.81**
Leisure Attitude	0.85**	0.81**	---	0.87**
Earning Related Emotions	0.81**	0.81**	0.86**	-----

Table 4.

Female Correlations for the Variables in the Study ($p < .01$)

	Achievement Motivation	Self-Efficacy	Leisure Attitude	Learning-Related Emotions
Achievement Motivation	-----	0.92**	0.82**	0.82**
Leisure Attitude	0.82**	0.84**	---	0.84**
Earning Related Emotions	0.82**	0.88**	0.84**	-----

Discussion

The main objective of the study was to examine the relationship of learning related to emotions with psychological factors which are achievement motivation and leisure attitude using a structural equation model. The result showed that psychographic variables correlated with learning related emotions. In this study three psychographic variables investigated: achievement motivation and leisure attitude. Achievement motivation was positively correlated with learning related emotions as consistent with findings of Putwain et al.'s (2013) that partially supported the correlation between achievement goals and learning related emotions. The above finding was also supported by other studies such as Elliot and Pekrun (2007) who stated that emotion forms an integral element of achievement motivation. Darling-Hammond et al. (2002) claimed that motivation leads to a sense of mastery over the individual's emotions, and that motivation is a strong driver of goals pursuant of achievement. Consequently, motivated students are strongly driven to keep on learning and perceiving positive self-concept. The finding also supported the relationship between leisure attitude and learning related emotion. In other words, leisure activities were pertinent to an individual's lifestyle. However, the results of previous studies supported the result of the current study that motivation and attitudes proved to be very effective in students learning (Akbas & Kan 2006). The result showed no significant differences between the study variables on the basis of gender. The result supported the control-value theory's assumption that the relationship between variables should be structurally equivalent for both men and women (Pekrun et al., 2007). However, the insignificant result may be justified by students studying in the same group across the subjects rather than changing. Moreover, students' interaction with their instructors can be assumed to be significantly influential element in the students learning emotions (Pekrun et al., 2009). The same can be said about students' motivations and skills in relation to their exposure to the same instructor (Wild, Enzle, Nix, & Deci, 1997). In addition, the classroom environment for both men and women depends on practical teaching activities that increase the interaction between students with each other as well as with their instructors which leading to a positive learning emotion, including students' beliefs and skills acquisition (Wentzel & Looney 2010). However, the study demonstrated positive relationship between the study variables. This may be due to the positive emotions' students have in their educational environment which subsequently promote students enthusiasm and engagement. Furthermore, both male and females' students reported positive

attitudes toward learning and both were eager to acquire education since they received equal support from their family and teachers.

Conclusion and Recommendation

From this study, it can be concluded that learning related to emotions has a positive relation with psychological factors. The structural equation model revealed that the three variables positively correlated with learning related to emotions. Based on the result of this study, academicians and decision makers in higher education institutions should focus on psychological factors to promote positive learning emotions among students. To conclude, the study attempted to conduct the relationship between psychographic variables (achievement motivation and leisure attitude) and learning related outcomes. Few previous studies have tested the psychographic variables in the current study like self-efficacy and leisure attitude. Its strength lies in the inclusion of gender in the analysis that have been ignored in prior studies. Beyond its contributions to the studies, future research may focus on qualitative method to extend this study approach. Additionally, the current study lies in the correlation research design; thus, longitudinal study is needed to extend the study results. Moreover, the participants of this study from one university in Saudi Arabia and therefore future studies may increase the scope of their research to include larger number of universities.

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