

How to Cite:

Al-Hendawi, M., & Nasser, R. N. (2022). The socioeconomic status of girls and boys relating to their psychological health: Emotional and behavioral difficulties in Qatar. *International Journal of Health Sciences*, 6(S4), 5274–5290.
<https://doi.org/10.53730/ijhs.v6nS4.10076>

The socioeconomic status of girls and boys relating to their psychological health: Emotional and behavioral difficulties in Qatar

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Abstract---Socioeconomic status is an important exogenous factor impacting the child's psychology and well-being. Participants in this study included students from grades 8, 10, 11, and 12 from Qatar. To measure emotional and behavioral problems, the students completed self-report questionnaires on socioeconomic indicators, gender, age, and the Strengths and Difficulties Questionnaire. Confirmatory factor analysis was performed, and the model was improved by removing poorly loaded items. ANOVA was performed using an improved version of the model. The highest means were for emotional problems. The adolescents were mostly normal across all domains of the emotional and behavioral problem dimensions. In the univariate analysis, socioeconomic status was inversely related to all emotional and behavioral problem domains. The higher socioeconomic status the lower the emotional and behavioral problems. Girls had higher levels of emotional and behavioral problems, specifically related to emotional domains. There were no interaction effects between gender and socioeconomic status. The main significant differences found between males and females on emotional problems. In addition, a mean difference between high and average socioeconomic status on emotional problems was found. Similarly, there was a significant difference found between high economic status and middle and low socioeconomic status for peer problems. Thus, this study suggests that socioeconomic status affects child outcomes in a country with a high level of relative wealth, underscoring the importance of assessing income and education status separately in future studies.

Keywords---emotional, behavioral problems, gender, socioeconomic status, wellbeing, emotional problems, peer problems, Qatar.

Introduction

Emotional and behavioral difficulties (EBDs) are disabling factors characterized by adverse or abnormal emotional or behavioral responses in schools and homes. Emotional and behavioral problems (EBPs) differ according to sociodemographic factors that adversely affect educational performance, social interaction, and psychological well-being. Adverse emotional and behavioral problems arise from stressful events in the environment and are consistently exhibited in settings, as in school, and home. EBPs may exhibit externalizing behavioral disorders such as aggression, fighting, peer rejections disruptions, impulsiveness, lack of focus, lack of control and oppositional disorders (Furlong et al., 2004; Severson, et al., 2007; Tarolla, et al., 2002). They may also show poor social and personal skills in making friends and engaging with peers and communities (Dunlap & Childs, 1996). The outcomes of EBPs lead to general decrease in wellbeing as in psychological diseases, such as depression, low involvement, and passive/avoidant behaviors (Gresham & Kern, 2004) impacting drastically children's poor academic outcomes (Van der Ende et al., 2016). If stressors are more than temporary EBPs would persist even with individualized interventions (Coutinho et al., 2000). These problems could be permanently disabling if they are not diagnosed early followed with appropriate interventions.

A corpus of studies globally and regionally has address the adolescents' EBPs as in Asia. For instance, studies from China (Du, Kou & Coghill, 2008; Wang et al., 2014), Pakistan (Samad et al., 2005), South Korea (Kim et al., 2014), Thailand (Teekavanich et al), Turkish children (Erol, 2005), Iran (Godarzi et al., 2012) and Japan (Matsuishi et al., 2008) and in the Middle East, Egypt (Elhamid et al., 2009; Mowafy et al., 2015), Jordan (Gearing et al., 2014; Atoum et al., 2018), Lebanon (Ponguta et al., 2020), Oman (Emam, Kazem, & Al-Zubaidy, 2016; El-Keshky & Emam, 2015; Al-Mukhani et al., 2018), Palestine (Thabet et al., 2004), United Arab Emirates (Eapen et al., 1998), Saudi Arabia (Abdel-Fattah et al., 2004; El-Keshky & Emam, 2014; Al-Modayfer & Alatiq, 2015) and Yemen (Alyahri & Goodman, 2006) reflect the pathology of cross-sections of the population as male and female but lack in the understanding of gender interactions with high or low socioeconomic status. Nor do they reflect the influence of social, political, and economic changes on adolescents' psychological well-being (Konowalek & Wolanczyk, 2018). Policymakers and education professionals can learn from the scope of the studies and this one contributing to teenagers' emotional and behavioral problems.

Looking at emotional and behavioral problems without considering a broader context, such as living conditions, family background, and socioeconomic status, can be detrimental to children's psychopathologies. Children who do not have the right resources, a proper and rich environment, and options to get out of adverse and behavioral contexts can be detrimental to their emotional and behavioral psychopathologies (van Oort et al., 2011; Conger and Donnellan, 2007; Hosokawa & Katsura, 2018; Deater-Deckard et al. 2012). Socioeconomic status is one of the most important contextual factors affecting children's development (Conger and Donnellan 2007; Keating and Hertzman 1999; McLoyd 1998; van Oort et al. 2011). More importantly, the idea that low familial socioeconomic status can generate and increase the risk of mental health problems is well-established.

Parents who cannot remove their children from adverse environmental conditions or seek the help they need in counseling and psychiatric interventions are more likely to increase the risk of mental health (Conger and Donnellan 2007; van Oort et al. 2011). It is also well established that children with lower socioeconomic status have higher rates of developing psychopathology (Fryers et al., 2003; Lorant et al., 2003) having shown a greater level of aggressive behavior and attention problems (van Oort et al. 2011). The difference in socioeconomic status and its relation to EBD differ from one societal structure to another. In nations where class and annual income are wide and concentrated in one stratum in society, the relation between socioeconomic status and EBD could be salient. However, in a societal structure where affluence exists across different strata such relation might not exist. In this study we attempt to understand the relation between socioeconomic status and its relation to EBD in an affluent society like Qatar.

Qatar's level of income per capita has increased from \$29,914.26 in 2000 to \$93,352.02 in 2013 (Lanouar, Al-Malk & Al Karbi, 2016). Qatar ranks 36 in the human development category. There has also been an increase in human development initiatives with large amounts of financial resources in the country. The measure of the Human Development Index in Qatar is 0.88, with a maximum of 1.00. This placed Qatar in 35 of the 177 countries. However, other indices, such as the gender development index, ranked Qatar 84 of 93 countries with a score of 0.374 out of a possible 1.0 (Richer, 2014). In 2012, Qatar ranked 117 for gender inequality and had scores indicating lower life expectancy and years of schooling (Malik, 2012). Concomitantly, overall, there has been an increase in the Human Development Index for Qatar since 1980. Given the tremendous financial resources of the country, the relatively low score on the Human Development Index may be attributed in part to the paternalistic society, where women and children are generally disadvantaged. While socioeconomic status captures some elements of macro-societal structures, it may shed light on other elements such as social position, prestige, societal status, or even tribal status. It is well established that low socioeconomic level is significantly associated with poorer behavioral, cognitive, and social-emotional development among children (Conger and Donnellan 2007; McLoyd 1998; van Oort et al. 2011). Other questions might arise regarding the invariance of gender and whether socioeconomic differences are homogenous among boys and girls.

Gender is an important invariance factor in psychopathology, particularly in EBPs among adolescents. Men and women exhibit different emotional and behavioral problems in schools and homes. Specifically, boys' behaviors are consistently associated with hyperactivity and conduct disorders, whereas girls are prone to show higher emotional problems (Osman et al., 2019). However, such differences arise because of the biological and etiological basis of gender. Emotional and behavioral problems are culturally prone, making boys more likely to show fewer emotional problems. In a patriarchal cultural context, an emotionally maligned boy carries the stigma of being "abnormal," bridled, and pallid in the context of the Middle East. For girls, being hyperactive draws attention to girls as being unfeminine and masculine. Early identification of specific behavioral and emotional problems help health service workers to intervene to limit the progression of emotional and behavioral problems (Harrington et al., 1996).

Thus, this study aimed to identify the multiple characteristics of EBPs among adolescents in Qatar and their association with gender and socioeconomic status. Adolescents' perceptions are considered in terms of behavioral and emotional problems. Adolescents in schools provide a self-rating on the EBD instrument and socioeconomic status. The analysis seeks to address parents' socioeconomic and its univariate effects on children's emotional and behavioral problems.

The results of this study will be informative to teachers, community stakeholders, and policymakers who have the decision to provide effective psychological and social services in schools for children in need of help, support and therapy. This is in line with the early intervention and prevention philosophy where such problems occur, and there is a proactive system in place that deals with behavioral abnormalities. In particular, we underline human capacities in schools, and we believe that many schools lack the human resources to deal with mental diseases. As many social workers take on the role of psychologists, guidance counselors, and therapists, they are not trained in the psychophysiological field; this study might draw the attention of policymakers in recognizing the prehensile situation in schools and the community.

Methods

Design and Sample

The researchers approached the Ministry of Education and Higher Education in Doha, Qatar. The schools were selected from different areas of the city's municipalities, with more than 80% of the general population. Data about the schools was obtained from the Ministry of Education and Higher Education which allowed the researchers to select and recruit a sample of schools based on the following criteria: 1) An average performance of students in the school on the National Comprehensive Educational Exam (excluding schools with either high or low performance as only six schools for boys and girls would be chosen), and 2) the normative distribution of the students' nationalities, as indicated by the percentage of Qatari and non-Qatari students representing the national distribution.

Within each school, students were invited to participate in the study through a consent form given to them and sent to their parents. All students in grades 10, 11, and 12 participated in the study at the six schools selected for this study. The instruments were submitted to students through a link to their learning management systems (LMS). At the time of the study, there was a strict lockdown in schools due to the COVID-19 outbreak, and all learning was online. The Ministry of Education and Higher Education sent text messages as reminder prompts on the LMS for students to fill in the questionnaire(s) and submit it on the link.

Questionnaire

The Arabic version of the Strengths and Difficulties Questionnaire (SDQ) was used in this study. The subscale scores for emotional problems, conduct problems, hyperactivity, peer problems, and prosocial are rated 0-10. The total

difficulty score was calculated by adding the four difficulty subscales, except for the prosocial subscale. Each subscale had five items, and the maximum score for each subscale was 10. Scores on each item range from “0” only a little to “2” a great deal. The total score on the difficulty scale reaches 40 by adding the maximum scores on emotional problems, conduct problems, hyperactivity, and peer problems, indicating greater levels of difficulty. Total score on difficulties determines abnormality, borderline and normality: 20+ as clinically significant levels, 16-19 is indicative of a borderline, 0-15 is indicative of a normal range. In terms of the socioeconomic status, an appended questionnaire asked adolescents rate on 3-point scale: “1” below average, “2” average, and “3” above average.

Procedure

Ethical approval was granted by the Institutional Research Board (IRB) of Qatar University, which is assured by the Ministry of Public Health (IRB number: QU-IRB 90/11). The principal researchers met with the school office in the Ministry of Education and Higher Education to select the school and received approval from the ministry. The lead researcher also approached all school’s principal, who were informed of the research project. A description of the project was provided to parents with a consent form through the LMS system. Participants were informed that their results would be treated in confidence by the researcher and were not associated with their school marks and/or progress. Parents who electronically signed the consent form and approved their children to participate in the study. The adolescents in this study were sent the SDQ in Arabic through the LMS. The students fill the instruments and submit it online to the class coordinator. Each school would print the filled SDQ and background responses blinding the respondent and provide the information to the researchers.

Analysis

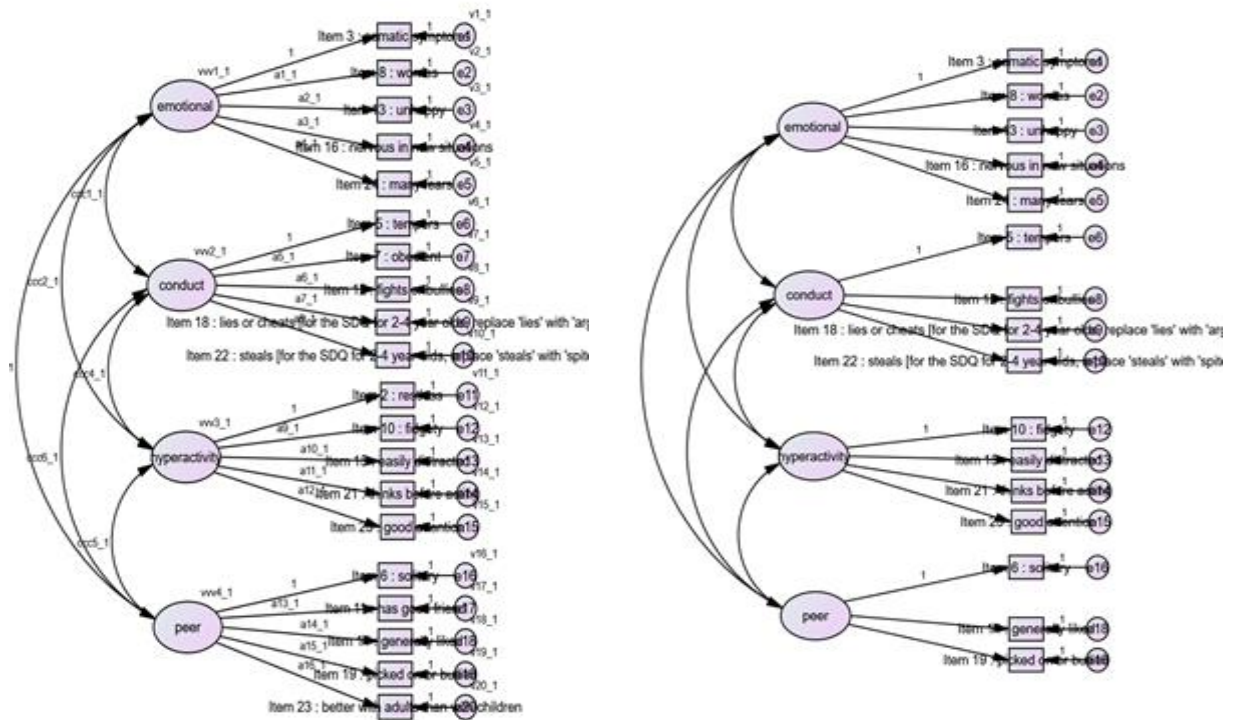
The data were analyzed using SPSS version 26. Analyses were performed to describe the sample, assess the reliability and validity of the SDQ and perform inferential statistics to determine difference among the independent variables. Several Analysis were conducted to address the psychometrics of the SDQ. A Cronbach analysis and confirmatory factor analysis was performed. The confirmatory factor model fit indices were offered to evaluate the appropriateness of our hypothesized model, The goodness-of-fit of the estimated models is evaluated based on the following criteria: (1) chi-square to degrees of freedom ratio (χ^2/df) lower than 5; (2) the goodness of fit (GFI), which is the proportion of variance accounted for by the estimated population covariance, should be close to 0.9 and higher; (3) the comparative fit index (CFI) compares the fit of a target model to the fit of an independent, or null, model, it should be greater than 0.9, and (4) the Root Mean Square Error of Approximation (RMSEA) lower than 0.08 (Hu & Bentler, 1999). Moreover, we interpreted the magnitudes of the standardized estimates. We considered estimates lower than 0.4 as low estimates. Once the model was improved we ran an ANOVA test using 2x3, gender by socioeconomic status respectively. Post-hoc tests were also run to address the differences among the variable with more than 2 levels (socioeconomic status) and any related interactions.

Results

The internal reliability of the scales and their subscales of the SDQ was assessed using Cronbach's alpha. Once the filled SDQ and background instruments were collected from the schools. The data was entered on a spreadsheet. All positively worded or reversed items were checked and entered into the data file. The total score of the SDQ was calculated for the emotional problem scale by summing the results of the five items that make up the subscale. A similar procedure was conducted for the other four subscales: conduct problems, hyperactivity, peer problems, and prosocial behavior. The total score of the total difficulty scale was calculated by summing the scores of the four difficulties subscales of the SDQ (emotional, peer problems, hyperactivity, and conduct problems).

The questionnaires were completed and self-rated at home by the young adolescents. Due to the COVID-19 lockdown, students were probed online through the LMS. There were 338 male students and 181 female students. The mean age of the students was $M=16.33$, $SD=1.1$, $n=519$; the mean age of the males was $M=16.4$, $SD=1.1$, $n=338$, and the mean age of the female students was $M=16.22$, $SD=1.13$, $n=181$. The socioeconomic status of the adolescents was $n=100$ (19.3%) below average, 325 (62.6%) average, and 94 (18.1%) above averages.

The SDQ is a widely used and the model is established, we performed confirmatory factor analysis (CFA), as shown in Figure 1, on the standard model of behavioral difficulties. The facet model included a prosocial subscale. However, we wanted to address these difficulties and remove the prosocial factor from the model.



$\chi^2/df= 4.4$ GFI=0.87, CFI=0.77, RMSEA=0.077, $\chi^2/df= 4.4$ GFI=0.9, CFI=0.835, $p=0.0$ RMSEA=0.08, $p=0.0$

Figure 1

CFA of the difficulties model for SDQ original and improved

Several items had loadings less than 0.4. Item 7 of the SDQ: “Generally obedient... (I usually do as I am told),” with a factor loading of 0.14 on the conduct factor. For the hyperactivity factor, was item 2 of the SDQ: “Restless, overactive... (I am restless...)” with a factor loading of 0.25, and lastly, for the peer problem factor, was item 11: “Has at least one good friend (I have one good friend or more) with a factor loading of 0.24 and item 23: “Gets on better with adults than with other children (I get on better with adults than with people my age)” with a factor loading of 0.05. Items with loadings less than 0.4 were removed from the data. The result of the CFA and the parameter estimates was as follows: $\chi^2/df= 4.4$ GFI=0.9, CFI=0.835, RMSEA=0.08, $p=0.0$. The results were acceptable but did not reach the level of merit. We wanted to explore the standardized residual covariance matrix to call out some of the estimates greater than one, but we were reluctant to move more items from the model to avoid losing the psychometric properties of the instrument. In Figure 1, the model on the left appears as the facet model, and the second is the improved model, with removed items that had estimates below 0.4 (mentioned above). All inferential statistics were calculated using the improved model. We calculated the means again by

removing the aforementioned items and calculating the difficulty subscales' reliability. The subscales showed improved and meritorious consistency. Table 1 presents the self-rated means and percentages of normal, borderline, and abnormal percentages for both the facet model as well as the improved model. The last three columns of the table show the statistical analysis of the improved model, including means, standard deviations, and Cronbach's alpha calculations.

Table 1
Mean rating on the difficulty subscales, average ratings, Cronbach alpha and percentage adolescents categorized as normal, at borderline, and abnormal (n=519)

	Original Model					Improved Model				
	StudentSD Rating	Cronbach alpha (No. of items)	Normal N (%)	Borderline N (%)	Abnormal N (%)	StudentSD Rating	Chronbach Alpha (No. of Items)			
Emotional Problems	2.57	2.34	0.8 (5)	460(88.6%)	16(3.1%)	0	43(8.3%)	2.57	2.34	0.8 (5)
Conduct Problems	1.73	1.53	0.5 (5)	458(88.2%)	30(5.8%)		31(6.0%)	1.13	1.3	0.6 (4)
Hyperactivity	3.15	2.11	0.6 (5)	447(86.1%)	38(7.3%)		34(6.6%)	2.33	1.8	0.6(4)
Peer Problems	2.81	1.67	0.4 (5)	360(69.4%)	123(23.7%)		36(6.9%)	1.33	1.2	0.5(3)
Prosocial	7.55	1.84	0.6 (5)	446(85.9%)	42(8.1%)		31(6.0%)			
Difficulty	10.25	5.92	0.8 (20)	360(69.4%)	123(23.7%)		36(6.9%)	7.36	5.4	0.9 (16)

The reliability analysis was improved with the new model. The improved model had a Cronbach $\alpha > 0.6$ with exception to peer problems. But the Cronbach alpha reached 0.5 using the improved model. The adolescents also showed normality in their behaviors. The percentage of abnormal behaviors were less than 10% of the sample.

The main analysis of the study was conducted with a 2x3 ANOVA using gender and socioeconomic status on the difficulty scales of emotion problems, conduct problems, hyperactivity, peer problems, and their sum known as the difficulties scale. In terms of gender there was significant differences between boys and girls on the emotional problems scale at $p=0.01$ level. On the socioeconomic status, there was a main effect on emotional problems and peer problems at the $p=0.01$ level. Overall, socioeconomic status was also significantly different on the calculated difficulty scale, with $p < 0.05$. There were no interaction differences reported between gender and socioeconomic status. We performed a post-hoc analysis for socioeconomic status to understand the differences in the three levels of socioeconomic status. We ran the least significant difference post hoc test.

Table 2
2 x 3 ANOVA of gender x socioeconomic status on the SQD Scales

Factors	Source	df	Sum Squares	of Mean Square	F	Sig.
Emotion Problems	Gender	1	31.832	31.832	9.048	0.003
	SES	2	31.529	15.765	4.481	0.01
	Gender SES	*2	10.587	5.293	1.505	0.223
	Total	518	1892.952			
Conduct Problems	Gender	1	7.659	7.659	4.257	0.040
	SES	2	6.362	3.181	1.768	0.172
	Gender SES	*2	4.301	2.151	1.195	0.303
	Total	518	941.091			
Hyperactivity	Gender	1	0.001	0.001	0.000	0.985
	SES	2	5.903	2.952	0.90	0.407
	Gender SES	*2	11.32	5.661	1.726	0.179
	Total	518	1700.998			
Peer Problems	Gender	1	.063	0.063	0.043	0.836
	SES	2	20.614	10.307	7.017	0.001
	Gender SES	*2	2.440	1.220	0.831	0.436
	Total	518	784.998			
Difficulty	Gender	1	106.264	106.264	3.721	0.054
	SES	2	239.390	119.695	4.191	0.016
	Gender SES	*2	63.579	31.789	1.113	0.329
	Total	518	15094.443			

SES=Socioeconomic status

Significant post-hoc test found that adolescents with low socioeconomic status were more likely to rate the emotional problems higher than those with high socioeconomic ones. Second, those with middle socioeconomic status were more likely to rate higher peer problems than those with high socioeconomic status. This same relationship was found for the difficulties measure, where adolescents with high socioeconomic status were more likely to rate difficulties lower than middle and low socioeconomic status adolescents.

Table 3
Means and LSD mean differences of socioeconomic status

	Statistic s	Gender		SES			SES			
		Male	Female	Low SES	Middle SES	High SES	Post-hoc Statistics	Middle- Low	High- Low	High- Middle
Emotional problems	Mean	1.72	2.34	2.28	2.03	1.53	Mean Difference	-0.26	-0.78*	-0.51
	SD	0.12	0.17	2.13	1.91	1.58	Std. Error	0.21	0.27	0.22
	Mean	.981	1.286	1.22	1.18	.87	Mean Difference	-0.04	0.36	-.32
Conduct	SD	.084	.121	1.44	1.32	1.32	Std. Error	.0.8	0.064	0.04
	Mean	2.25	2.25	2.16	2.42	2.20	Mean Difference	0.26	0.04	-0.22
	SD	0.11	0.16	1.90	1.81	1.72	Std. Error	0.21	0.26	0.21
Hyperactivity	Mean	1.248	1.220	1.41	1.45	0.83	Mean Difference	0.42	-0.58*	-0.63*
	SD	0.08	0.11	1.36	1.21	1.00	Std. Error	0.14	0.17	0.14
	Mean	6.67	7.80	7.68	7.7	5.87	Mean Difference	0.02	-1.81*	-1.83*
Peer Problems	SD	0.34	0.48	6.08	5.40	4.31	Std. Error	0.61	0.77	0.63
	Mean	6.67	7.80	7.68	7.7	5.87	Mean Difference	0.02	-1.81*	-1.83*
	SD	0.34	0.48	6.08	5.40	4.31	Std. Error	0.61	0.77	0.63

SES=Socioeconomic status

Discussion

In this study, we used the SDQ to measure the difficulties that adolescents face at school or home. The SDQ is a self-rated or parent/teacher-rated instrument with 25 main questions that fit five scales: emotional, conduct, hyperactivity, peer problems, and prosocial behaviors. This study aimed to pinpoint the relation between socioeconomic status and emotional and behavioral problems. The confirmatory factor analysis allowed for ridding some items of the model to improve the psychometric properties. The analysis was based on a refined model. Regarding their socioeconomic status, the adolescents were asked about their economic and financial status. Parental education was not part of this measure's indicator; thus, socioeconomic measure addressed parents' financial status. Univariate analysis revealed that socioeconomic status was negatively related to all mental health domains (emotional, conduct, hyperactivity, and peer problems). A significant difference was found for emotional and peer problems, with those adolescents who had high socioeconomic status being more likely to rate the lower two domains of mental health than those with a lower socioeconomic

status. There are likely several operational factors through which family income affects adolescents' well-being. Based on the family investment model of Hosokawa and Katsura (2018). The family investment model suggests that the family can invest in the child's social, human, and psychological well-being. Those who can afford this investment are more likely to find children dealing with emotional and behavioral problems through support mechanisms and resilience strategies. While those whose parents are economically disadvantaged, adolescents are more likely to face adverse and harsh parenting styles, leading to dysfunctional parent-child interactions. In addition, parents' lack of financing in raising children may lead to chronic levels of family stress, subsequently magnifying negative emotional distress juxtaposed to children (Xuan et al., 2018). Parents with a negative influence on their child's development increase the risk of child maladjustment (Conger et al. 1992; Conger et al. 2010; Conger and Donnellan 2007; Conger et al. 1994; McLoyd 1990; McLoyd and Wilson 1990). The financial strain leads to frustration, depression, anger, and emotional distress (Adler et al. 1993; Brooks-Gunn and Duncan 1997), which often leads to conflict and a stressful environment (Anthony, 2005) spilling over to parent-child interactions (Cutrona et al. 2003; Cutrona et al. 2011) which may also extend to peer-peer interactions.

One way to deal with mental health issues is through social means. Parental education could provide agility to deal with the demands and needs of the situation (Deater-Deckard, 2008). Parents who have higher education can also deal with personal resources better than those with low education. The premise is that parents' greater education may be able to manage their stress and organize their home life in a way that supports their children emotionally, intellectually, and socially. Thus, future studies could integrate educational level with economic status.

Qatar is a closely knit and a collective society with family life profoundly at its center; thus, if children do not find such emotional support at home, there are always extensions to the family (close family members) such that females and males might recourse to other family members and large and close-knit community. Qatar is highly affluent and has the highest Grand Domestic Product (GDP) in terms of its population in the world. In 2013 for instance, Qatar's standard Human Development Index rankings were 0.834, the highest in the Arab region and 36 worldwide. But the socioeconomic differences were significant, particularly in that they were at levels below $p=0.01$. That is, those with low socioeconomic status are relatively low, not at the absolute level, but relative with the local economy in Qatar. In comparison to Arabs living in Egypt, Syria, and Jordan, low socioeconomic status in Qatar is not isomorphic to low socioeconomic status among adolescents living in low-GDP countries in the Arab world. Given the significant differences among levels of socioeconomic status in an affluent community, noting that this difference is salient and robust; thus, we see that in any future studies parents' level of financial status should integrate quantitative income response to rating income as in numbers rather than qualitatively addressing the level of economic/financial condition of the family on a three-level scale.

Gender differences in the ANOVA results showed statistically significant differences in emotional problems, with females having higher mean scores than males. The outcome regarding the differences in emotions between female and male participants has been extensively supported in the literature. For example, a Jordanian female sample rated higher on the emotional problem; likewise, females from Egypt (Mowafy et al., 2015), Oman (Al-Mukhani et al., 2018) and Iran (Mohammadi, 2013) all reported higher emotional scores than males. These differences are similar to those in other international studies, specifically Asian studies. For example, a study conducted by Yao et al. (2009) used the self-report SDQ in a sample of Chinese adolescents and found that girls had higher scores on the emotional problems subscale than boys, whereas boys had higher scores on conduct and peer problems subscales than girls. Emotional problems are persistent among female adolescents, and these emotions might be overtly expressed, possibly because of a toxic masculine and patriarchal society. Females feel their vulnerability and produce these negative emotions. Thus, engaging young girls in displays of positive emotions is paramount to young girls' sensitivity, and empowerment to be productive and achieving individuals.

Limitations

There was a low response rate to the questionnaires for various reasons, from being "too busy to respond" to procrastinating despite receiving reminders. In addition to factors such as an absence of incentives for participants (Fowler, 2013) and a cultural reluctance to share information about self and families' circumstances that are considered private, despite assurances of confidentiality. It is also worth noting that the culture of response to research is still developing in the country. In the Arab world, it can be difficult to garner support for gathering and publishing data about either public or private education or other sectors of society. Thus, it is common for individuals not to reveal sensitive information about themselves or participate in research studies (author). In addition, the fact that the instrument was given online, not face-to-face, was due to COVID-19. Respondents felt little obligation to complete the questionnaire. Lastly, as mentioned, future studies should integrate parents' educational level with their socioeconomic status. Rather, in this study, adolescents perceived status as financial rather than overarching and relating to education and other social status measures as social influence, family and social status.

Conclusion

In conclusion, we found that socioeconomic status measured by self-rated economic/financial parental conditions and gender were independently related to mental health domains. Those with low incomes had higher levels of mental health problems in Qatar. While Qatar is an affluent nation, in such a context, there might be relative poverty, exposing people to a number of mental health issues. The current findings suggest the impact of socioeconomic status on adolescents and that measuring parental education can help identify the potentially unique associations of socioeconomic status with human development. Understanding the mechanisms that underly these associations could contribute to improvements through interventions to improve the lives of adolescents.

Acknowledgments

This paper has been partially funded by a grant from Qatar National Research Fund with grant Number HSREP 02-1230-190022.

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