

قلق المستقبل المهني بين طالبات كلية الطب بجامعة الإمام عبد الرحمن بن فيصل في إطار ثقافة جماعية

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ملخص: هدفت الدراسة الحالية إلى ما يأتي: (أ) العلاقة بين العوامل المؤثرة على اختيار التخصص الدراسي وقلق المستقبل المهني، فضلاً عن التوجه المحلي (الفردية في مقابل الجماعية). (ب) العلاقة بين المسار المتوقع وتطابق مسار المسار المهني الوالد - المراهق. (ج) فحص منبئات قلق المستقبل المهني. وقد أجري مسح إلكتروني على (157) طالبة من طالبات السنة التحضيرية بكلية الطب في جامعة الإمام عبد الرحمن بن فيصل في المملكة العربية السعودية، وطبقت ثلاثة أساليب إحصائية في تحليل البيانات لاختبار الفروض محل البحث، وهي: معامل ارتباط بيرسون، وتحليل التباين في اتجاه واحد، وتحليل الانحدار المتعدد. أظهرت النتائج أن الاختيار الذاتي للتخصص كان ذا ارتباط دال سالب بقلق المستقبل المهني، في حين كان تطابق المسار المهني الوالد - المراهق ذا ارتباط دال موجب بالتأثير الوالدي والاهتمامات الشخصية في اختيار التخصص، وأخيراً أظهرت النتائج أن التوجه المحلي والاختيار الذاتي (الفردية في مقابل الجماعية) كانا منبئين بشكل دال على ارتفاع معدلات قلق المستقبل المهني؛ حيث وجدت الدراسة الحالية أنه على الرغم من أن الطالبات لديهن مستوى أعلى من القيم الجماعية، فإن عملية اختيارهن الرئيسة تأثرت بمصالحهن الشخصية أو مخاوفهن بشأن تأمين وظيفة بدلاً من التأثير الأبوي.

المصطلحات الأساسية: قلق المستقبل المهني، التوجه المحلي، طالبات كلية الطب، تطابق مسار المسار المهني الوالد - المراهق.

Future Career Anxiety among Female Medical Students at Imam Abdulrahman bin Faisal University in Collectivist Cultural Setting

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Abstract: The purpose of the study is to examine: (a) the relationship between factors influencing major selection (personal interest, parental influence, job security, peer influence) and Future Career Anxiety as well as Communal Orientation (individualism versus collectivism); (b) the relationship between prospective track of study (medicine, pharmacy, dentistry, applied medical sciences) and Adolescent-Parent Career Congruence; (c) the predictors of Future Career Anxiety; and (d) the correlations among the variables of the interest. An electronic survey was conducted on (156) female medical students of the preparatory year at Imam Abdul Rahman bin Faisal University, Saudi Arabia. The results indicated that there was a significant negative correlation between self-selection of major and Future Career Anxiety, and there was a significant positive correlation between self-selection of major and Adolescent-Parent Career Congruence. Moreover, there was a significant positive correlation between parental influence and personal interest in major selection. Students who chose their major based on personal interest and with the purpose of securing a job had significantly higher mean scores on Communal Orientation than students who chose their major based on parental

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influence. Finally, Communal Orientation and self-selection of major were significant predictors of Future Career Anxiety.

Key words: Future Career Anxiety, Communal Orientation, Female Medical Students, Adolescent-Parent Career Congruence, and Saudi Arabia.

Introduction

Choosing a major is one of the most important decisions for adolescents. The academic major choice does not only affect the students' learning and satisfaction while in college (Porter & Umbach, 2006), but it also shapes their future career path (Workman, 2015). Many students come to college without deciding on a specific major, those students are referred to as undecided (Workman, 2015). Career indecision is defined as "an inability to make a decision about the vocation one wishes to pursue" (Guay et al., 2003, p. 165). Previous researches indicated that career indecision is a common concern that often associated with anxiety among college and undergraduate students. With the intensive studies that focus on career indecision, many other studies had focused on factors that might influence the choice of the academic major such as peers, parents, and family (Malgwi et al., 2005; Workman, 2015). Other studies suggested looking at contextual and societal factors that influence career decision making of adolescents (Rainey & Borders, 1997; Savickas, 2000; Vignoli et al., 2005), and one of the factors that was widely investigated was Communal Orientation (individualism and collectivism). Students whose academic decision is influenced by other extraneous factors are not receiving the needed attention by professionals even though they might experience adjustment issues resulting from being in a major that does not satisfy their personal and educational needs. The consequence of such case has many dimensions as students might experience psychological problems, such as stress and anxiety while studying as well as Future Career Anxiety regarding their prospective job performance (Vignoli et al., 2005). The current literature provides limited empirical knowledge regarding the factors influencing career decision-making, major selection process, and Future Career Anxiety of undergraduate female students in collectivist societies.

Mojgan et al. (2013) observed a high percentage of career indecision among Iranian undergraduate students and suggested that this high percentage of career indecision indicates the difficulty of making a critical

life decision, such as major selection, without a well- defined role. The authors suggested that university counseling services can play a critical role in helping students define their career goals and have a clear plan for their future. The authors further discussed that career indecision is a multidimensional phenomenon and can be influenced by variety of factors, such as family and peers.

Communal Orientation: Collectivism and Individualism

Individualism and collectivism are the two cultural dimensions used to analyze individuals' social systems, morality, religion, cognitive differentiation, cultural patterns, values, and the embedded self against the autonomous self (Triandis, 1993). Collectivists, as distinct from individualists, define themselves as parts or aspects of a group. They have personal goals that overlap with the goals of their in-group, and if there is a discrepancy between the two sets of goals, it is considered obvious that the group goals should have priority over personal goals (Hakim-Larson & Nassar-McMillan, 2008). In the collectivists' society, social behavior is predicted from norms, obligations and responsibilities, and relationships as being the greatest importance for individuals even if these relationships interfere with the personal benefits (Rasheed, 2015).

On the other hand, individualists focus on self-concepts that are autonomous from groups. They view their own selves, with their needs and goals, as a priority (Hakim-Larson & Nassar-McMillan, 2008). Among individualists, social behavior is best predicted from attitudes as well as from contracts made by individuals. Relationships are less important to individualists, and they can be dropped when the costs exceed the personal benefits (Singelis et al., 1995).

Majority of research conducted on career decision-making has utilized Western based theories, and most studies utilized Caucasian samples (Whiston & Keller, 2004). Many researchers indicated that there is a need to integrate culture-specific values in the career decision-making (Mojgan et al., 2013; Sawitri et al., 2014; Williams, 2003).

Even though the concept of worldview has been integrated in research since 1980s (McCarthy, 2005; Williams, 2003), it has not been adequately utilized in career decision-making research, which causes difficulty in generalizing the results to students in collectivist societies since a vast majority of research conducted in this area utilized students

from individualistic societies in their samples. Due to the nature of the collectivist societies, it is expected from young individuals to rely on their parents in the decision making process in general; therefore, career choice of the young individual is not merely a personal choice but rather a group decision which could involve individuals, parents and family members. This may be true for students in the Kingdom of Saudi Arabia in which the society is collectivist rather than individualistic.

Parental Influence on Career Decision-Making

Literature on career development showed voluminous studies that presented the parental influence on students' career decision-making (Dietrich & Kracke, 2009; Hashim & Embong, 2015; Workman, 2015). A study by Alika (2012) presented peers and parents as the two main factors that influence the students' choice of a particular career. However, the study showed that when students have a close, supportive and involving relationship with their parents, their peers might have less influence on them. Another study also indicated that college students who come from families that are over involved and supportive are very likely to be less self-governed and possibly commit themselves to uninterested choice of career to please their families (Berrios-Allison, 2005). Perceived pressure and perceived parental control were predictors of anxiety for adolescents (Wolfradt et al., 2003), and parents should ensure that what they perceive as supportive behavior should be similarly perceived by the adolescents in order for their intention to be achieved (Sawitri et al., 2014). Schultheiss et al. (2001) stressed the importance of considering factors, such as culture, gender, and socioeconomic background for identifying the relationship roles on the career choice process. Recognizing these factors is significantly important to conceptualize the influence of parents on students' career development. This knowledge is particularly needed for professionals in the counseling field who have limited knowledge about the specific system of the familial influences (Whiston & Keller, 2004). If it is true, for example, that parents have a significant influence on career development, then, how would cultural dimensions (Individualism and Collectivism) affect the career development within a family as a unit. Mojgan et al. (2013) indicated that younger generation within communities identified as more collectivists than individualists typically respect and take into consideration the viewpoint of the significant people in the family especially the parents

when making any kind decision including career. Mau (2000) found that students from Taiwan had less decision-making self-efficacy compared to the American students as the Taiwanese culture emphasize social conformity and collective decision. At the same time, many studies conducted in Western cultures had also presented the parents as one of the main factors that influenced the students' choice of major (Vignoli, 2009; Wolfradt et al., 2003). Sawitri et al. (2014) indicated that parents from both collectivist and individualist countries have a significant influence on their children's career development. The current study is conducted on a purely collectivist society, Saudi Arabia, and the result is expected to clarify the role of the cultural dimensions on the career decision- making.

Role of Gender in Career Decision Making

In the 20th century, women's role in the workforce has shifted from traditionally female oriented jobs to non-traditional male oriented jobs, and this shift has led to studies that explored factors, such as race, gender, and parental expectations that might influence women's career aspirations (Domenico & Jones, 2006). Several studies explored the role of gender in career decision making indicating that female adolescents differ from male adolescents in some aspects of the career decision or indecision (Domenico & Jones, 2006; Rainey & Borders, 1997; Vignoli et al., 2005; Vignoli, 2009). For instance, Vignoli et al. (2005) found that fear of failing (perceived competence required for a specific career) could play a greater role in the girls' career decision making process. It is, thus, important for studies to consider controlling the gender variable for the results to be generalizable.

In Saudi Arabia, the women's journey toward higher education is rapidly growing. Few years ago, female students were permitted to enroll in a narrow range of studying fields, such as education, medical science, natural science, economics, social sciences and information technology (Jamjoom & Kelly, 2013). Today, more options are opened for women, and they can be enrolled in fields that used to be available only for males, such as engineering, agricultural science and law. With the current expansion of studying fields for female students in the country, they can study most of the subjects like male students except for majors that might lead to a mix between male and females in the workplace (Hamdan, 2005).

This is usually the case for females from conservative families, however, open minded families in the country usually give females more space to choose their majors regardless of the mixing idea. Families from the east coast of Saudi Arabia who live most of their life with the presence of Americans fall into this category. The presence of Americans in the east coast of Saudi Arabia began in 1979 with the establishment of ARAMCO (Arabian American Oil Company) (Hamdan, 2005). The presence of American families in the east coast region influenced the lifestyle of Saudi families in many aspects-one of which is education. Thus, it is not surprising to see females from the eastern region to be enrolled in majors that require a mixed environment with males in the workplace.

Future Career Anxiety

Anxiety is defined as “a state of intense apprehension, uncertainty, and fear resulting from the anticipation of a threatening event or situation, often to a degree that normal physical and psychological functioning is disrupted” (American Heritage Medical, 2007, p. 38). Further, Nadiah defines the Future Career Anxiety as “state of tension and pessimism felt by the university student for the lack of employment chance after graduation” (Nadiah, 2015, p.16). Anxiety can affect many aspects of an individual’s life, including the choice of their future career. Facing career-related anxiety and indecision can be a normal experience for college students (Daniels et al., 2011). Gordon (1981) indicated that anxiety is an important variable that often associated with undecided students. Further, a study by Ali and Tariq (2009) found a significant positive relationship between career indecision and anxiety. Career indecision is found to be associated with factors, such as lack of information about self, value unclarity, limited career exploration, uncertainty about the outcome, and a wide range of choices (Ali & Tariq, 2009; Germeijs & De Boeck, 2003). Anxiety is a factor that might influence career exploration as students might have fear of failing in their academic professional career, fear of not meeting their parents’ expectations with their career choice, and fear of moving away from their family as part of the career requirement (Vignoli et al., 2005).

Experiencing anxiety could also occur as a result of the parents’ control and pressure on their children. A study by Wolfradt et al. (2003)

found that the parents' control and pressure were positive predictors of anxiety on their children. This can also be applied to the pressure of family on adolescents' career choice. Sawitri et al. (2014) stated that adolescents' career decision is negatively influenced when parent and adolescent have differing career directions. It has been suggested that contextual variables should be taken into consideration when conducting career research; therefore, the education system in the country needs to be taken into consideration as one of the contextual variable. In Saudi Arabia, the first year of college is one of the most important and challenging transitions in the educational system. This year is called the preparatory year, which is designed to bridge the gap between the high school educational system and the university educational system. It aims to develop the students' English proficiency, especially in some fields, such as medicine and engineering, where the language of instruction is English. The students in the preparatory year are also required to take classes in general studies, such as physics and chemistry, and these general study classes are tailored toward their specific field of study (e.g. engineering or medicine). Students are enrolled in different college tracks, such as engineering, medicine or science based on their Grade Point Average (GPA). After the completion of the preparatory year, students are enrolled in different college tracks based on their (GPA) of the preparatory year.

In the Saudi society there are certain careers that are respected and considered to be prestigious, which eventually lead to a guaranteed employment, such as medicine being the first and engineering being the second best option. In the health track (preparatory year), for instance, only those with a very high GPA are placed in medicine major which is the most preferred major among female students. For example, in 2015 the number of students who were enrolled in the health track was 369 female students and only 75 of those students who had a high GPA (4.7 out of 5) were accepted in the school of medicine (Imam Abdulrahman Bin Faisal University). The rest of the students were assigned into other majors, such as dentistry, nursing, applied medical sciences, or pharmacology.

Limitations of study

The study was conducted in the second semester of the academic year 2015/2016 on female students from Medical schools at Imam Abdulrahman Bin Faisal University in Saudi Arabia. The age group of the sample ranged between 18 and 19 years. The study examined the variables related to Future Career Anxiety, Communal orientation, and Adolescent-Parent Career Congruence that were measured through a computerized test battery.

Hypotheses

Hypothesis 1. There is a significant correlation among Future Career Anxiety, Adolescent-Parent Career Congruence, communal orientation, parental influence on major selection and self- selection of major.

Hypothesis 2. There is mean difference in Future Career Anxiety score based on factors influencing major selection (parental influence, personal interest, and securing job).

Hypothesis 3. There is mean difference in communal orientation score based on factors influencing major selection (parental influence, personal interest, and securing job).

Hypothesis 4. There is mean difference in Adolescent-Parent Career Congruence score based on the track attended in medical schools (dentistry, applied medical sciences, pharmacy, and medicine).

Hypothesis 5. Adolescent-Parent Career Congruence, communal orientation, parental influence on major selection, and self-selection of major predicts Future Career Anxiety.

Method

Research Design

This study followed the correlative and comparative descriptive methods (Non-experimental method). Researchers of the current study followed the treatment of independent variables through description, sorting and classifying, not through modification and intentional changes. The survey design was used in this research to fit the goals and procedures of the study.

Participants

A total of 156 female students in the preparatory year of medical

school at Imam Abdulrahman Bin Faisal University (Dammam, Saudi Arabia) took the online survey. The age of the participants ranged between 18 and 19 with the mean of 18.46. Of the participants, 147 were single and 10 were married. In terms of their plan for choosing a track for the upcoming year, the indicated choices were as follows: 108 medicine track, 28 dentistry, 12 applied medical sciences, and 9 pharmacy. None of the participants indicated a choice for nursing and cardiovascular.

Procedure

An online survey was emailed to the participants. The survey included Future Anxiety Scale, Communal Orientation Scale (COS), Adolescent-Parent Career Congruence, and a demographic questionnaire. Students were also asked to rate the percentage of personal and family influence on their major selection.

Materials

Communal Orientation Scale

The 14-item instrument was developed by Clark et al. (1987), and it measures how much individuals believe in helping one another and care about others' feelings in social relationships. Each item is rated on 7-point Likert-type scale (1 = extremely uncharacteristic of me and 7 = extremely characteristic of me). Examples of items are "I often go out of my way to help another person" and "When making a decision, I take other peoples' needs and feelings into account". The researchers translated the survey before confirming the properties of the psychometric. The validity of the scale was confirmed by the internal consistency through the correlation between each item and total score ranged between (.43 and .76), indicating a moderate validity of the scale. While the Cronbach's alpha coefficient for all 14-item was .78.

Adolescent-Parent Career Congruence Scale:

Sawitri et al. (2013) developed the 12-item instrument to assess Adolescent-Parent Career Congruence. The instrument assesses two aspects of congruence: the complementary congruence which is (7 items) that was defined as, "the situation where adolescents perceive their needs in exploration, planning, and goal setting to be met by parents, and their perception that parents are satisfied with their progress" (Sawitri et al., 2013, p.221); the second aspect is the supplementary congruence which is

(5 items) that was defined as, “the situation when adolescents believe that they possess similar or matching perceptions as their parents regarding career interests, values, plans, and goals” (Sawitri et al., 2013, p.221). Each item is rated on a 6-point scale (1 = strongly disagree and 6 = strongly agree), and the higher scores indicate higher degree of perceived congruence with parents in career domain. The researchers translated it, before confirming the properties of the psychometric. The validity of the scale was confirmed by the internal consistency through correlation between each item and the total score varied between (.37 and.65), indicating a moderate validity of the scale. The study reported the following Cronbach’s alpha coefficients for each subscale; Complementary congruence.83 and Supplementary congruence.80. The Cronbach’s alpha coefficient for all 12 items was.87.

Future Career Anxiety Scale

The scale was developed by Nadiah (2015), and it consists of 36-items that assess the Future Career Anxiety in specific. Each item is rated on a 3-point Likert-type scale (1 = disagree, 2 = neutral, 3 = agree), and the higher scores indicate higher Future Career Anxiety. The validity of the scale was confirmed by the internal consistency through correlation between each item and the total score varied between (.41 and.73), indicating a moderate validity of the scale. While the Cronbach’s alpha coefficient for all 36- items was.85.

Translation Procedure

Brislin’s (1986) model was followed for the translation procedure. Brislin’s model is “recommended as the most reliable method for developing an equivalent translated instrument” (Yu et al. 2004, p. 309). The back translation step included in the model accounts for a more reliable translation. In the first step, English Instruments (Communal Orientation Scale and Adolescent-Parent Career Congruence Scale) were translated from English into Arabic by two bilingual mental health professionals. Then, a monolingual Arabic speaker was asked to review the items of the Arabic versions for ambiguous wording. The reviewer did not have any prior knowledge regarding the instruments and was not provided with the title of the instrument. The revisions to the Arabic versions were made according to the feedback received. In the third step, we asked a bilingual mental health professional, who did not have any

prior knowledge regarding the instruments, to translate the Arabic versions of the instruments into English. The last step included a comparison of the original and the back-translated version of the instruments. Future Career Anxiety Scale was originally in Arabic, and it was not translated, therefore.

Results

Table 1: Correlations among the Study Variables

	2	3	4	5
1. Future Career Anxiety	-.332**	.017	.045	.0121
2. Self Selection of Major	—	.12	.223**	.125
3. Parental Influence		—	.198*	-.135
4. Adolescent-Parent Career Congruence			—	.149
5. Communal Orientation				—

*, $p < .05$, **, $p < .001$

Correlation analysis indicated that self-selection of major was significantly negatively related to Future Career Anxiety $r = -.332$, $p < .001$, and significantly positively correlated with Adolescent-Parent Career Congruence $r = .223$, $p < .01$. Parental influence on major selection was also significantly positively correlated with Adolescent-Parent Career Congruence $r = .198$, $p = .013$.

Table 2: One-Way Analysis of Variance in Future Career Anxiety Score by Factors Influencing Major Selection

Source	SS	df	MS	F	p
Between Groups	236.29	2	118.15	3.468	.034
Within Groups	5247.02	154	34.07		
Total	5483.31	156			

* $p < .05$

Table 3: Tukey HSD Test for Comparison of Future Career Anxiety Among Factors Influencing Major Selection

(I) Track	(J) Track	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Parental Influence	Securing Job	-3.082	2.362	.395	-8.672	2.508
	Personal Interest	.693	2.012	.937	-4.070	5.455
Securing Job	Parental Influence	3.082	2.362	.395	-2.508	8.672
	Personal Interest	3.774*	1.434	.025	.380	7.169
Personal Interest	Parental Influence	-.693	2.012	.937	-5.455	4.070
	Securing Job	-3.774*	1.434	.025	-7.169	-.380

* $p < .05$

One-way ANOVA was conducted to test the second hypothesis. The results indicated that there was a significant difference between factors influencing major selection in Future Career Anxiety ($F(2,154) = 3.468$, $p = .034$). A Tukey post-hoc test revealed that students whose primary reason for major selection was securing a job had significantly higher level of future career anxiety compared to students whose primary reason for major selection was personal interest ($p = .025$). There was no significant difference between securing job and parental influence groups ($p = .395$), and parental influence and personal interest groups ($p = .937$).

Table 4: One-Way Analysis of Variance in Communal Orientation Score by Factors Influencing Major Selection

Source	SS	df	MS	F	P
Between Groups	748.67	2	374.34	4.157	0.17
Within Groups	13866.81	154	90.04		
Total	14615.48	156			

* $p < .05$

Table 5: Tukey HSD Test for Comparison of Communal Orientation Among Factors Influencing Major Selection

(I) Track	(J) Track	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Parental Influence	Securing Job	-11.035*	3.840	.013	-20.122	-1.948
	Personal Interest	-7.953*	3.272	.043	-15.696	-2.111
Securing Job	Parental Influence	11.035*	3.840	.013	1.948	20.122
	Personal Interest	3.082	2.332	.385	-2.437	8.600
Personal Interest	Parental Influence	7.953*	3.272	.043	.211	15.696
	Securing Job	-3.082	2.332	.385	-8.600	2.437

* $p < 0.05$

One-way ANOVA was conducted to test the third hypothesis. The results indicated that there was a significant difference between factors influencing major selection in communal orientation score ($F(2,154) = 4.157, p = .017$). A Tukey post-hoc test revealed that students whose primary reason for major selection was their parents had significantly lower communal orientation score than students whose primary reason for major selection was securing a job ($p = .013$), and students whose primary reason for major selection was personal interest ($p = .043$). There was no significant difference between personal interest and securing job groups ($p = .385$).

Table 6: One-Way Analysis of Variance in Adolescent-Parent Career Congruence Score by Track

Source	SS	df	MS	F	P
Between Groups	694.64	2	231.547	6.892	.000
Within Groups	5140.59	154	33.599		
Total	5835.24	156			

* $p < 0.05$

Table 7: Tukey HSD Test for Comparison of Adolescent-Parent Career Congruence Among Tracks

(I) Track	(J) Track	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Medicine	Pharmacy	5.296*	2.011	.046	.073	10.520
	Applied Medical Sciences	4.824*	1.764	.035	.243	9.406
	Dentistry	-2.474	1.229	.188	-5.667	.719
Pharmacy	Medicine	-5.296*	2.011	.046	-10.520	-.073
	AMS	-.472	2.556	.998	-7.111	6.167
	Dentistry	-7.770*	2.221	.003	-13.539	-2.000
Applied Medical Sciences	Medicine	-4.824*	1.764	.035	-9.406	-.243
	Pharmacy	.472	2.556	.998	-6.167	7.111
	Dentistry	-7.298*	2.000	.002	-12.492	-2.103
Dentistry	Medicine	2.474	1.229	.188	-.719	5.667
	Pharmacy	7.770*	2.221	.003	2.000	13.539
	Applied Medical Sciences	7.298*	2.000	.002	2.103	12.493

* $p < 0.05$

One-way ANOVA was conducted to test the fourth hypothesis. The results indicated that there was a significant difference between tracks in Adolescent-Parent Career Congruence score ($F(3,153) = 6.892$, $p < .001$). A Tukey post-hoc test revealed that students in the medicine track had significantly higher level of Adolescent-Parent Career Congruence than those in pharmacy and applied medical sciences track. Students in dentistry track had significantly higher level of Adolescent-Parent Career Congruence than those in pharmacy and applied medical sciences. There was no significant difference between students in applied medical sciences and pharmacy track; and between students in medicine and dentistry track.

Table 8: Summary of Simple Regression Analysis for Variables Predicting Future Career Anxiety

(N = 156)

Variable	B	SE B	β
Adolescent-Parent Career Congruence	.098	.077	.101
Parental Influence	.005	.018	.023
Self Selection of Major	-.121	.025	-.374**
Communal Orientation	.096	.047	.156*
R ²		.148	
F		6.589**	

*, $p < 0.05$, **, $p < 0.001$

Multiple regression analysis was conducted to determine if Adolescent-Parent Career Congruence, Communal Orientation, parental influence on major selection, and self-selection of major predicted Future Career Anxiety score. The results indicated that only two of the four predictors (Communal Orientation score and self-selection of major) significantly predicted Future Career Anxiety score. The results indicated that two variables accounted for 12.6% of the variance ($R^2 = .148$, $F(2,154) = 6.589$, $p < .001$). It was found that Communal Orientation significantly predicted Future Career Anxiety ($\hat{\alpha} = .156$, $p = .03$), as did self-selection of major ($\hat{\alpha} = -.374$, $p < .001$).

Discussion

Studies have examined stress and anxiety among medical students in their relation to academic and environmental stressors in Saudi Arabia (Abdulghani, 2008; Al-hazimi et al., 2004; El-Gilany et al., 2008; Inam, 2007); however, the researchers were not able to locate any research that examined the influence of Future Career Anxiety among female medical students. Medical studies in Saudi Arabia are known to promote competition rather than collaboration among students, and competition negatively influences the emotional and physical health of the medical students (Al-Dabal et al., 2010). The existing literature indicates that medical students' mental health worsens as they begin their studies in medicine (e.g. Abdulghani, 2008).

The current study results indicated that students who chose their major themselves, had lower level of Future Career Anxiety compared to those who chose their major based on extraneous factors (e.g. family). This result can be interpreted by saying that students who are influenced by external factors in the major selection process are more anxious toward their future career, which can potentially be a fear of failure or not being able to perform the requirements of the job (Vignoli et al., 2005). Students are likely to choose a major based on their interest as well as their abilities and strengths; thus, students who chose their major because of personal interest would have higher confidence toward being successful in their career. It is also likely that students who chose their major due to external factors are under the pressure of family or society to the point where their future anxiety is increased, as it was found that perceived parental control and perceived parental pressure increase anxiety (Wolfradt et al., 2003).

Results also indicated a significant positive correlation between two of the factors influencing major selection --personal interest and parental influence--and Adolescent-Parent Career Congruence indicating that with the existence of Adolescent-Parent Career Congruence, it is possible for students' career choice to be determined by personal interest and parental influence simultaneously.

The second hypothesis that students who chose their major based on external factors would report significantly higher level of Future Career Anxiety was partially supported. Students whose primary reason for major selection was securing a job had significantly higher level of Future Career Anxiety compared to students who chose their major based on personal interest. It is, therefore, indicated that students who are concerned regarding being employed in the future are more anxious regarding their future career. However, students who chose their major because of parental influence did not report significantly higher Future Career Anxiety when compared to students who chose their major based on personal interest.

A surprising result, which was inconsistent with the existing literature, was related to Communal Orientation. Students who indicated choosing their major based on personal interest had significantly higher score on collectivism compared to students who chose their major as a result of parental influence. It was expected that students who had higher

score on collectivism would abide by the values of collectivist society and adhere to their parents' wishes regarding their future career. Students who chose their major with the intention of securing a job also reported higher score on collectivism compared to students who chose their major under parental influence. Interpretation of this result could be understood in the light of collectivist societal values, which encourage people to be productive members of the society contributing to greater good. It is also known that failure to be employed following graduation could bring disappointment to the family as a whole, and, therefore, students must ensure employment following graduation to honor the family. This societal pressure then increases the Future Career Anxiety of these students, and as mentioned above, results in selecting a major that will bring the students a higher chance of securing an employment.

Additionally, rather than categorizing individuals in one of the two categories of Communal Orientation, Seo's (2011) study supported the notion that individuals can present the characteristics of individualism and collectivism concurrently. It can be understood that students who chose their major based on personal interest are still honoring collectivist values; however, they are also practicing some level of independence which is a behavior that is commonly associated with individualism. Singelis et al. (1995) drew a distinction between vertical and horizontal dimensions of collectivism and individualism. Vertical collectivism emphasizes hierarchy while horizontal collectivism is more focused toward equality (Hartung et al., 2010). Thus, higher scores of participants on collectivism with consideration that they had chosen their major based on personal interest indicate that female medical students fall into the category of horizontal collectivists. As mentioned previously, the eastern region of Saudi Arabia is known to be more progressive, and families, who allow their daughters to study in majors where they could be mixed with men, may also contribute their daughters' feelings of egalitarian relationship.

A common behavior observed among preparatory year students in medical school is that many students wish to complete their studies in the medicine track; thus, students' average grade in preparatory year is taken into account when admitted to medical school (Al-Shehri et al., 2013). The results indicated that the parents also had the same wish for their daughters. Students who indicated an interest in choosing the medical

track for upcoming year had a higher level of Adolescent-Parent Career Congruence compared to pharmacy and applied medical sciences track. This result was expected as it is a commonly observed trend by the faculty in the preparatory studies that students wish to continue their education in the medicine track, which then causes a great deal of stress and anxiety due to quota, which indicates that only approximately 50% of all students can be placed in medicine track. Contrary to what was hypothesized, dentistry students had the highest mean score on the Adolescent-Parent Career Congruence scale, resulting in significantly higher mean score compared to pharmacy and applied medical sciences track. However, there was no significant difference between medicine and dentistry tracks.

Communal Orientation and self-selection of major accounted for 13% of the Future Career Anxiety, and it was consistent with the previous literature that the pressure put on students by the societal norms (e.g. not disappointing parents) increases the students' anxiety regarding their future career (Vignoli et al., 2005). An important interpretation of this result is that counselors working with students with Future Career Anxiety must take the client's level of collectivism into account as it is found to predict Future Career Anxiety.

Al-Dabal et al. (2010) found that medical students are, compared to non-medical students, at a higher risk of mental and physical health problems. Consistent with several previous studies, we recommend that mental health services should be in place to provide support and assistance to students starting from preparatory year and throughout their education in medical school. It is important to promote self-care among health professionals who soon will be taking care of others. We also recommend career services to be provided to preparatory year medical students to allow them make informed decisions regarding the track they desire to proceed with, as our results indicated that the students' choice of medicine track could highly be influenced by parental and societal expectations. Supportive counseling services should also be provided to helpin reduce Future Career Anxiety among these students, as it was significant.

Future studies should examine the relationship among the variables with male medical students to determine if there is any difference between the genders. Even though, we aimed to determine the peer influence on

major selection, students did not report the level of influence of their peers on their major selection. Therefore, we recommend that future studies should examine the influence of peers on the major selection process.

Conclusion

The present study was a contribution to understand “What influences career decision making of Saudi female medical students”. Students who had chosen their major without external influence had lower levels of Future Career Anxiety. Students who had chosen their major to secure a job after graduation had the highest level of Future Career Anxiety. Finally, self-selection of a major and Communal Orientation were found to be significant predictors of Future Career Anxiety.

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