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Cultural factors impacting student motivation at a health sciences college in the Eastern Province of Saudi Arabia

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Abstract: This paper presents a reflection on students' levels and types of motivation at a college of health sciences in Saudi Arabia and highlights the social and cultural factors possibly contributing to the differences in motivation among those students. The results of this study, which followed a mixed-methods approach, indicate a multiplicity of contributing factors and values, namely: gender stereotyping, appreciation of early graduation, stereotypes regarding career status, family background, and parents' educational levels, value attributed to education, ultra-conservatism, and social image and prestige. From these factors, a number of key implications and recommendations are deduced, some of which are general while others are more college specific.

1. Introduction
The Kingdom of Saudi Arabia is the third largest country in area in the Arab World. It is located in the Arab Gulf region and is commonly referred to as "The Land of the Two Holy Mosques" due to its two

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PUBLIC INTEREST STATEMENT
Student motivation is crucial for effective learning and high-quality academic performance. Not all students, however, exhibit the same types and levels of motivation; as a result, differences in learning and achievement exist between them. Differences in motivation are usually attributed to a variety of factors, among them: psychological, socioeconomic, social, and cultural aspects and dynamics. Understanding the impacting factors that affect student motivational drives and lead to differences in them is not easy, although extremely important and crucial, especially in an educational context where difficulties with students' motivation seem prevalent. For this reason, this study tried to discover and shed some light on possible factors impacting students' motivation at a college of health sciences in the Eastern Province of Saudi Arabia, to hopefully raise awareness about what mainly affects such students' thinking, beliefs, and interests and make some recommendations of how to possibly help them overcome motivational challenges and issues.

holiest cities Makkah and Madina. Its government is an Islamic absolute monarchy and its population, in its entirety, practices Islam, the country's official and only religion. Economically, Saudi Arabia is an affluent country, rich with natural resources, namely: petroleum and gas. Relatively speaking, it can be considered as a fast-growing country, but socially, it continues to struggle with two main forces simultaneously acting against each other: the first force is a progressive one, which tries to push Saudi society toward staying up-to-date with international developments while the second one is ultra-conservative in nature and consists mainly of Salafi religious beliefs (also known as Wahhabi) that continuously try to pull the society back toward adherence to traditional activities, Islamic dress code, and "a code of modesty that rests on the dignity and reputation of the woman, with restrictions on interactions between men and women" (Metcalfe, 2007, p. 59). These beliefs, along with a set of pre-Islamic cultural customs that have become embedded in the Muslim way of life, unquestionably impact Saudi women more than men (Hamdan, 2005), in that they do not give women the same types of freedom and place on them more restrictions, socially, politically, and businesswise. Despite all this, Saudi women—like their sisters in the Arabian Gulf states—have been able to outperform their male counterparts in education (Al-Mamoud, 2005), mainly by consistently achieving higher standardized test scores and school grades (Kapiszewski, 2001). Saudi women have also succeeded through the years in working in a number of fields, primarily in education and the medical sectors. In the past, female participation in the labor market was generally low (Baki, 2004), but recently, there has been some improvement in this respect. For example, it has been the norm that due to "many social reservations and pressures, most women in Saudi Arabia work in environments that are restricted only to women, like girls' schools, ladies' beauty centers, female branches of banks or companies, etc. Hospitals, of course, have always been an exception due to their gender-mixed nature and the difficulty of implementing any form of segregation in them" (Abdul Razzak, 2012, p. 54). Recently, however, women have been permitted to work in other settings alongside with men. Even in terms of studying, a coed international graduate-level university has been established, which is the first of its kind in the Kingdom. This gender mixing in a variety of contexts is proving to be a learning experience not only for the women but also for the men in the Saudi culture, who are finding themselves in a position where they are required to view women differently from how they were brought up to view them; hold different expectations of them; be impacted by their motivation and achievements; and often even compete with them. This is not quite easy, especially in a society that has always been almost entirely male-dominated and a culture which has long considered the female as weak, vulnerable, and dependent on the male in almost every aspect of her life. Despite their differences, however, both Saudi male and female students seem to be motivationally and academically impacted in college by more or less the same factors impacting students worldwide, mainly psychological, socioeconomic, social, and cultural aspects and dynamics. How do such factors possibly affect Saudi college students' motivation and academic achievement is the main focus of this study.

The college focused on here is not coed in nature, but rather has two branches segregated according to gender. The majority of its student population, however, consists of women and for this reason, clarifying the status of women in Saudi Arabia above seemed necessary. This college, in addition, like every institution of higher education, has its own set of core principles, values, and culture, which along with the superordinate Saudi culture play a significant role in determining students' types and levels of motivation. For, as researchers (Driscoll, 1994; Weiner, 1990) have shown, motivation cannot be separated from society, its culture, values, and the goals associated with some of its sub-segments.

2. Literature review and conceptual framework

Motivation in the literature is defined as a force that stimulates, directs, and sustains behavior (Brophy, 1998; Glynn & Koballa, 2006; Palmer, 2005). Student motivation, on the other hand, or motivation to learn, is defined as the tendency of a student "to find academic activities meaningful and worthwhile and to try to derive the intended academic benefits from them" (Brophy, 1998, pp. 205–206). According to Barlia (1999) and as cited by Cavas (2011), "motivation is a vital educational variable promoting both new learning and performance of previously learned skills, strategies, and

behaviors" (p. 32). Some researchers have gone as far as saying even that without motivation, appropriate curricula and good teaching are not enough to ensure students' achievement (Dornyei & Csizer, 1998). Research studies have shown many factors (psychological, social, and cultural) related to motivation, like: intrinsic and extrinsic aspects; parental influence and involvement; family background; peer pressure; self-efficacy expectations; effort; value attributed to a task; anxiety; self-regulation and the setting of goals; perceptions of ability; learning strategies; relevance of the subject matter; classroom atmosphere; teaching style; and school environment. (Brophy, 1998; Garcia, 1995; Nolen & Haladyna, 1989; Pintrich & Schunk, 1996; Singh, Granville & Dika, 2002) The school environment, for example, has been found to optimize motivation and learning when it is accessible, safe, positive, personalized, and empowering (Williams & Williams, 2011). Here, teachers, of course, play a very important role since they are an integral part of the school environment. Studies have shown that many aspects related to the teacher can contribute to student motivation, like: teachers' subject knowledge and skills; motivation level; qualifications; modes of assessment; teaching style; quality of relationships with the students; and enthusiasm (Williams & Williams, 2011). The more enthusiastic, motivated, qualified, and diverse in teaching and assessment teachers are, the more they are capable of promoting students' motivation to learn. At the same time, students' personal factors are extremely significant; ample studies have found that intrinsic aspects such as love for learning, curiosity, desire to be involved, and love for social interaction all increase students' motivation much more than extrinsic aspects such as grades, rewards, and recognition (Williams & Williams, 2011). High levels of perceived personal effectiveness and competence or high self-efficacy expectations also contribute positively to students' motivation, just as ownership of the academic work (or feeling inherently responsible for the learning and having a set long range educational plan) and prior learning achievements do (Williams & Williams, 2011). Anxiety, on the other hand, and in particular language anxiety which students experience when required to study in a foreign language in which they lack exposure and are incompetent, has been shown to reduce motivation (Shah, Hussain, & Nasseef, 2013). Similarly, students' sense of lack of their parents' involvement in their education and the lack of the value they attribute to what their children are studying can have a similar negative effect, for studies have found a clear link between parental involvements and children's academic motivation and educational development (Gottfried, Fleming, & Gottfried, 1994). Disadvantaged parents, in particular, have been found to be low on fostering competence in their children and on encouraging them to learn or see value in learning; they are also less engaged with their children's school work and less likely to help their children develop social relationships that support and value achievement (Center on Education Policy, 2012).

The socioeconomic status (SES) of a student's family has been shown to have a significant influence not only on motivation but also on other soft skills and traits, like: self-regulation; self-esteem; and the ability to work with others, focus on tasks, and deter gratification (Heckman, 2008). Results of studies by Heckman (2008, 2011) and Young, Johnson, Hawthorne, and Pugh (2011) have indicated gaps in achievement, cognitive and non-cognitive skills, and in approaching academic challenges between socioeconomically advantaged students, on the one hand, and their more advantaged peers, on the other. Specifically, Heckman (2008, 2011) discovered that students from a disadvantaged SES "possess lower levels of cognitive and non-cognitive skills and lag far behind their more advantaged peers" (Center on Education Policy, 2012, p. 4), while Young et al. (2011) found that students with high SES "tend to approach academic challenges with a greater sense of internal control over success than students from lower-SES families" (Center on Education Policy, 2012, p. 4). Why do such gaps and differences exist is something still not quite understood by researchers; however, some like Gottfried, Fleming, and Gottfried (1998) and McLanahan (2004) attribute them to discrepancies in parenting practices, home environments and the degree of cognitive stimulation in those environments, and peculiarities in general social contexts. The educational levels of the parents and their beliefs about learning have also been found to be important determining factors related to student motivation and achievement (Duncan & Magnuson, 2005). This is in addition to a number of other cultural factors that have been identified by researchers, like: (1) how students view themselves (self-image) and the group they belong to; (2) parents' culture-specific values, expectations, and behaviors; (3) cultural stereotypes and discrimination; (4) the perceptions

of others; (5) the desire to protect the group identity; (6) and cultural perceptions related to academic achievement and its relevance to personal goals and group identity (Murdock, 2009; Oyserman & Destin, 2010). Taking such cultural factors into consideration is extremely important since these cultural peculiarities result in common attitudes, values, behaviors, and expectations that guide and control students' motivation toward studying and work, as well as affect the outcomes of their efforts.

Gender role stereotypes in society, for example, strongly influence educational institutions, teachers, as well as students' perceptions of their abilities, achievements, and behaviors (Pajares & Valiante, 2001). They also affect the preferences of students in that the girls tend more than the boys to select courses and majors through which they can form positive, personal connections and can place others first. This is mainly due to society's tendencies to reward girls for nurturing, conforming, and caring behaviors and to reward males for more assertive behavior, uniqueness, and risk-taking (Scantlebury, 2009). Social image or prestige also influences students' selections of courses and majors, according to Thomas and Allen (2006) as cited by Downey, McGaughey, and Roach (2011). Studies have shown that students usually choose majors with higher social image and level of income and that this is especially true of males more than of females (Leppel, Williams, & Waldauer, 2001; Sugahara, Boland, & Cilloni, 2008). In addition, studies have indicated that some students choose majors which they perceive to be easier than other options and based on what they see themselves as capable at and based on the amount of courses they need to graduate, of course, the less courses, the more preferred the major (Carter, 2006; Cohen & Hanno, 1993). Students' image of themselves and how they would look in a certain major (i.e. personal image) also influence choice of major or career (Zhang, 2007), just as the probability of finding a job after graduation does (Celikoz, 2010).

The gaps and differences in student motivation and achievement may be inevitable; however, as argued by the Center on Education Policy at the George Washington University (2012), there is a need to try and prevent disparities in background that can negatively affect student motivation and achievement, primarily through: (1) public awareness campaigns related to how to effectively foster students' motivation; (2) culturally sensitive programs that educate about supportive parenting; and (3) social efforts and policies that tackle poverty and other root causes of the motivation and achievement gaps.

Conceptually, this study was guided by the well-established indication that a strong link exists between culture and motivation (Driscoll, 1994; Weiner, 1990) and by the belief that motivation is crucial for effective student learning and high-quality academic performance (Barlia, 1999; Cavas, 2011). It was also grounded in Abraham Maslow's principle that all individuals, regardless of culture, are motivated and behave in certain ways to fulfill certain needs. Some of these needs are physiological and some are psychosocial. The latter needs are learned and acquired through socialization and therefore usually differ from one society or culture to another, which naturally leads, therefore, to differences in the expectations, actions, and behaviors they bring rise to. Understanding the peculiarities of the societies and cultures that bring rise to such needs is inevitable for any clear and just comprehension of them and of the motivational drives resulting from them.

3. Purpose of study

How exactly does culture affect individuals' motivational drives and the ways they satisfy their needs is the main focus of the study at hand, which specifically examined some of the possible impacts culture may have on student motivation at college in particular. To be more precise, the research question that this study attempted to answer is the following: What are some of the possible factors and values existing in Saudi culture that could possibly be having an impacting role on students' levels and types of motivation at a college of health sciences in the Eastern Province of Saudi Arabia? To answer this question, we first tried to empirically discover the different aspects related to students' motivation—that was only after sensing some motivational problems at the college—and then discussed how these characterizing aspects may be impacted by Saudi cultural dynamics. The subsequent section gives a clearer picture of the college context and tries to highlight the main

issues and challenges which, in reality, acted as the launching point for this study. For confidentiality purposes, the pseudonym Health Sciences College (HSC) has been used in this study to replace the original name of the college.

4. Contextual background

HSC is a privately owned family business with a highly individualized and centralized leadership since all decisions in it are more or less made and finalized through a top-down approach by one family member alone, who is responsible for the management of the college as a project. With respect to size and age, the college can easily be considered as both small and young. It offers three main health science undergraduate programs, which are nursing, medical lab technology (MLT), and pharmacy technician. These are in addition to a number of other programs in which the enrollment of students is lower. The college is made up of two branches: one for the female students and one for the males. All the students at HSC are sponsored by the Saudi National Human Resources Fund, and all of those who graduate are guaranteed a job at the hospital with which the college is affiliated. The majority of students who attend HSC are from economically underprivileged villages located around two of the largest oases in the Eastern Province of Saudi Arabia and, therefore, come from a low socioeconomic class with either illiterate or poorly educated parents. Most, if not all, HSC students are public school graduates and all of them come from the scientific track in high school. Like most Saudi students, they are linguistically challenged in terms of English language proficiency, for English education in Saudi Arabia "has been observed to lag behind that of other countries in Asia," where in general English is treated only as a subject of study rather than a living language spoken daily (Liton, 2013, pp. 19–20). As a result, almost all HSC students end up being enrolled in a foundation/preparatory program in the first year of college. In this program, they are mainly offered English courses, in addition to two mathematics courses and one ICT course.

Partly due to the underprivileged background of the students, many seem to come with very poor academic, social, and organizational skills, which the college tries diligently to develop in them in their first two years at the college (i.e. the foundation year and the freshman year). In addition, a considerable number of the students appear to exhibit during these years (as indicated by attendance records, faculty reports, and student referrals to the counselor's office and to their advisors) violations of the college's rules and regulations, by being usually tardy; having a high absence rate; not submitting assignments on time; often resorting to cheating on exams; plagiarizing; not following instructions; and failing to live up to expectations of cleanliness and orderliness in school facilities, like: the cafeteria, science labs, library, washrooms, etc. All this is coupled in some cases with a lack of interest in learning; low curiosity level; short attention span; low self-efficacy expectations on assignments and exams; and minimal effort. Certainly, this is not to say that there aren't students at HSC who work hard, display interest and curiosity, abide by the rules, and perform well. On the contrary, there are those (mostly females) who from their academic performance and involvement at the college demonstrate a genuine quest for knowledge and who stand out and shine among the rest. The interesting fact though is that these types of students are usually the exception and they are the ones who go through their remaining years in college smoothly and without too many challenges. The greater number of students, however, unfortunately belongs to the first category, as indicated by students' grades, attendance records, faculty reports, and student referrals to the counselor's office and to their academic advisors. These students, as a result, are the ones who present the real challenge for the college, not only in the first couple of years of their enrollment but also in their last two years, which include the internship parts of the programs during which problems of a different type surface.

With respect to enrollment in academic programs, nursing happens to have only female students while the male student population is distributed among the remaining programs. When comparing the pharmacy technician program with the main ones offered at the college, it is easily noticeable that it enrolls a smaller number of students (both males and females), and it is the longest program in terms of required years of study.

With this knowledge of the contextual background of the college in mind, it was inevitable to reflect upon the contributing factors behind some students' violations of rules and regulations, lack of interest in learning, low curiosity level, short attention span, low self-efficacy, and minimal effort, all of which happen to be symptoms of low student motivation to learn (Stipek, 2002). It was also natural to wonder about what marks the difference in motivation between such students and the exceptionally motivated few. Knowing that there seems to be a strong link between motivation and culture and taking the study's conceptual framework as a basis, the author decided to undertake the study at hand to first try and identify HSC students' motivation types and levels and second, suggest some of the factors and values existing in Saudi culture that could possibly be having an impacting role on them.

5. Methodology

A mixed-methods inquiry approach was used in this study and it relied on three main data collection tools, as described below:

(1) Discussions of a focus group of 12 HSC students from Years 1, 2, 3, and 4 (3 from each year): The 12 students were 4 males from Pharmacy and MLT and 8 females from the same majors in addition to Nursing. They took part in the focus group on a voluntary basis only after all the necessary official institutional approvals were granted, and they belonged to a non-randomly selected sample of 60 students who participated in this study and who were enrolled at HSC in the academic year 2013–2014. The discussions centered on psychosocial issues that could help in identifying students' levels and types of motivation, like: their reasons for choosing the majors that they chose; challenges they are facing at the college; how they perceive education; their family relations and circumstances at home; how their parents perceive their children's education; and how involved their parents are in their life and studies.

(2) A quantitative research instrument, basically a survey in the form of a 17-item questionnaire (Appendix A), was used to gather demographic information about 60 HSC students from the 3 main majors (20 from each) to explore their study habits, study interests, attention levels in classes, disciplinary problems if any, feelings toward their areas of specialization, and their parents' feelings toward their education, all of which could possibly help us in identifying students' levels and types of motivation. The participants' gender and specialization distribution were as follows: 20 Nursing females, 12 MLT males and 8 females, and 7 Pharmacy Technician males and 13 females. The reason why a questionnaire was selected as a research instrument is because of the researcher's desire to reach a wide sample of student participants, especially after having identified some opinions through the responses gathered from the focus group of 12 students. The participants were non-randomly selected since they represented Year 1–4 students enrolled in one of the main majors at HSC in the academic year 2013–2014. The questionnaire was distributed to them by hand, by one of their instructors with whom the researcher had previously worked. The distribution and the filling out of the questionnaire took place at the college in a huge hall where they were invited to gather and only after they officially consented to take part in the study. Since most of the participating students had low English language proficiency and since their mother tongue is Arabic, the researcher translated the questionnaire from English to Arabic and had it assessed by an additional qualified translator, who like the researcher has an in-depth understanding of the target population. To remain loyal to the meaning of the original document, symmetrical translation was used, which is a type of translation that ensures an equal sense of familiarity, as well as maintains cultural relevance between the original and translated document (Davison, 2004).

(3) A sample of eight HSC instructors from Nursing, Pharmacy Technician, and MLT specializations was asked to participate in a reflective exercise which consisted only of one journal entry. This reflective entry revolved around the challenges and difficulties faced by students during internship sessions and the researcher hoped that through this journal entry, it would be possible to extract additional information regarding students' motivational types, levels, and the main factors impacting them. The eight participating instructors were non-randomly selected

because they represented HSC instructors who were involved in conducting Year 3 and Year 4 students' internships/practical training in the hospital in the academic year 2013–2014. They were informed in advance of the study's objectives and had consented to take part in it through their reflective journal entry. Eight reflections were collected in total.

The raw data collected from both the focus group discussions and from the instructors' reflections were analyzed on the basis of a general inductive approach. In other words, the transcripts of the focus group discussions, as well as the reflections' content were first repeatedly and rigorously read; then, they were coded; and finally, some of their text segments that contained major meaning units or themes were identified and labeled as categories, under which other pertinent text segments were included. These categories that surfaced were derived from the research objectives and from the various readings of the raw data. The researcher has presented them in the "Results" section below with their corresponding labels, descriptions, data or text, and discussion of the data. While the data collected through the questionnaire are displayed below quantitatively in Tables 1 and 2 in number of responses, these numbers indicate several important interpretations presented below qualitatively since the main objective of the questionnaire was to discover personal aspects, such as how the participants study (study habits), how they feel toward their studies and specializations, how they pay attention in their classes, how their parents feel toward their studies, etc., rather than what they study or when, which would have been more fit for a quantitative type of analysis.

To ensure credibility of the research findings, the researcher made sure to go back to the participants in the end of the study for verification of the data interpretations. All interpretations were recognized, confirmed, and agreed upon by the participating students and instructors.

6. Results

6.1. The questionnaire

6.1.1. Questionnaire findings
Below are two tables (Tables 1 and 2) which display, respectively, the demographical data and the responses of the 60 participants who participated in the questionnaire.

The demographic data of the sample of participants indicate that the majority of the students (78.3%) reside in villages and that a huge number of them (91.7%) belong to parents' with a low socioeconomic level, with the majority (60%) coming from underprivileged or poor families and some (31.7%) from low middle-class families. With respect to parents' education level, less than half (41.7%) of the students have fathers with a high school degree or above, and even less (30%) have mothers with the same qualifications.

The findings displayed in Table 2 indicate important interpretations pertaining to the focal points of the 10 survey items: the participants' study habits (Items 8 and 9); study interests or likes and dislikes (Items 10 and 11); attention in classes (Items 12 and 13); disciplinary problems (Item 14); feelings toward their areas of specialization (Items 15 and 16); and their parents' feelings toward their education (Item 17). These interpretations are presented in the subsequent section with their analyses.

Table 1. Demographics		
No.	**Category**	**Data**
1	Gender	19 Male
		41 Females
2	Area of specialization	20 Nursing
		20 MLT
		20 Pharmacy technician
3	Year of study	15 Year 1
		15 Year 2
		15 Year3
		15 Year 4
4	Place of residence	13 (21.7%) Urban/city
		47 (78.3%) Rural/village
5	Father's level of education	15 (25%) Elementary
		20 (33.3%) Middle school
		16 (26.7%) High school
		9 (15%) University (Undergraduate) 0 University (Graduate)
6	Mother's level of education	19 (31.7%) Elementary
		23 (38.3%) Middle school
		11 (18.3%) High school
		7 (11.7%) University (Undergraduate)
		0University (Graduate)
7	Parents' socioeconomic level	36 (60%) Underprivileged/poor
		19 (31.7%) Low middle class
		5 (8.3%) Upper middle class
		0 High class/wealthy

Table 2. Student responses					
Item	**Responses**				
8	13/60 study daily	21.7%	47/60 do not study daily	78.3%	
9	5/13 who study daily, study 1–2 hours per day	38.5%	7/13 who study daily, study 2–3 h per day	53.8%	1/13 who study daily, studies for 3 or more hours per day — 7.7%
10	21/60 always enjoy coming to the college	35%	33/60 sometimes enjoy coming to the college	55%	6/60 do not at all enjoy coming to the college — 10%
11	8/60 like all their subjects of study	13.3%	39/60 like only some of their subjects	65%	13/60 like none of their subjects — 21.7%
12	12/60 say that it is usually easy for them to pay attention in all their classes	20%	37/60 said that it is sometimes easy to pay attention but not in all their classes	61.7%	11/60 said that it is never easy for them to pay attention in any of their classes — 18.3%
13	23/60 find what they are studying meaningful most of the time	38.3%	28/60 only sometimes find what they are studying meaningful	46.7%	9/60 never find what they are studying meaningful — 15%
14	15/60 have been in trouble at the university many times (e.g. caught cheating, plagiarizing, being tardy to class, not attending classes enough, and being messy)?	25%	33/60 have been in trouble only a few times	55%	12/60 have never been in any kind of trouble — 20%
15	11/60 have never wished that they were enrolled in a different major than their current one	18.3%	18/60 have often wished that they were enrolled in a different major than their current one	30%	31/60 have wished only once or twice that they were enrolled in a different major than their current one. — 51.7%
16	27/60 definitely feel proud of what you are studying	45%	18/60 think that they are proud of what they are studying	30%	15/60 do not really feel proud of what they are studying. — 25%
17	18/60 Definitely feel that their parents are proud of what they are studying	30%	31/60 are not really sure if their parents are proud of what they are studying	51.7%	11/60 do not really feel that their parents are proud of what they are studying — 18.3%

6.1.2. Analysis of questionnaire findings

(a) Study habits (Items 8 and 9)

With respect to study habits, the results indicate that the majority of the students (78.3%) do not study daily and from the minority (21.7%) who do, only 7.7%, which is a relatively very small number of students, study three or more hours per day. Keeping in mind a good and well-known rule of thumb for success in college, namely that at least two hours of study time are usually required per credit hour, then it follows that for any three-credit course, at least six hours of study are required per week. Since students at HSC are not allowed to take less than 12 credits per semester, then it follows that per week, they ideally should be putting in at least 24 hours of study time. It is safe to deduce, therefore, that in our research investigation, even the few participants who do actually study daily and for 3 hours or more per day are barely putting in the hours needed for ensured success. All of this may point possibly to insufficient motivation to study on the part of most HSC students, which therefore can hinder effective student learning and high-quality academic performance (Barlia, 1999; Cavas, 2011).

(b) Study interests (likes and dislikes) (Items 10 and 11)

The questionnaire results show that 10% of the 60 students do not at all enjoy coming to college, while more than half (55%) only sometimes enjoy coming, and some (35%) always enjoy coming to college. Although the data indicate that a good number of students at least enjoy coming sometimes to the college, this does not necessarily have to mean that they enjoy coming because they are motivated to study. They may enjoy coming for other reasons like possibly to meet and socialize with people of their same age group or, in the case of the girls especially, to just get out of the house, which in a strictly conservative culture they do not get too many chances to do on their own. With respect to whether the students like their subjects of study, the majority (13.3% plus 65%) reported to like at least some of their subjects, which is a positive thing. Still, however, there is a good number of students (21.7%) who like absolutely none of their subjects and this is quite alarming since one wonders about what level of motivation they could possibly have to study when they dislike all their subjects.

(c) Attention in classes (Items 1 and 13)

More than half of the participants (61.7%) find it sometimes easy to pay attention but not in all their classes and some of them (18.3%) find it never easy to pay attention in any of their classes. About the same number (20%) find it easy to pay attention in all their classes. This means that around 80% are having difficulty paying attention in at least some class and this is a big percentage that needs to be seriously considered, especially due to the prominent roles paying attention in class and participation play in students' achievement and motivation to learn (Voelkl, 1995). The data also indicated that only some students (38.3%) find what they are studying meaningful most of the time. This implies that the remaining students do not find meaning in what they are studying, either sometimes (46.7%) or even all the time (15%). In Maslow's terms, this points to the possibility of their psychosocial needs not being fulfilled in their classroom. Since meaningful and relevant learning experiences are crucial for interest in learning (Brozo, 2005), it follows that the chances of such students' motivation to be high are most probably quite low.

(d) Disciplinary problems (Item 14)

The data indicate that the majority of the student participants have been in some kind of trouble (80%) while at the college, either for cheating or plagiarizing, or being tardy or messy, or for not attending classes regularly. This is a large percentage, even if most of the students (55%) have been in trouble only a few times. The fact that the students have engaged in such acts as cheating,

plagiarizing, and being tardy indicates, if anything, a lack of interest in putting in the sufficient effort needed for good or even acceptable academic performance.

(e) Feelings toward specialization (Items 15 and16)

The majority of the student participants (51.7% and 30%) have wished—even if just once or twice—to having been enrolled in a major other than their own while only some (18.3%) seem completely satisfied with their current area of specialization. Clearly, satisfaction with what one is doing or studying is important for motivation. Since the majority of the students (81.7%) do not seem to always be 100% convinced about or satisfied with their major, this may imply a fluctuation in their motivation levels and, consequentially, an inconsistency in their performance, based on how they are feeling toward their specialization at a particular time. The more serious problem, of course, is with the 30% who have often wished that they had majored in something else. This makes one wonder why they were at HSC to begin with.

In relation to feeling satisfied with one's major is the feeling of pride. The data indicate that a quarter of the participants do not feel proud of what they are studying and more than half of them happen to be nursing majors. Again, this makes us wonder about those students' presence at the college and their enrollment in a specific program: Are they there just because of the scholarship or because they could not get accepted anywhere else? Or were they pressured somehow to enroll at HSC or to take on a certain major? A quarter is a significant number, especially when a little more of them (30%) only think that they are proud of what they are studying and are not quite sure.

(f) Parents' feelings toward their children's education (Item 17)

When it comes to whether the students' parents feel proud of what their children are studying, more than half of the study participants (51.7%) reported that they are not really sure of how their parents feel. It could therefore be that the parents are proud but do not express it or maybe, due to the low educational background of many parents, they do not even comprehend or know exactly what their children are studying. In any case, not being certain of how their parents feel does nothing to help motivate the students. The situation is worse for the students (18.3% of them) who do not feel that their parents are proud of what they are studying.

To conclude, from the data collected through the questionnaire, therefore, we do not sense that there is a high level of motivation among the students at HSC, mainly because of the following indicative points:

- Students, in general, not putting in enough study hours
- Some students not interested in coming to the college and some not liking most of their subjects of study
- Some not paying attention in class and not finding what they are studying meaningful
- Most students having been in some kind of trouble in the college
- Some students not satisfied with their areas of specialty and some not feeling proud of what they are studying, and
- Some students not feeling that their parents are proud of what they are studying and others not really sure of how their parents feel.

6.2. The focus group discussion and the journal reflections

6.2.1. Findings from the focus group discussion
The four themes or categories below surfaced from the focus group discussion of 12 students.

6.2.1.1. Reasons for major of study. The reasons given by the focus group students for why they chose their particular majors varied. A repeated response was that the major was chosen out of interest. Some unique reasons were given in the following student quotes:

- "I am studying nursing because it is the only major I got accepted in"
- "I am majoring in pharmacy because it is what my father wants me to study"
- "When I chose medical lab technology, I chose it first because of the scholarship and the guaranteed job after graduation and second because it is cleaner than nursing and requires less years of study than pharmacy"
- "I chose nursing because as a profession it is more fitting for women than other health sciences majors and because I feel that its course requirements are easier than those of other subjects"
- "I first wanted to choose nursing but my parents would not accept that I be given night duty when I actually start working; as a result, I chose MLT instead."
- "I got accepted in pharmacy first but then when I discovered that to graduate, I would have to study for 6 whole years, I shifted to nursing which requires only 5 years with the foundation year. Finishing early is important for me because I do not want to delay working and helping my parents and siblings financially."
- "I originally wanted to become a nurse but my parents refused. They kept telling me that they will not have me cleaning after people and serving them and that it would be better if I stayed home altogether. To get out of the house, I decided to major in pharmacy, which they do not seem to have a problem with."

6.2.1.2. Challenges faced at the college. The prominent challenge reported by the students is the fact that a lot of their courses are taught in English. Another challenge is the high level of math and science courses in comparison to what they were studying in school, which therefore develops in them a feeling of lack of proper preparation for college. Other challenges mentioned include the great number of assignments; insufficient time to do all that is required; the long time spent commuting to and from the college, especially in the case of the majority of students living in far-away villages; the lack of understanding of some of the instructors; procrastination; loss of interest in one's studies; and not seeing in the eyes of others the importance or value of what they are studying. One student expressed this last point by saying "Many people think that I am wasting my time by studying a major such as nursing, when I could have probably majored in something more admired socially." Another student said, "My friends think I am totally crazy for willing to spend 6 years of my life studying to graduate with a pharmacy technician degree, when in the same period of time I could possibly graduate with a medical doctor degree."

6.1.2.3. Perceptions of education. When the 12 focus group members were asked about what education means to them, the recurrent theme was that education is a means to a better financial and social future; with the college degree, one can get a better job and can therefore assist their family and secure a better life for themselves. Another theme that was mentioned by a few girls was that education is a way for them to get out of the house every day, see their friends, meet new people, and socialize. One girl added, "Every time I want to go out of the house, my parents give me a lecture and ask too many questions about where I am going and with whom, the occasion, and what time I will be back. And usually I have to be accompanied by my mother or elder sister. When I am coming to college, I simply have to tell them that I have classes to attend and I end up getting better social experiences than my other outings." Two of the male students mentioned that they are enrolled in the college mainly because of the stipend they receive from the Saudi National Human Resources Fund for enrolling in such health science majors. To quote them exactly, they said: "If to get our hands on the money, we have to get an education, then why not?" This indicates that their first priority is money and not education itself.

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6.2.1.4. Family environment and relationship with parents. A recurrent theme here was that the students' parents are supportive and want their children to do well in their studies, even though they don't always understand the nature of the courses their children are taking. One theme unique to the male students was that even though their parents are proud of them for being in college, they still would have preferred if they were working and making a living instead in order to help the family financially. From the focus group discussion, no actual involvement from the parents in their children's education was evident; in some cases, the involvement was restricted to their prayers for their children's success.

6.2.2. Findings from the journal reflections
The eight instructor reflections regarding the challenges and difficulties faced during internship sessions indicated no serious issues with pharmacy and MLT students. In the case of the female nursing students, however, the situation was quite different. The instructors reported the recurrent problem of some female students under training completely refusing to attend to male patients at the hospital, even if they were just required to practice taking their vital signs. While in the cases where the female students were more open to the idea, they tended to exhibit a great deal of ignorance or unfamiliarity and, even in some cases, fear and anxiety when having to deal with the males. Another problem that surfaced had to do more with the social image and prestige of the student nurses on training. While at the hospital, completing certain required tasks and assignments, a great deal of hesitation—and sometimes total rejection even—was exhibited from the side of the students, with respect to doing certain tasks they considered as degrading—such as cleaning after the patients or giving them a sponge bath, replacing patients' catheter bags, and changing diapers. Looking at these tasks as degrading is probably influenced by the widespread cultural misperception in Saudi society that such tasks are a servant's or a maid's job, even though they are usually completed by expatriate nurses in hospitals with no problem.

7. Discussion

The data analysis above helped in identifying the main issues HSC students struggle with and which directly and indirectly impact both their motivation levels and student learning issues like: poor study habits; difficulties in paying attention in class; dislike toward their subjects of study; not finding meaning in what they are studying; facing disciplinary problems; not being convinced with their major of study and not feeling proud of it; lack of certainty with respect to how their parents feel toward their education; challenging English medium of instruction and math and science courses; and challenges and difficulties related to social image and prestige during internship, especially for the female nursing students. These issues impacting HSC students happen to be in nature consistent with the factors indicated by other research studies in the literature (Brophy, 1998; Garcia, 1995; Nolen & Haladyna, 1989; Pintrich & Schunk, 1996; Singh et al., 2002) as the main determinants of motivation, namely: psychological, social, and cultural.

In addition, the data analysis of this study indicated, in particular, the power of some cultural influences on student motivation and achievement. This is evident, for example, in how students perceive certain majors like nursing as female-only; how the nursing students refuse to engage in certain tasks during internship because they perceive them as degrading and as duties to be done by employees of other nationalities; how they also refuse to attend to male patients due to having been accustomed all their lives to stay away from strange men; and how education is perceived by students and parents in many cases as an investment leading to a better future life. This power of Saudi cultural influences on student motivation and achievement indicated by the data analysis is very much in line with this study's conceptual belief that a strong link exists between culture and motivation, as earlier studies of Driscoll (1994) and Weiner (1990) had shown.

Despite the fact that this study's data analysis identified the main issues HSC students struggle with and which directly and indirectly impact both their motivation levels and learning and hinted to how HSC students' motivation and achievement are influenced by social and cultural factors, it did

not explicitly point out what these factors may be. Discussing what these factors could be is what will be covered in this discussion section of the paper.

Certainly, identifying such cultural factors exclusively and with precision is not possible for "human beings in general and students in particular are complex creatures with complex needs and desires" (Williams & Williams, 2011). It is therefore very difficult to judge what exactly could be impacting them and their motivation, as it could be a mixture of aspects and dynamics all at one time. For this reason, this study attempted only to answer the question: "What are some factors and values existing in Saudi culture that could possibly be having an impacting role on students" levels and types of motivation at HSC' and did not attempt to definitely identify such factors. The expectation, in our discussion here, should therefore be that by examining the culture–motivation link further in the Saudi context, we will only be able to reason about the cultural factors most relevant to this study, and which have a high probability rate of being linked to the main motivational issues of HSC indicated by our empirical investigation above. Below is a list of these factors with potential explanations related to each of them.

- Gender stereotyping with respect to careers: There seems to be a general perception in the Saudi society that certain careers or specializations are restricted only to a certain gender. One of these specializations is nursing. Even when there is talk about what a nurse did or said, automatically there is this image in the mind that the nurse is a female. This perception is historically found in many societies and cultures (McCutcheon, 1996) and is not unique to Saudi Arabia. Unfortunately, however, it can have a negative influence on high school male graduates trying to decide on a health science major in college, in that it can easily discourage and demotivate them from enrolling in a nursing program. This may eventually lead to a serious work-related problem, embodied in a scarcity of Saudi male nurses in hospitals, which necessitates the recruitment of expatriate male nurses, who often do not speak the same language of their patients nor can understand certain cultural peculiarities specific to Saudi society. The observation at HSC of no male students enrolling in nursing, despite the fact that the program is open for both genders, is highly probable as evidence of the power of this stereotypical perception.

- Appreciation of completing studies and graduating early: There seems to be in the Arab World in general an appreciation for graduating from college and joining the workforce as early as possible, and Saudi Arabia is no exception. This appreciation among students probably goes back to their association of college graduation and employment with personal independence, just as high school students tend to view their graduation from high school and transition to college as a form of independence (Spence & Barnett, 2006). It could also be that a part of students' motivation to graduate early goes back to boredom at college, as Dainow (2001) discovered. Other studies (e.g. Stanley & Sandhofer, 1997) have also shown parental pressure to be behind students choosing accelerated education in some cases while a study by Firmin and Gilson (2007) indicated a student's future plans to pursue further studies as a motivating factor. Regardless of the reasons, we tend to find a number of college students sometimes taking a high number of credits per semester and there are some who opt for taking courses in the summer, to possibly enable them to graduate at least a semester or even a year earlier. Such decisions and steps do not always work to the benefit of the students since many of them end up suffering from a number of negative consequences, like: stress and burnout due to the credit overload; lower grades and lower performance than they normally would have had without the overload; and poor quality of submitted assignments due to pressure and time constraints. This appreciation of graduating early may also decrease students' motivation to choose, and leads them to refrain from enrolling in college programs that are considerably longer in duration than others. The observation at HSC of fewer students majoring as pharmacy technicians, compared to other health science majors, could be indicative of this cultural type of appreciation, especially since many HSC students of other majors were actually originally interested in studying pharmacy but then ended up selecting something else. As evident in our empirical study results, some students openly admitted that the reason why they did not choose pharmacy is because it required

six years of study with the foundation/preparation year, while other programs required only five. The impact of fewer students selecting pharmacy could have implications on other majors since this could lead to an excess of graduates of other health science specialties, for whom, at one point, there may not be sufficient jobs available.

- Stereotypes regarding careers: Another stereotypical perception apparent in Saudi society is that jobs like nursing, MLT, pharmacy, or X-ray technician are not prestigious and, as a result, are not befitting enough for those who are well-off. What reinforces this perception is: (1) the fact that such jobs in Saudi Arabia are usually occupied by expatriates from much poorer Arab and South Asian countries, like: Egypt, Syria, the Philippines, India, Bangladesh, and Pakistan and (2) when compared with certain professions like medicine, law, and engineering, they score significantly less on the scale of highly esteemed jobs. Observing HSC, the majority of students coming from a low socioeconomic background and belonging to either illiterate or poorly educated parents could be living proof of this dominating stereotypical perception and its power to demotivate the economically advantaged from specializing in such professions. If one looks closely, such a stereotype could become a root cause of a serious social problem, represented by an accentuation of the divide between the economically advantaged and the disadvantaged in Saudi society. This is in addition to the possibility of negatively impacting the self-image and self-esteem of students who actually find themselves majoring in such unfairly sneered at specializations. This may have an indirect impact on how these students themselves start valuing their area of specialization and on their motivation to work hard and succeed in it. This is especially true since one of the challenges mentioned by students in the focus group discussion had to do with "not seeing in the eyes of others the importance or value of what they are studying."

- Family background and socioeconomic factors: Research studies have indicated that students who are socioeconomically disadvantaged are less likely than their more advantaged peers to benefit from parental attention, activities, and resources that both stimulate cognitive, non-cognitive, and soft skills and promote autonomy, positive social relationships, motivation, and achievement (Heckman, 2011; McLanahan, 2004). This is due to the fact that these students usually "…have fewer opportunities at home that foster competence, encourage them to find interest or see value in learning" (Center on Education Policy, 2012) and nurture curiosity and exploration (Gottfried et al., 1998). Although not a rule, this is often more evident in family contexts where the parents are also of a low educational level; for as Duncan and Magnuson (2005) have shown, the educational and skills levels of the parents play a significant role in their children's development. The fact that the majority of HSC students come from a low socioeconomic status and possess either poorly educated or even illiterate parents could be an explanation of why many of them, especially in the first couple of years at the college, exhibit violations of rules and regulations, lack of interest in learning, low curiosity level, short attention span, low self-efficacy, and minimal effort. Simply put, their behaviors and attitudes may happen to be the result of their family environments, which most probably lack the resources needed for developing them and preparing them cognitively, personally, emotionally, and socially for college life. It is true that schools and teachers also have a significant part in such development; still, however, research has emphasized the role and involvement of parents as a necessity. In the words of Grolnick, Friendly, and Bellas (2009), "When parents believe in children's competence and have high expectations for them, provide the resources that children need to feel connected to others, and facilitate a sense of autonomy by supporting children's initiations and problem-solving, children's motivation is most likely to thrive." (p. 295) The opposite is also unfortunately to a high extent true. Still and unsurprisingly, despite all this, some students at HSC, coming from similar disadvantaged family and socioeconomic backgrounds, were observed to be highly motivated, diligent, outstanding in performance, and socially and emotionally intelligent. Besides psychological factors that could be behind these students' commendable traits, skills, and successful experiences, there could possibly also be cultural factors as well, as explained in the bullet points below.

- Perceiving education as a means to an end: In Saudi Arabia, like elsewhere in the world, there are those—especially the disadvantaged economically or who have lost everything in their lives (e.g. refugees)—who look at education as an investment (Ugland 2003) and see their children as a source of hope to the point that raising their children well, educating them, and helping them succeed becomes a major life project for them (Miller et al., 2002). Many of their children (or students) themselves also feel that they are obliged to succeed at education and life in order to compensate their parents for the chances they did not have when younger (Rousseau & Drapeau, 2000). For this reason, these students end up having high levels of motivation, determination, and resilience and try to seize every opportunity they find to study and do well. For example, therefore, a scholarship like the one provided to HSC students by the Saudi National Human Resources Fund, along with the guaranteed job after graduation, would be both looked at by disadvantaged but highly motivated and determined students as golden opportunities to improve their families' financial and social statuses. The small category of few but outstanding students at HSC most probably views education this way. What marks the difference, therefore, between it and the rest of the less-motivated students could basically be the differences in family values toward education. It is highly probable that in the first case, the students have behind them families that highly value education and see it as an important means to a noble end and, therefore, tend to form a strong support system for their children, whereas in the second case of students, the exact opposite is highly probable, especially since a considerable number of them have been observed talking about: (1) how their parents preferred having them (in the case of the males) financially assisting them by taking on a certain job, rather than spending time at the college or (2) how they (in the case of the girls) were just coming to the college as an excuse to get out of the house and socialize, to escape family restrictions on their daily freedom, or to avoid household chores and demands, in which case, they did not really see a value to education but were just using it as an alibi.

- Ultra-conservatism: The results of the empirical investigation showed how in the internship years of the nursing program at HSC, some female students under training completely refused to attend to male patients at the hospital, and how when some of them eventually did, they tended to exhibit a great deal of ignorance or unfamiliarity and, even in some cases, fear and anxiety when doing so. As is well known, Saudi society is ultra-conservative in culture and is highly segregated gender-wise and so Saudi girls and boys are not normally brought up from a young age to deal with persons of the opposite gender, unless they are very close relatives to them. Attending to a total grown-up stranger of the opposite gender can prove to be, therefore, a true challenge to Saudi young ladies, especially to ones with the same SES as the HSC students, who probably did not get too many opportunities to travel abroad and experience more open cultures as they were growing up.

- Social image and prestige: Another internship problem that was revealed through our empirical investigation had to do more with the social image and prestige of the student nurses on training, for they tended to perceive certain tasks and responsibilities as degrading and demeaning. This perception, as was explained before, is probably influenced by the widespread cultural misperception in Saudi society that such tasks are a servant's or a maid's job, even though they are usually completed by expatriate nurses in hospitals with no problem. It is true that "the unprecedented openness to new educational resources and cultural perspectives is leading Saudi Arabia's younger generation to become less traditional and strict in their views" (Hamdan, 2014, p. 310); nevertheless, the fact remains that some perceptions/misperceptions are so deeply rooted in Saudi culture that it will take considerable time before changes in these perceptions, as well as corrections to the misperceptions, do actually take place.

With these limited but important social and cultural factors unveiled, a clearer picture is hopefully drawn regarding the forces that influence and drive HSC students when making behavioral and learning choices and decisions. A clearer, although not a complete, picture is also hopefully portrayed with respect to why certain motivational differences exist among students, despite similarities in SES and background.

8. Conclusions and recommendations

It is a fact that the HSC students who participated in this study are limited in number and do not represent all Saudi students. It is also a fact that other health science colleges in Saudi Arabia may have totally different types of students in terms of SES, motivation level, academic performance, and social behavior. Despite this, it may still be safe to at least take into consideration some of the factors outlined here and the connections made when studying student motivation in other institutions of higher education in Saudi Arabia—factors like gender stereotyping, appreciation of early graduation, stereotypes regarding career status, family background and parents' educational levels, value attributed to education, ultra-conservatism, and social image and prestige. This is mainly due to the fact that this study has highlighted how such factors could strongly influence what the students choose to study, how they academically perform, how they behave socially, how they view themselves, and how they react toward tasks and duties that are an essential part of their future jobs. The impact on such important and relevant aspects is obviously significant, regardless of educational context or major of study. For this reason, it is safe to assume that the factors discussed in this study and the connections made could act as potential eye-openers to other researchers, educators, and higher education institutions. Of course, a more comprehensive empirical study, with the same purposes as this one, but which also takes into consideration not only social and cultural factors influencing student motivation but also psychological ones, could present a more accurate account of factors influencing student motivation at HSC and to possibly yield more generalizable conclusions. Nevertheless, even with the limitations of this study, it is still possible to deduce a number of key implications and recommendations from it, some of which are public related while others are more college specific, as can be found below.

8.1. College-specific implications and recommendations

- Health science programs in Saudi colleges and universities need to be revised in ways that ensure the inclusion of an early orientation of students to their areas of specialties, so that they discover in advance exactly what tasks and duties to expect in their internship years, instead of getting shocked and alarmed by some of the requirements later on.
- College counseling and guidance services need to be continuously made available for students to advise them on a number of issues related to their learning and behavioral choices, while at the same time focusing on educating students desiring to graduate early on the possible negative consequences of such a decision.
- Success stories of previous health science students from a disadvantaged SES need to be shared in health science colleges that have a majority of students who do not really see the value of education or who just assign a minimal importance to it.

8.2. Public-related implications and recommendations

- Serious social efforts and policies are needed in Saudi Arabia (and elsewhere as a matter of fact) to discover ways and incentives that could encourage males to enroll in programs such as nursing, which are usually perceived as female specific.
- Public awareness campaigns and initiatives are critically needed in Saudi Arabia, as well as other rich Arab Gulf countries, to educate people about the nobleness and value of certain health science professions like nursing, MLT, pharmacy technician, X-ray technician, etc. and to eradicate the perception that such jobs are only for a certain socioeconomic class.
- Similar to the suggestion made by the Center on Education Policy at the George Washington University, culturally sensitive programs that educate about supportive parenting are needed to be developed by the Saudi public under the sponsorship of the government, as a crucial attempt for fostering student motivation.
- The Saudi Government needs to encourage the private sector to open up state-of-the-art health science colleges that target the middle and upper-middle classes of society in order to attract

students to enroll in specializations other than medicine. What would help also is for these same colleges to open up graduate programs in the same areas of specializations, so as to give motivated students who are economically advantaged more of an incentive to major in such areas of specialization.

Certainly, this list of implications and recommendations is not exclusive; many more may be added to it, especially if future empirical studies are conducted in similar areas of focus. It is actually highly recommended here that such studies be conducted, especially since research on student motivation and on health sciences education in the Saudi context are highly scarce in the scientific literature. This paper, as a result, proposes that the Ministry of Higher Education and the Ministry of Health in Saudi Arabia make available a number of grants for researchers to conduct widespread research in this area. It also proposes that private colleges of health sciences in Saudi Arabia themselves provide the right channels and the needed resources for conducting comparative research studies between them about this same topic of student motivation and health sciences education in order to draw a clearer picture about it, from which more credible generalizations could possibly be derived.

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Appendix A

Part one: Demographic information

(1) Gender: _____ Male _____ Female

(2) Area of specialization: _____ Nursing _____ MLT _____ Pharmacy technician

(3) Year of study: _____ Year 1 _____ Year 2 _____ Year 3 _____ Year 4

(4) Place of residence: _____ Urban/City _____ Rural/Village

(5) Father's level of education: ___ Elementary ___ Middle school ___ High school

   _____ University (Undergraduate) _____ University (Graduate)

(6) Mother's Level of Education: ___ Elementary ___ Middle School ___ High School

   _____ University (Undergraduate) _____ University (Graduate)

(7) Parents' Socioeconomic Level: _____ Underprivileged/Poor

   _____ Low Middle Class
   _____ Upper Middle Class
   _____ High Class/Wealthy

Part two: Questions

(8) Do you usually study on a daily basis?

   (a) _____ Yes, every day of the week
   (b) _____ No, not every day

(9) If you study on a daily basis, how many hours per day do you study?

   (a) _____ 0–1 hour
   (b) _____ 1–2 hours
   (c) _____ 2–3 hours
   (d) _____ 3 or more hours

(10) Do you enjoy coming to college?

   (a) _____ Yes, always
   (b) _____ Sometimes
   (c) _____ No, not at all

(11) Do you like your subjects of study?

   (a) _____ Yes, all of them
   (b) _____ Only some of them
   (c) _____ No, none of them.

(12) Is it easy for you to pay attention in class?

(a) _____ Usually yes, in all my classes
(b) _____Sometimes, but not in all my classes
(c) _____ Never, not in a single class

(13) Do you find what you are studying meaningful?

(a) _____ Yes, most of the time
(b) _____ Only sometimes
(c) _____Never

(14) Have you ever been in any kind of trouble at the university (e.g. caught cheating, plagiarizing, being tardy to class, not attending classes enough, and being messy)?

(a) _____ Yes, many times
(b) _____ Yes, only a few times
(c) _____ No, never

(15) Have you ever wished you were enrolled in a different major than your current one?

(a) _____ No, never
(b) _____ Yes, often
(c) _____Yes, but only once or twice

(16) Do you feel proud of what you are studying?

(a) _____ Yes, definitely
(b) _____ I think so
(c) _____No, not really

(17) Do you feel that your parents are proud of what you are studying?

(a) _____ Yes, definitely
(b) _____ I am not sure
(c) _____ No, not really

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