A Reciprocal Model of Psychographic Attributes Related to Their Learning among Preparatory Year of Undergraduate Students in West Saudi Arabia

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Abstract

This study examines the level of psychographic attributes among the preparatory year students enrolled at the University of Dammam, Saudi Arabia. The study sample consists of 209 students chosen with the help of random sampling and questionnaire survey was employed for data collection. Based on the findings, the entire study variables, which are achievement motivation, self-efficacy and leisure attitude, were revealed to have average levels. Additionally, the findings revealed a significant correlation between all the variables. Specifically, differences were noted between students on the basis of their gender and study tracks on some study variables. The study recommends that in an attempt to facilitate students' positive attitude towards the university, it is imperative for the university management to plan and organize programs geared towards developing positive attitude, increasing self-efficacy and motivation among the students.

Keywords: psychographic variables, preparatory year, self-efficacy, achievement motivation, leisure attitude

1. Introduction

A country's success is highly dependent on the current generations and their possession of intellectual and communication skills, along with their stable psychographic characteristics. More recently, stakeholders' expectations on the quality of graduates in Higher Learning Institutions have experienced an increase. This is consistent with the declared objective of the Ministry of Education Saudi Arabia, in which it emphasized on the importance of extracurricular activities for the development of intellectual, creative and communicative skills as laid down in the King Abdullah Project General Education development (http://en.wikipedia.org/wiki/Education in Saudi Arabia#cite note-24). Thus, the realization of such objective calls for active education planning and designing focused on improving the education provided to youth.

For over 3 decades, psychographics has been examined by researchers but even to date; it remains one of the most ambiguous concepts in the field of marketing research (Heath, 1995). In such a context, it appears that every scholar has defined psychographics in his/her own point of view. For instance, some define it as values or lifestyle whereas others defined it elaborately. In their work entitled Consumer profiles: An Introduction to Psychographics, Gunter and Furnham (1992) explained that the concept attempts to provide a description of the human characteristics of consumers that may relate to their reaction to efforts towards products, packaging, advertising and public relations. These variables may cover a range of factors from self-concept and lifestyle to attitudes, interests and opinions along with individuals' characteristics that describe them according to their psychological and behavioral characteristics-for instance, how individuals behave and what psychological factors are bases for the pattern of activity. They are a reflection of an individual's psychological factors, which in turn define him/her. For instance, an individual's need to belong or to obtain group approval that makes him or her take part in any university activity. Taking part in the activity then becomes a part of his/her psychographics, and in turn, this urges student behavior towards such university activity in a motivating manner. When speaking of psychographic segmentation, variables come into play, which are basically psychological in essence. These variables could be considered as a part of the psychographic segmentation process and they include interest, activities, opinion, pattern of behavior and attitude. Emotions related to learning are referred to as temporary affective states of students when taking part in daily activities involving teaching, learning and education system assessment. Thus, this study is focused on studying preparatory year students, a group that represents a challenging transition period and that has been overlooked in the literature pertaining to education (Bradley, 2012; Beard, Clegg & Smith, 2007; Hill & Reddy, 2007).

1.1 Problem Statement

On a global scale, educating youth and ensuring their success are required to meet the increasing demands of a dynamic global economy and to promote the well-being and the quality of life. People generally experience different types of effects brought about by these challenges that adversely influence their psychosis and their social, cognitive and behavioral aspects. Such effects differ from one individual to the next and hence, their reactions towards them also vary. Studies such as Appleton, Chrisenson, and Farlong (2008), Raver and Knitzer (2002), and Ackerman, Kogos, Youngstorm, Schoff, and Izard (1999) related adolescent issues to a dip in self-esteem, behavioral issues combined with adverse influence from peers, and failure in school performance, lack of social and emotional skills and social adjustment skills.

In the context of Saudi Arabia, a few studies have highlighted issues pertaining to the adolescent phase like emotional and behavioral issues, social issues, psychological issues, lack of leisure, lack of self-esteem, self-injury, and lack of social connectedness (Abo-Zeid et al., 2009; Abdel-Fattah et al., 2004; Al-Hattab, 2006; Al-Anazi & Al-Shamli, 2011; Jdaitawi, Motawa, & Al-Nabrawi, 2013). These issues may result in the individual's lack of tendency towards task performance, effective studying, and effective memorization of details; attempt to steer clear of failure, selection of effective performance settings, setting and achieving goals and maintaining effort for a span of time. Over the past decades, the main reasons for these issues are explored by researchers for the purpose of taking recourse against them, where majority of them mentioned the role of psychographic attributes in education. Related to these attributes are values, self-concept and lifestyle. Specifically, Plog (1994) contended that psychographic characteristics could generate individual groups having similar lifestyles and interests. More recently, Azniza et al. (2013) showed that psychological constructs are significant factors that could lead to the enhancement of the student's success, particularly university level students.

In sum, researchers are of the consensus that psychographic attributes are major factors that could bring about superior well-being and in turn, enhance successful university performance and involvement in extra-curricular activities (Aznina et al., 2013). Nevertheless, studies dedicated to examining the concept in a general context, and in the context of Arab countries are still few and far between. Therefore, the present study contributes to literature by examining the psychographic attributes among preparatory year university students in general, and in Saudi universities in particular. In addition to the above, prior studies remained focused on the diagnosis of these variables in individual educational Western settings, and to the best of the researcher's knowledge, no study of this caliber has been conducted in the Arab region.

2. Literature Review

2.1 Psychographic Variables

Psychographic elements refer to individuals' characteristics that define them according to their psychological and behavior makeup—in other words, how people behave and the psychological factors that underlie the activity pattern. It primarily consists of three components, which are attitude, interest and opinion. These are also considered as psychographic profile in the AIO framework employed to study lifestyle according to quantitative measure. In particularly, psychographic analysis is a method that examines the way students live, their interests and their likes, which are all representations of their lifestyle as the analysis is dependent on several statements concerning an individual's activities, interest and opinion (Aznina et al., 2013). Hence, the present study examines three psychographic factors namely achievement motivation, student's leisure attitude and self-efficacy. Achievement motivation refers to the inclination to do well for the entertainment of inner feeling concerning personal achievement (McClelland, 1987), while self-efficacy is described as the individual's belief in his capabilities to organize and carry out courses of action needed to generate achievements (Bandura, 1997, p. 3). Lastly, leisure attitude refers to a psychological construct that comprises of emotional, cognitive and behavioral elements (Maio & Haddock, 2010).

Prior findings showed that the first two elements are related and that the student's self-efficacy beliefs regarding his/her capabilities to process academic curricula may affect his/her motivation and learning (Schunk, 1991). In other words, when students are convinced that it is difficult for them to understand material, they will possess low self-efficacy for learning. On the other hand, students who are convinced that they can handle and process information, will possess high self-efficacy for learning, and in turn, perform these activities with greater motivation. Studies dedicated to this area of research showed that self-efficacy and motivation are correlated (e.g.

Pajares, 1996; Elias, Noordin, & Mahyuddin, 2010). Specifically, Elias et al. (2010) revealed a significant and positive correlation between achievement motivation and self-efficacy and Hagger et al. (2002) demonstrated that motivation predicted leisure behavior and that self-efficacy was moderately correlated with leisure behavior. Moreover, other studies like Yordy and Lent (1993) and Armitage and Conner (1999) found self-efficacy to be a significant predictor of physical activity. In this regard, Brawley and Martin (1995) revealed that self-efficacy contributed 3-25% of variance in both physical activity and exercise behavior.

To conclude, only few researchers have dedicated their work to examining psychographic variables in the context of Saudi university students. Hence, this study is developed to investigate the relationship among achievement motivation, self-efficacy and leisure attitude among preparatory year university students enrolled at the University of Dammam, Saudi Arabia. The study contributes to literature by highlighting the differences of psychographic variables between the students according to gender and study tracks.

2.2 Purpose of Study

This quantitative study aims to determine the psychographic attributes among preparatory year students and the correlation among the variables and to conduct a comparative analysis of the psychographic attributes of the various models employed in different tracks and gender. In sum, the study objectives are;

To determine psychographic attributes among preparatory year university students in the University of Dammam, Saudi Arabia.

To investigate the correlation between psychographic attributes among preparatory year university students in the University of Dammam, Saudi Arabia.

To conduct a comparison among the psychographic attributes of preparatory year university students in the University of Dammam, Saudi Arabia on the basis of gender.

To conduct a comparison among the psychographic attributes of preparatory year university students in the University of Dammam, Saudi Arabia on the basis of study tracks.

3. Study Method

3.1 Research Design

This study employed the quantitative survey method of study for collection of data. According to Babbie and Mouton (2001) survey refers to the research method that simply notes the phenomenon accurately and provides a description of the observation. Similarly, Stacks (2002) describes the survey method as a method that collects in-depth information concerning respondent attitudes and beliefs, specifically from considerable population samples—in this study, as the number of students is considerable, it is challenging to obtain accurate and authentic data through other means besides the survey method.

3.2 Population/Sample

Students enrolled in the preparatory level in the University of Dammam, Saudi Arabia make up the sample study. It is not possible to include the entire students in the study and hence sampling is conducted where the researcher selects a subset to represent the larger population. The sample comprised of 209 undergraduate preparatory students, divided by gender as follows; 120 male students and 89 female students. The students were studying in three tracks namely medicine, engineering and science, and were characterized by similar demographics with few differences in their teaching and learning process.

3.3 Procedure

The study sample of 209 students (female and male) enrolled in three tracks in the University of Dammam, participated in the study by filling up the questionnaire. Data collection was conducted towards the end of the second semester of 2013/2014. They were requested at the end of the timetable session by the researcher who also took the opportunity to explain the purpose behind the study.

3.4 Measurements

A self-report questionnaire was used for data collection—the questionnaire comprised of two sections namely background and psychographic elements. The first section (background) was developed to obtain required information of the respondents like their gender, study track, among other factors that may be needed to shed a light on the differences in their learning related emotions and psychographic attributes. The characteristics were gauged on a five-point Likert scale based on rank justification, ranging from 1 strongly disagree-5 strongly agree. The measurements used for the psychographic attributes were adopted from Azniza et al. (2013). Such measurements comprise of three scales;

Achievement motivation scale: the scale is made up of two dimensions—first, mastery dimension, which consists of 8 questions that examines the students' preferences towards the difficulties they face in their tasks, and second, competitiveness dimension, which consists of 5 questions focused on measuring the students' inclination to win in interpersonal situations. Cronbach's alpha reliability coefficient was applied to this scale, after which the result was found to be 0.89.

Self-efficacy scale: this scale measurement was adopted from Aznina et al. (2013) that is focused on assessing a general take on perceived self-efficacy in order to predict how the students handle day to day challenges in their university life. The Cronbach's alpha reliability for this scale was found to be 0.92.

Leisure Attitude Scale: this scale measurement was adopted from Raghed and Beard (1982). The scale has 18 items that are developed to measure three dimensions namely general knowledge and beliefs concerning leisure, beliefs concerning leisure relationship with health, happiness and work, and other concepts like qualities and characteristics. The Cronbach's alpha reliability for this scale was found to be 0.79.

4. Data Analysis

Analysis of data was carried out through descriptive statistics, Pearson product moment correlation and MANOVA tests. The study's first objective is to determine the level of psychographic attributes among preparatory university students. In Table 1, the mean score of students in achievement motivation is 3.20, indicating an above than average score and the mean score for self-efficacy is 3.29, also indicating an above than average score. Lastly, the attitude scale of students has a mean score of 3.33. It can therefore be contended that the level of all the psychographic attributes of the students were found to be average.

Table 1. Means scores and standard deviations of participants for the research variables

Variables	N	Minimum	Maximum	Mean	SD
Achievement Motivation	209	1	5	3.20	1.10
Self-Efficacy	209	1	5	3.39	1.28
Leisure Attitude	209	1	5	3.33	.895

The second objective of this study is to determine the relationship among the students' psychographic attributes. Table 2 lists the statistically significant positive correlations among the variables. Specifically, achievement motivation was found to correlate with self-efficacy at (0.535**, p<0.05), achievement motivation was correlated with leisure attitude at (0.649**, p<0.05), and self-efficacy was correlated with leisure attitude at (0.669**, p<0.05). These correlations are all positive and significant, indicating that majority of the students are convinced of their abilities, are motivated to perform their university tasks and enjoy their study environment.

Table 2. Correlation matrix of study variables

Variables	Achievement Motivation	Self-Efficacy	Leisure Attitude
Achievement Motivation	1	.535	.649
		.000	.000
Self-Efficacy	.535	1	.669
	.000		.000
Leisure Attitude	.649	.669	1
	.000	.000	

Note. Significant (p<0.05).

The third objective of this study is to conduct a comparison between the levels of psychographic variables between students based on their gender. The results of data analysis dedicated to this objective are provided in Table 3. A two way MANOVA (2x3) test was conducted on the three dependent variables namely achievement motivation, self-efficacy and leisure attitude. The independent exists in male group and female group. An initial set of analysis generated significant main effects based on gender with the dependent variables. The

homogeneity of variance-covariance assumption that underlies MANOVA is analyzed through box M test, and according to the result, such homogeneity is achieved. Differences were revealed by a multivariate test between the genders on achievement motivation, self-efficacy and leisure attitude mean scores via the Pillais Trace criterion with a statistically significant value of (F=3.510, p=.016, >.0.05). The investigation results by the gender group, showed a significant difference at the following values; achievement motivation (F=4.111, p=.044) and self-efficacy, (F=7.538, p=.007), with the exception of leisure attitude: (F=1.036, p=.310) as presented in the Table 3. It can therefore be concluded that a significant difference exists in the average total score of achievement motivation and self-efficacy with the exception of leisure attitude between genders. Additionally, the average total score of the dependent variables for the male group is considerably higher compared to that of the female group as depicted in Table 4.

Table 3. Results of MANOVA for between-subjects effect of the research variables: P .05

Source	Dependent Variables Posttest	Type Sum of Square	df	Mean Square	F	P
Group	Achievement Motivation	4.938	1	4.938	4.111	.044
	Self-Efficacy	12.151	1	12.151	7.538	.007
	Leisure Attitude	.831	1	.831	1.036	.310
Total	Achievement Motivation	2395.000	209			
	Self-Efficacy	2751.000	209			
	Leisure Attitude	2485.000	209			

Note. Significant (p<0.05)

Table 4. Summary statistics for variables scores (n=209)

Variables		Males	Females	Total
Achievement Motivation	Mean	3.33	3.02	3.20
	SD	1.04	1.15	1.10
Self-Efficacy	Mean	3.60	3.11	3.39
	SD	1.19	1.36	1.28
Leisure Attitude	Mean	3.38	3.25	3.33
	SD	.871	.927	.895

The final objective of the present study is to conduct a comparison between the levels of psychographic variables between the students on the basis of their study tracks. The data analysis results pertaining to this objective are displayed in Table 5. A three-way MANOVA (3x3) was applied on the three dependent variables (achievement motivation, self-efficacy and leisure attitude. The independent variables exist in the three tracks (engineering, medicine and science). The initial set of analysis generated no significant main effects for students' tracks. Specifically, homogeneity of variance-covariance assumption underlying MANOVA was tested through the use of box M test and according to the results, such homogeneity was achieved. A multivariate test on achievement motivation, self-efficacy and leisure attitude, was conducted via Pillais Trace criteria after which statistically significant result was found at (F=1.695, p=.121, >0.05). The investigation results comparing the dependent variables on their influence upon the independent variable (study tracks) indicated no significant difference among the tracks with regards to achievement motivation (F=2.606, P=.076) and self-efficacy (F=3.040, P=.050) but a significant difference was found with regards to leisure attitude at (F=4.930, P=.008) as displayed in Table 5. It can be concluded that a significant difference in the average total score of the independent variable, leisure attitude, exists in medicine students but no significant difference exists between student's tracks on the other two dependent variables.

Table 5. Results of MANOVA for between-subjects effect of the research variables: P .05

Source	Dependent Variables Posttest	Type Sum of Square	df	Mean Square	F	P
Group	Achievement Motivation	6.257	1	3.128	2.606	.076
	Self-Efficacy	9.915	1	4.958	3.040	.050
	Leisure Attitude	7.623	1	3.811	4.930	.008
Total	Achievement Motivation	247.303	209			
	Self-Efficacy	335.912	209			
	Leisure Attitude	159.268	209			

Note. Significant (p<0.05).

5. Discussion

The present study examined the psychographic attributes of the students enrolled in preparatory year at the University of Dammam. Based on the obtained results, achievement motivation, self-efficacy and leisure attitude of the students were above average. This may be attributed to the fact that the students were relatively new to the university and they are still in the transition of coping with the environment and thinking about their future majors. Among the primary findings of this study is the significant positive relationship between the three variables which can be explained by the students' beliefs that the faculty environment is meaningful and interesting, thus motivating them and leading to believe in their abilities. The positive relationship between achievement, motivation and self-efficacy is consistent with prior studies (e.g. Landine & Stewart, 1998; Aznina et al., 2013; Majzub & Yusuf, 2010; Elias, Noordin, & Mahyuddin, 2010). This finding is also aligned with the theory of achievement motivation, which posits that students highly inclined to achieve are characterized as future oriented, confident, responsible and is self-efficacious. Also, the positive achievement motivation-leisure attitude relationship is supported by prior studies such as Aznina et al. (2013), Chiu and Kayat (2010). Lastly, the correlation between self-efficacy and leisure attitude is also supported by prior studies that highlighted a positive leisure attitude-self efficacy relationship (e.g. Hagger et al., 2002; Dishman, 2001).

This study's major contribution to literature is the finding that shows significant differences between the genders in terms of achievement motivation and self-efficacy but not leisure attitude. This result is expected and attributed to the male students need to put more effort and their willingness to face challenges compared to girls. Additionally, male students may be more confident in their performance ability in their tracks and in tackling difficult challenges. Finally, no significant differences were found between students' tracks in terms of achievement motivation and self-efficacy, but significant differences were found in terms of leisure attitude. The university students, based on the analyzed results possess serious beliefs of their future as preparatory university students, as this level is crucial for them, in terms of their entrance to the university courses. Hence, the results display their actual beliefs and attitudes concerning the variables. However, students in medicine displayed higher leisure attitude mean scores compared to students in the other remaining tracks (science and engineering). This is an expected result as medicine students are often engaged in social activities and class activities more than other students and may feel more contended in sharing their achievements, which in turn influence their behaviors.

To conclude, this study attempted to conduct an assessment of the complexity between the relationship among achievement motivation, self-efficacy and leisure attitude. Its major contribution lies in the inclusion of gender and tracks in the analysis, which has been neglected by prior studies. What is particularly notable is the gender pattern in the relationship between independent and dependent variables, which is found to in opposite direction between the genders. As for the study limitations, first, study data was collected from self-report measures, which may be susceptible to inflated biases owing to the social desirability effects. Second, the present study design is a correlation design—in this regard, future studies may adopt longitudinal and experimental designs to effectively encapsulate the objective responses and the directionality effects of the variables. Third, the study sample comprised of students from the University of Dammam, Saudi Arabia and thus the results generalizability to other universities should be considered with caution. Future studies may include students from other Saudi universities to provide broader and more generalized findings.

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