

Predictive Ability of Emotional Support Resources, Birth Order, Gender, and Grade in Cyberbullying among Gifted Adolescents in Jordan and the Sultanate of Oman:

A Comparative Study

Tarik H. Al-Kharusi^{1*}, Dawood A. Al-Hidabi², Mustafa. Q. Heilat³,

Ahmad M. Al Shabatat⁴ & Maya S. Alhabsi¹

¹Ministry of Education, Oman. ²International Islamic University, Malaysia. ³Al-Balqa Applied University, Jordan

⁴SIMAT Center for Research and Studies.

Received: 2/3/2022

Accepted: 27/10/2022

Abstract: The current study aimed to reveal the predictive ability of the emotional support resources, birth order, gender and grade in cyberbullying among gifted adolescents in Jordan and Oman. It also aimed to identify the differences, if any, in electronic bullying (bully, victim) according to the different sources of the emotional support, birth order, gender and grade among a sample of Jordanian and Omani adolescents. The study participants were 340 gifted students from Jordan and Oman, ranging from 13 to 15 years old. The Cyberbullying (bully, victim) and the perceived emotional support scale (family and friends) were used and appropriate methods verified their validity and reliability indicators. The results indicated the possibility of predicting cyberbullying (victim) through the perceived emotional support provided by the family and the student's gender. As for cyberbullying (bully), the results indicated its unpredictability to perceived emotional support from (family and friends), gender, birth order and grade. In addition, significant differences in cyber-bullying (victim) were found in favor of females and males in cyberbullying (bully). The results confirmed the predictive ability of several psychological and personal variables, such as perceived emotional support provided by family and gender and the possibility that gender might have a role in cyberbullying (the victim), which contributes to understanding more psychological, cognitive, personal and social aspects related to cyberbullying behavior, and the need to focus research on knowing the motives behind cyberbullying behavior and on identifying the desires and negatives that the bully seeks to achieve, and the effects of this on the cyberbully and others.

Keywords: cyber bullying; bully, victim; emotional support sources; birth order; gender; grade; adolescents; gifted students; Jordan, Oman

القدرة التنبؤية لمصادر الدعم العاطفي والترتيب الميلادي والجنس والصف في التنمر الإلكتروني لدى المراهقين الموهوبين في الأردن وسلطنة عمان: دراسة مقارنة

طارق حمود الخروصي^{1*} وداوود عبد الملك الحدابي² و مصطفى قسيم هيلات³ و أحمد محمد الشيبات⁴ و مياء سيف الحبسية¹

¹وزارة التربية والتعليم، سلطنة عمان. ²الجامعة العالمية الإسلامية، ماليزيا. ³جامعة البلقاء التطبيقية، الأردن. ⁴مركز سمات للبحوث والدراسات.

الملخص: هدفت الدراسة الحالية إلى الكشف عن القدرة التنبؤية لمصادر الدعم العاطفي والترتيب الميلادي والجنس والصف في التنمر الإلكتروني بين المراهقين الموهوبين في الأردن وسلطنة عمان. كما هدفت إلى التعرف على الفروق إن وجدت في التنمر الإلكتروني (المتنمر، الضحية) حسب المصادر المختلفة للدعم العاطفي، والترتيب الميلادي، والجنس، والصف لدى عينة من المراهقين الأردنيين والعُمانيين. وقد شملت عينة الدراسة (340) طالبًا وطالبة من الموهوبين في الأردن وسلطنة عمان، وقد تراوحت أعمارهم بين 13 و15 عامًا. ولتحقيق أهداف الدراسة تم اتباع المنهج الوصفي الارتباطي التنبؤي، وتم استخدام مقياس التنمر الإلكتروني (المتنمر والضحية)، ومقياس الدعم العاطفي المدرك المقدم من (الأهل والأصدقاء) بعد التحقق من خصائصهم السيكومترية. وقد أشارت النتائج إلى إمكانية التنبؤ بالتنمر الإلكتروني (الضحية) من خلال الدعم العاطفي المدرك المقدم من الأهل ومن خلال جنس الطالب. أما بالنسبة للتنمر الإلكتروني (المتنمر)، فقد أشارت النتائج إلى عدم إمكانية التنبؤ به من الدعم العاطفي المدرك المقدم من (الأهل والأصدقاء) والجنس والترتيب الميلادي والصف، كما أشارت النتائج إلى وجود فروق ذات دلالة إحصائية في التنمر الإلكتروني (الضحية) باختلاف الجنس ولصالح الإناث وللذكور في التنمر الإلكتروني (المتنمر). وبهذا فقد أكدت النتائج إمكانية التنبؤ بالعديد من المتغيرات النفسية والشخصية، مثل الدعم العاطفي المدرك المقدم من الأهل والجنس، واحتمال أن يكون للجنس دور في التنمر الإلكتروني (الضحية)، مما يساهم في فهم المزيد من العوامل النفسية والمعرفية والشخصية. والجوانب الاجتماعية المتعلقة بسلوك التنمر الإلكتروني، والحاجة إلى تركيز البحث على معرفة الدوافع الكامنة وراء سلوك التنمر الإلكتروني وتحديد الرغبات والسلبيات التي يسعى المتسلط لتحقيقها، وتأثير ذلك على المتنمر الإلكتروني والآخرين.

الكلمات المفتاحية: التنمر الإلكتروني، المتنمر، الضحية، مصادر الدعم العاطفي، الترتيب الميلادي، الجنس، الصف، المراهقون، الطلاب الموهوبون، الأردن، سلطنة عمان.

*tariq-alkhroosi@moe.om

Introduction

Nowadays, youth cannot imagine life without the internet and social media platforms. Portable electronic devices facilitate communication using various types of applications such as Facebook, Instagram, FaceTime, Twitter, Messenger and Instagram. Despite the devices usefulness, they also present some serious risks in case of misuse (Beran & Li, 2005; Brighi et al., 2012). For example, the increased access to the internet has been accompanied by cyberbullying (González-Cabrera et al., 2019).

According to Willard (2007), cyberbullying is “being cruel to others by sending or posting harmful material or engaging in other forms of social aggression using the Internet or other digital technologies” (p.). At the same time, Hinduja and Patchin (2009) remarked that cyberbullying is conscious and repetitive harm caused by using computers, mobiles or other electronic devices.

It is noticeable that even 13 years ago; AP-MTV (2009) poll indicated that more than 75% of 14 to 24 years olds believe that digital abuse was a serious problem. However, only about a half believe that what they post online could come back to hurt them. Generally, because gifted students have distinguished characteristics from their peers (Catholic Education Office Melbourne, 2013), that may make them experience bullying (Cabrera et al., 2019). Connolly (2018) remarked that academically gifted adolescents frequently face cyberbullying and collected evidence from extant research that higher-achieving students are more likely to become victims of bullying than their non-gifted peers. Although some researchers found no differences between gifted and non-gifted students in perpetration (Mitchell, 2011) and victimization experiences (Ryoo et al., 2017), other studies revealed a positive correlation between cognitive ability and victimization (Kim & Glomb, 2010). Jumper (2010) also displayed those gifted children reported being bullied experiences higher compared to non-gifted children.

González-Cabrera et al. (2019) performed a cross-sectional study with 255 gifted students in Spain to determine the prevalence of cyberbullying in gifted students. They found that 25.1% of the students were pure-cyber victims, 3.9% were pure cyberbullies and 6.6% were cyberbully victims. Gámez-Guadix et al. (2013) concluded that cyberbullying is predictive of adolescents' psychological and behavioral health problems. Both bullies and victims might suffer the adverse effects of bullying (Ogurlu & Sariçam,

2018). Van der Wal et al. (2003) pointed out that bullies were more inclined to misdemeanor behaviors, impulsive, dominating, and depressive symptoms, and suicidal ideation. On the other hand, victims of cyberbullying may have severe anxiety, depression, isolation, anger, academic performance declination and increased thoughts of suicide (Fremouw et al., 2013; Mitchell, 2017). Even if it is assumed that bright individuals have a high ability to anticipate, avoid and solve interpersonal problems easily, they have high self-understanding; still, unfortunately, such assumptions are not always true (Blackett & Webb, 2011). Connolly (2018) stated that academic and social abilities are not mutually inclusive. The advantage of having significant academic ability does not preclude gifted adolescents from experiencing the same hurt and influence as mainstream students. Accordingly, it is worth giving more attention to cyberbullying among gifted students and the factors affecting it.

Empirical and clinical literature has challenged the myth that gifted students do not have unique social and emotional concerns (Peterson, 2009). Indeed, gifted students have unique social, psychological and emotional needs. Renzulli (2012) cleared up the educators' view that intellectual quotient is not enough indicator for gifted students' success. To meet their social-emotional needs, gifted and talented students require social and emotional support from school personnel and their parents (Cooper, 2013). Heilat and Seifirte (2019) defined emotional support as expressions of concern and cared for others, especially in difficult times. Providing emotional support to others may take many forms, such as offering sympathy, expressing concern and displaying compassion and love for them (Buhrmester et al., 1988; Cohen & Willis, 1985; Cutrona & Russell, 1990).

Emotional support may have specific importance for gifted students and their development (Heilat & Seifirte, 2019). Research findings indicate that gifted children will be better adjusted in a supportive and accepting environment (Eddles-Hirst et al., 2012). Ogurlu et al. (2018) pointed out that close friends are considered as a primary social support source for gifted students, and teachers are also important sources of social support for them.

According to Peterson (2009), when gifted students lack opportunities to talk about their social and emotional development concerns, it may play a role in vulnerability. His research examined the effects of social support from family, friends and other close

ones on Internet addiction with a sample of 207 medical students. Tan (2019) found that all aspects of social supports were negatively correlated to Internet addiction significantly. In this vein, some researchers suggest that prevention or treatment of Internet addiction could be a part of the solution to reduce cyberbullying (Sureda Garcia et al., 2020). Karaer and Akdemir (2019) shed light on the importance of improving parents' skills, enhancing good relationships between parent and adolescent, and training them on using the Internet appropriately. These factors could be considered to decrease internet addiction and consequently decrease cyberbullying.

Some studies explored correlations between bullying/cyberbullying among gifted and other factors such as the grade and gender. For example, Peterson and Ray (2006) investigated bullying in 432 gifted children. The results revealed that bullying occurred at every grade level; 67% of the gifted eighth graders had sometimes experienced bullying in school. The peak year was grade 6, in which 46% of gifted students had come to face at least one kind of bullying. However, Pelchar and Bain (2014) revealed that the fourth-grade gifted students mentioned higher bullying levels compared to the fifth-grade gifted students. While Peters and Bain (2011), in contrast with both prior studies, pointed out that high achieving and gifted high school students did not bully others, nor were they victimized by others at higher rates.

Gender differences in bullying among gifted students have also been studied. Peterson and Ray (2006) found that gifted males both bullied others. Moreover, they were victimized ten times more than gifted females at least in one grade in schools. Similarly, Akcan and Ozturk's (2017) research aimed to examine the relation effects of gender frequency on cyberbullying and victimization. The research sample consisted of 151 (76 females, 75 males) high school and university students. The results showed that males were more likely to be both cyberbullies and victims more than females. However, Ogurlu and Sariçam (2018) found that gifted Turkish males had higher peer bullying levels than gifted females and females had more peer victim levels.

Other individual characteristics were studied as variables that may affect bullying such as birth order. Toseeb et al. (2020) found that structural family-level characteristics (e.g., birth order) were strong predictors of involving sibling bullying. In contrast, Patel et al. (2020) study in India revealed no correlation be-

tween bullying and birth order. However, the researchers did not find studies correlating between birth order and bullying among gifted students.

In general, there is very little empirical evidence about cyberbullying and giftedness (González-Cabrera et al., 2019). Studies correlating between cyberbullying and gender, birth order, and emotional support resources among gifted students are limited with mixed findings. Also, there are no similar studies have been conducted in the Arabic population. The variance in bullying prevalence rates reported for the Arab world is similar to variance reported for Western countries (Kazarian & Ammar, 2013). Media outlets reported attacks and insults against individuals of Asian descent (in particular Chinese) in Britain, Germany, Australia, Vietnam, and Canada. Likewise, Arab countries reported similar incidents in Jordan, Egypt, Morocco, Syria, Iraq, Lebanon, and Tunisia (Alsawalqa, 2021). According to Kiran (2013), one of the main causes of teen suicide in the western countries is "cyberbullying", while in Arab countries, the cultural and religious beliefs minimize such actions among the victims of cyberbullying. In most cases, Arab culture and family patterns in socialization call for females to appear tolerant, more accepting of moral values, and sympathy compared to males who are socially imposed to appear as men characterized by aggression, violence, and rigidity.

It is clear from previous studies that there is a clear contrast in the results about cyber-bullying (bully, victim). Some studies have indicated differences in cyber-bullying (bully, victim) between males and females, such as Ogurlu & Sariçam's (2018), while others stated no differences between males and females in bullying. A study by Peters and Bain (2011), which was conducted on ordinary students, showed that the differences in bullying between males and females are in the type, not in the level, where females tend to spread rumors while males tend to threaten.

Some studies also indicated that there are differences in bullying according to the birth order, such as the study by Bruhn (2010), which indicated that there are differences in traditional bullying according to the birth order, especially the victim. This study was conducted on ordinary students, while other studies indicated that there are no differences in cyberbullying according to birth order, but these studies were conducted on ordinary students and traditional bullying, such as Gonzales and Madrigal (2020).

On the other hand, concerning ordinary students, not gifted students, birth order is considered a variable to

the level of realization of bullying among secondary students (Gonzales & Madrigal, 2020). Maybe it is due to causes which Alfred Adler theorized that a person's birth order affected his or her personality growth (Cistaro, 2011). Studies by Carter and Wilson (2015) and Shorap (2020) did not discover the birth order effect on electronic bullying. In contrast, it showed statistically significant differences in bullying based on birth order, from the firstborn to the sixth born (Alabbasi, 2016). Remarkably, birth order was significantly related to victimization, while being that birth order does not play a role in electronic bullies, but this only showed for middle and older siblings without the younger (Bruhn, 2010).

In addition, some studies have shown the differences in bullying according to the different grades, such as the study of Pelchar and Bain (2014), while other studies have indicated that there are no differences in bullying according to the different grades, such as the study of Peters and Bain (2011). As for the role of emotional and social support, studies have confirmed its importance and its reflection on personality in general and adolescents in particular (Heilat & Seifert, 2019).

This apparent difference in the results justifies conducting the current study, which aims to reveal the predictive ability of emotional support resources, birth order, gender and grade in cyberbullying among gifted adolescents in Jordan and Oman, by answering the following questions:

1. What is the predictive ability of the sources of emotional support, birth order, gender, and grade of cyberbullying (bully-victim) among gifted students in Jordan and Oman?

2. Are there any significant differences in cyberbullying (victim-bully) among gifted students according to the sources of emotional support (family and friends), birth order, grade, country, and gender?

Methodology

Study Design

This descriptive study used quantitative method employing the predictive correlational research design to predict future conditions or behaviors in one variable (cyberbullying (victim-bully) from what is presently known of other variables (the sources of emotional support, birth order, gender, and grade).

Participants

The study sample was selected using the convenience sample and included 340 gifted students (N= 168, 49% from Jordan, N=172, 51% from Omani), The Jordan sample can be detailed as follows: (N= 61, 36.3% male, N= 107, 63.7% female), (N= 62, 37% from seventh grade, N= 57, 34% from eight grade, N= 49, 29% from ninth grade), (N=57, 33.9% first, N= 91, 54.2% middle, 20, 11.9% last). The Oman sample can also be detailed as follows: (N= 101, 58.7% male, N= 71, 41.3% female), (N= 58, 33.7% from seventh grade, N= 58, 33.7% from eight grade, N= 56, 32.6% from ninth grade), (N=50, 29% first, N= 99, 58% middle, 23, 13% last). All of These academically gifted students were classified by the Ministry of Education in Jordan and Oman as gifted students according to specific criteria. Gifted students were selected in the Sultanate of Oman whose achievement was 90% or more among their peers. The evaluation system includes scientific, literary, and artistic subjects and life skills to achieve the principle of multiple intelligences (Gardner). As for Jordan, gifted students were selected from King Abdullah II schools for Excellence based on the identification procedures of the Ministry of Education for those students' using aptitude and ability tests. Before conducting the study, 20 gifted students from Jordan, and 20 gifted students from Oman were selected to verify the validity and reliability of the tools used.

Instrument of the study

Cyber-Bullying Scale

In this study, the instrument used was a modified version of the Cyber-Bullying Questionnaire (CBQ) by Kowalski and Limber (2007). This questionnaire is a 23-item self-report scale developed to assess cyberbullying among middle school students. The questionnaire was designed in part after the Olweus Bully/Victim Survey (Olweus, 1996), which is a reliable and valid self-report scale for assessing participants' experiences of bullying, both victims and perpetrators (Olweus, 1996; Solberg & Olweus, 2003) similar to the Olweus scale. The (CBQ) included questions about participants' experiences of bullying (such as being bullied or bullied by others). Important questions included, "How many times have you been cyberbullied in the past two months?" and "How many times have you cyberbullied someone in the past two months?"

The questions were answered on a five-point Likert scale as in the Olweus Bully/ Victims scale of Bullying (victims and perpetrators) except for one question designed to quantify the number of times the participant feared being cyberbullied (i. e., it hasn't happened in the past two months; only once or twice; two or three times a month; about once a week; several times a week).

The present study used Moore's Scale (2012), where he revised the original cyber- Bullying Scale (CBQ) and reduced it from 23 items to nine specific basic questions. He assessed bullying, victimization, and fear of being bullied and removed questions about how to bully or hurt occurs (e. g., instant messages, text messages, or email).

Moore (2012) verified the reliability and validity of the abbreviated version used in the current study; performed a reliability analysis. Cronbach's alpha coefficient for the elements of victimization was (0.83) and bullying was (0.86), which indicates a good internal consistency for the scale's reliability. As for the overall scale, the average value of correlation between items was (0.41), with values ranging (from 0.17 to 0.71), indicating the average correlation of items from modest to moderate. The mean correlation between items for victimization questions was (0.82), ranging from (0.48 to 0.62) and (0.86), ranging from (0.55 to 0.71) for the bullying questions.

In the current study, the scale was translated to Arabic. Then, it was re-translated into English to ensure the validity of the translation and produce an appropriate copy for the Arab society. The scale was validated using content validity and internal consistency. The current study calculated the correlation coefficient between the items and the total score (0.80). Alpha Cronbach for internal consistency was used to demonstrate the scale's reliability. Alpha coefficients for the overall result were (0.77).

Emotional Support

In the current study, sources of emotional support were assessed using the Hisada et al. (1989) scale, where this scale measures an individual's perception of receiving emotional support (for example, sympathy or encouragement) from those who feel close to them (parents, teachers, friends, and social media communication). In front of each item, there is a five-point Likert scale. Uchida et al. (2008) calculated the internal consistency coefficients; they were (0.91), (0.92), and (0.91) for samples of American, Filipino, and Japanese participants, respectively.

Heilat and Seifert (2019) developed the scale by translating it into Arabic and then translating it back into English to verify the translation and producing an appropriate copy for the Arab population. Cronbach's alpha for the overall emotional support scale score was (0.90). The internal consistency of the subscales provided by parents (.93), teachers (0.91), peers (.89), and social media communication (93.).

In the current study, Cronbach's alpha was calculated on the total score of emotional support scale on a pilot sample in Jordan and Oman, it was (0.88), (0.92), respectively, and internal consistency of subscales provided by parents (.90), teachers (0.93), peers (.91) and communication through social media (.89), and in Oman it was (0.94) for parents, (0.90) for teacher, (0.87) for peers, and (0.88) for social media communication.

Procedures

The cyber-bullying and emotional support scales were applied to the participants in the first semester of the academic year 2020-2021. The researchers explained the study's objectives to the participants in Jordan and Oman. The researchers assured the participants that completing the scales was optional. Also, they ensured the participants that the data from the scales would be used only for research purposes. The two measures took about 40 minutes, after which the data was entered in the SPSS program and encoded for statistical analysis.

Data Analysis

The IBM SPSS Statistics version 24 was used to analyze data;. To examine the predictive ability of emotional support resources, birth order, gender, and grade in Cyberbullying among gifted adolescents in Jordan and Omani, standard multiple regression was used to test if the differences found were significant or not. ANOVA test was used.

Results

This section presents the results of the study organized according to the research questions.

Results related to the research question one: What is the predictive ability of the sources of emotional support, birth order, gender, and grade of cyberbullying (victim- bully) among gifted students in Jordan and Oman?

1- Correlation among variables (Emotional support from the family, Emotional support from the friends, Birth order, and Gender):

Birth order, gender, and grade were converted into dummy variables to be suitable for use in correlational and regression analyses. Table 1 shows the correlation results (victim) for the variables of the study. Significant correlations were found between victim, emotional support from the family, emotional support from the friends, and gender, and between emotional support from the family and friends, and between emotional support from the friends and birth order. However, other correlations were found not significant.

2- The predictive ability of the sources of emotional support, birth order, gender, and grade of cyberbullying (victim) among gifted students in Jordan and Oman.

Standard multiple regression was used to test if the sources of emotional support, birth order, gender, and grade can significantly predict cyberbullying (victim) among gifted students in Jordan and Oman. Table 2 shows that the overall regression was statistically significant $R^2 = 0.108$, $F(5, 334) = 20.404$, $p = .000$. This means that the model (emotional support from family, friends), birth order, gender, and grade) explains 10.8% of the variance in the victim.

Table 3 shows that family emotional support and gender significantly predicted cyberbullying (victim) among gifted students in Jordan and Oman, with β coefficient of (-.302) and (-.142), respectively. However, birth order and grade had non-significant coefficients.

Table 1. Results of correlation among variables (Emotional support from the family, Emotional support from the friends, Birth order, and Gender)

Variables	Victim	Emotional support from the family	Emotional support from the friends	Birth order	Gender
Emotional support from the family	-0.302*	1			
Emotional support from the friends	-0.172*	0.310*	1		
Birth order	0.001	-0.086	-0.184*	1	
Gender	0.167*	-0.088	0.075	-0.06	1
Grade	0.055	-0.04	0.035	-0.044	0.042

Table 2. Regression results of the sources of emotional support, birth order, gender, and grade of cyberbullying (victim) among gifted students in Jordan and Oman

Model	Sum of Squares	Df	Mean Square	R	R Square	F	Sig.
Regression	6.276	5	3.138	0.329b	0.108	20.404	0.000
Residual	51.825	334	0.154				
Total	58.101	339					

Table 3. Beta Coefficients of family emotional support and gender of cyberbullying (victim) among gifted students in Jordan and Oman

Variables	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	1.873	0.106		17.641	0.000
Emotional support from the family	-0.145	0.025	-0.302	-5.815	0.000
Student's gender	0.116	0.042	-0.142	2.756	0.006
Birth order	0.028	0.027	0.056	1.020	0.308
Grade	0.003	0.035	0.004	.072	0.942

Results Related Research Question two: Are there significant differences in cyberbullying (bully-victim) among gifted students according to the sources of emotional support (family and friends), birth order, grade, country, and gender?

1- Differences in cyberbullying (bully) among gifted students according to the sources of emotional support (family and friends), birth order, grade, and country and gender.

The ANOVA test was used to test if the differences found were significant or not. As shown in Table (4), there were no significant differences in cyberbullying (bully) among gifted students that can be attributed to the sources of emotional support (family and friends), birth order, grade, and country. However, Table 4 shows there were significant differences in cyberbullying (bully) among gifted students that can be attributed to gender. Scheffe test was used to perform multiple comparisons among the students; it was

found that the differences favored males over females. In other words, most of the bully students of cyberbullying were males.

1- Differences in cyberbullying (victim) among gifted students according to the sources of emotional support (family and friends), birth order, grade, country, and gender.

The ANOVA test was used to test if the differences found were significant or not. As shown in Table 5, there were no significant differences in cyberbullying (victim) among gifted students which can be attributed to the sources of emotional support (family and friends), birth order, grade, and country. However, Table 5 shows there were significant differences in cyberbullying (victim) among gifted students which can be attributed to gender. Scheffe test was used to perform multiple comparisons among the students; it was found that the differences favored females over males. In other words, most of the victim students of cyberbullying were females.

Table 4. Results of ANOVA of the differences in cyberbullying (bully) among gifted students due to the sources of emotional support (family and friends), birth order, grade, country, and gender.

Source of variance	Type III Sum of Squares	df	Mean Square	F	Sig.
Sources of emotional support	0.001	1	0.001	0.007	0.932
Birth order	0.004	2	0.002	0.022	0.978
Grade	0.083	2	0.083	1.042	0.308
Gender	0.610	1	0.305	3.809	0.023
Country	0.171	1	0.171	2.138	0.145
Error	26.606	332	0.080		
Total	427.875	340			

Table 5. Results of ANOVA of the differences in cyberbullying (victim) among gifted students due to the sources of emotional support (family and friends), birth order, grade, country, and gender

Source of variance	Type III Sum of Squares	df	Mean Square	F	Sig.
Sources of emotional support	0.007	1	0.007	0.045	0.833
Birth order	0.020	2	0.010	0.060	0.941
Grade	0.356	2	0.178	1.093	0.336
Gender	1.050	1	1.050	6.448	0.012
Country	0.205	1	0.205	1.261	0.262
Error	54.057	332	0.163		
Total	602.520	340			

Discussion

The result indicated that the perceived emotional support provided by the family predicts the likelihood of the adolescent falling victim to bullying in the future.

This result is a scientific addition demonstrating the importance of emotional support and its role in the development of academically gifted Jordanian and

Omani adolescent students. This result can be explained by the fact that the presence of emotional support provided by the family (care, attention, praise, appreciation, reassurance, respect, sympathy, love, trust and encouragement) leads to a self-confident adolescent who is emotionally stable and compatible with himself, his family and colleagues, and thus becomes more compatible with himself and the environment in which he lives and has the ability to interact and communicate positively with others. The channels of communication between the adolescent and his supportive family may have a role in talking to them and telling them about the extent of harassment he may be exposed to, so that they give him advice and be careful when dealing with the Internet, and he does not fall victim to cyberbullying.

This finding supported what was indicated by previous studies regarding the positive role of emotional support, especially for gifted students (Cooper, 2013; Heilat & Seifrite, 2019; Buhrmester et al., 1988; Cohen & Willis, 1985; Cutrona & Russell, 1990). These studies support the necessity to respond to the needs of gifted students and provide them with emotional and social support.

Regarding the consequence of the inability of the perceived emotional support provided by friends to predict cyberbullying (bully, victim), the cause may be the Corona pandemic and the accompanying social distancing and distance learning, which prevented emotional support from friends.

As for the ability of the student's gender variable to predict the likelihood that the adolescent will be a victim in the future, it can be on the sample of the study represented by adolescent students, and in terms of the existence of a gap between males and females at this stage, males are more inclined to violence, aggression, anger and less flexible, and females are more inclined to repair relationships and empathy with others, in addition to the presence of many Fundamental differences in their psychological and physiological nature, which was confirmed by Young, Erikson, and others (in Abd al-Rahman, 1998), and this variation in the nature of males and females led to the possibility of the gender of the student to predict cyberbullying (victim)

In addition, differences in cyberbullying (victim) by student gender, which favored females, could be explained by the fact that gifted teenage girls are more sensitive, have ease of deception, trust in others, are tolerant, and empathetic. Thus, they are more likely

to be exploited on social networks and become victims of cyber-bullying. Goleman emphasized the important role of empathy in limiting and controlling human cruelty. In addition, researchers believe that higher cognitive abilities of gifted students increase female compassion and tolerance for others.

Concerning the result of the existence of differences in electronic bullying (bullying) in favor of males, this result can be interpreted as males can be more show of strength and power than females, especially since males are communicating more with others through the Internet, without social restrictions especially in Arab societies.

This finding was partially consistent with the results of several studies (i.g., Lee, 2017; Wang et al., 2009; You et al., 2015; Jardadat, 2017; Smith et al., 2008; Sharab & Sharab, 2019; Niclova, 2017) which agreed that there are differences in cyberbullying, as they revealed that males are more involved in cyberbullying behavior; while females are victims of cyberbullying, with a difference in the current study sample compared to the samples of previous studies that ordinary students represented. Also, this result differed with the results of some studies that revealed that there are no differences in cyberbullying behavior or being a victim depending on the gender variable, such as (Hinduja & Patchin, 2008; MacDonald & Roberts-Pittman, 2010; Ryan, 2014; Robson & Witenberg, 2013; Didden, 2009).

The absence of statistically significant differences in cyberbullying by grade and birth order can be attributed to the reality that the study sample represents academically gifted students and adolescents with high mental abilities, eliminating the differences between these groups and the convergence of the age. Groups addressed in this study may have a role; there are no differences depending on the grade. According to Piaget (in Schunk, 2000), the study sample of 13-15 years old represents one age group. This result differed from that of the study by Peterson and Ray (2006), where the results revealed that bullying occurred at every grade level. Sixty- seven percent of the gifted eighth graders had experienced bullying sometime during all the school time, and the peak year was grade 6, in which 46% of gifted students had come to face at least one of the kinds of bullying. Pelchar and Bain (2014) study showed that gifted fourth graders students reported higher levels of bullying than gifted fifth graders. Moreover, Peters and Bain (2011) found that high achieving and gifted high

school students did not bully others, nor did others victimize them at higher rates.

The result of the absence of differences in cyberbullying between the categories of birth order can also be explained by what was confirmed by Bruhn (2010) "it is too early to consider birth order as an indicator of bullying in general". However, he found differences in traditional bullying according to the birth order, especially the victim, and this study was conducted on ordinary students. While other studies indicated no differences in cyberbullying according to birth order, these studies were conducted on ordinary students and traditional bullying, such as Gonzales and Madrigal (2020). Previous studies, (e.g., sharab & sharab, 2019; Carter & Wilson, 2019), which were conducted on academically gifted students have supported this finding, and other studies (e.g., Cistaro, 2011; Gonzales & Madrigal, 2020; Patel et al., 2020), were conducted on ordinal students, and revealed no association between bullying and birth order. The results also differed in part from the results of the study (e.g., Toseeb et al., 2020; Herrera et al., 2003; Hurlock, 1968), which all indicated that there were differences between students according to birth order, but between ordinal students. Finally, the effect of birth order on an individual's behavior remains merely a predisposition or inclination, and cannot be considered an absolute truth (Adler, 1964).

The current results can also be discussed through Arab culture and family patterns in socialization that call for females to appear tolerant, more accepting of moral values, and sympathetic compared to males who are socially imposed to appear as men characterized by aggression, violence, and rigidity.

Regarding the lack of statistically significant differences in cyberbullying between gifted adolescents in Jordan and Oman, this can be explained by the absence of fundamental differences between the two countries in customs, traditions, and culture, in general.

Implications and Limitation

This study indicated that cyber-bullying as a form of bullying is widespread and increasing day by day with the growing spread of the Internet and smart devices among members of society worldwide, especially adolescents. Both genders can affect cyberbullying, whether they engage in bullying behavior or have fallen victim to it. It is found that gender and the perceived emotional support provided by the family can predict cyber-bullying in the victim, the results

did not indicate the ability of those variables to predict the bully. The study also showed statistically significant differences in cyberbullying (the victim) in favor of females and (the bully) in favor of males. However, the results of the study may be confounded to the nature of the topic of the study as students in Arab communities still feel shy to strongly reveal their feelings and opinions about emotional support and cyberbullying. Another factor may affect the results of the study which is the methods and procedures of conducting this research, although the researchers are keen to fulfill the requirements of conducting the study in proper manner. Moreover, using the predictive research design in social and psychological sciences may not shed a clear light on the phenomena being studied. Therefore, we recommend using ethnographic research design to become involved with individuals or a group in a personal manner, using participant observation as a technique for gathering data for telling the groups or individual's story via rich narrative descriptions.

Therefore, it is essential to pay attention to the phenomenon of cyberbullying by trying to analyze it, understanding its aspects, revealing its causes and the factors affecting it. It is important to find constructive solutions to treat and control it, especially since societies, in general, are facing an expansion and spread, which has left negative effects on many community members, especially the physical, moral, or psychological aspects of adolescents. Accordingly, it is necessary to prepare preventive programs to reduce this phenomenon, educate victims and bullies about the importance of electronic security and increase security programs, especially for adolescents, to reduce the risks of electronic crimes. It is also necessary to conduct future studies to investigate the role of birth order, gender, age and other variables such as family socialization patterns, personality patterns, moral and spiritual intelligence and others to reveal their role in cyberbullying (bully, victim).

The results of the present study supported the predictive ability of the study variables with cyber-bullying and the differences in cyber-bullying (bully, victim) at different levels and dimensions of the variables. However, the study tools were applied to a limited sample of adolescent students (13-15) age, limiting the results' generalization to other ages and societies in different cultural contexts. In addition, the study tools relied on the respondents of self-report, which may affect the response of the study sample. This requires further research in this area using quantitative

and qualitative approaches and applying them to larger samples and different age groups.

Compliance with Ethical Standards

Conflict of interest. The authors declare that there is no potential conflict of interest pertaining to this submission to JEPS journal.

Informed Consent

All participants in (Jordan and Oman) were provided informed consent prior to participation in the study. All study procedures were conducted in accordance with appropriate institutional ethical review boards.

References

- Abdulrahman, M. (1998). *Personality theories*. Dar Qubaa for printing, publishing and distribution, Cairo, Egypt.
- Al-Abbasi, G. (2016). Bullying behavior among primary and middle school students and its relationship to gender and birth order. *Journal of Psychological and Educational Research*, (55), 88-117.
- Adler A. (1964). *Problems of neurosis: A book of case histories*. (P. Mairet, Ed.). New York, NY: Harper & Row, Publishers, Incorporated.
- Akcan, G., & Ozturk, E. (2017). The investigation of predictors of cyberbullying and cyber victimization in high school and university students. *Forensic Res Criminal into J*. 4(5), 146–149. doi: 10.15406/frcj.2017.04.00128
- Alsawalqa, R. O. (2021). Cyberbullying, social stigma, and self-esteem: the impact of COVID-19 on students from East and Southeast Asia at the University of Jordan. *Heliyon*, 7(4), p. e06711. doi: 10.1016/j.heliyon.2021.e06711.
- AP-MTV. (2009). *a Thin line: 2009 APMTV digital abuse study*. Retrieved from http://www.athinline.org/MTV-AP_Digital_Abuse_Study_Executive_Summary.pdf.
- Beran, T., & Li, Q. (2005). Cyber-harassment: A study of a new method for an old behavior. *Journal of Educational Computing Research*, 32(3), 265-277. doi:10.2190/8YQM-B04H-PG4D-BLLH
- Blackett, R., & Webb, J. (2011). The social-emotional dimension of giftedness: The SENG support model. *The Australian Journal of Gifted Education*, 20, 5–13.
- Brighi, A., Guarini, A., Melotti, G., Galli, S., & Genta, M. L. (2012). Predictors of victimization across direct bullying, indirect bullying and cyberbullying. *Emotional and Behavioral Difficulties*, 17(3–4), 375–388. doi: 10.1080/13632752.2012.704684
- Bruhn, D. C. (2010). *Cyberbullying among German and Dutch adolescents: research on siblings' influence and factors relevant for prevention and intervention*. University of Twente, The Netherlands. https://essay.utwente.nl/60448/1/MA_thesis_D_Bruhn.pdf
- Buhrmester, D., Furman, W., Wittenberg, M., & Reiss, H. (1988). Five domains of interpersonal competence in peer relationships. *Journal of Personality and Social Psychology*, 55, 991–1008.
- Carter, J. M., & Wilson, F. L. (2015). Cyberbullying: A 21st Century Health Care Phenomenon. *Pediatric Nursing*, 41(3), 115-125.
- Catholic Education Office Melbourne, (2013). *Gifted and Talented Students: A Resource Guide for Teachers In Victorian Catholic Schools*. Snap West Melbourne. ISBN: 9780864074256
- Cistaro, B. (2011). *The relationship between bullying, birth order, and self-esteem* [Master's thesis, Kean University]. ProQuest LLC.
- Clarke, N. (2010). Emotional intelligence and learning in teams. *Journal of Workplace Learning*, 22(3), 125- 145. <http://dx.doi.org/10.1108/13665621011028594>
- Cohen, S., & Willis, T. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98, 310–357.
- Connolly, J. P. (2018). Exploring the factors influencing gifted adolescents' resistance to report experiences of cyberbullying behavior: Toward an improved understanding. *Journal for the Education of the Gifted*, 41(2), 136–159. <https://doi.org/10.1177/0162353218763869>
- Cooper, P. M. (2013). *Parents' perceptions of how they serve the social and emotional needs of their intellectually identified gifted children* [Doctoral desertion]. Texas Wesleyan University.
- Cutrona, C. E., & Russell, D. W. (1990). Type of social support and specific stress: Toward a theory of optimal matching. In B. R. Sara son, I. G. Sarason, & G. R. Pierce (Eds.). *Social support: An interactional view* (pp. 319-366). New York: John Wiley & sons.
- Didden, R., Scholte, R. H. J., Korzilius, H., de Moor, J. M. H., Vermeulen, A., O'Reilly, M., Lang, R., & Lancioni, G. E. (2009). Cyberbullying among students with intellectual and developmental disability in special education settings. *Developmental Neurorehabilitation*, 12(3), 146-151. <https://doi.org/10.1080/17518420902971356>
- Eddles-Hirst, K., Vialle, W., McCormick, J., & Rogers, K. (2012). Insiders or outsiders: The role of social context in the peer relations of gifted students. *Roeper Review*, 34, 53–62. doi:10.1080/02783193.2012.627554
- Fegenbush, B. S., & Olivier, D. F. (2009, March 5-6). *Cyberbullying: A literature review*. Annual Meeting of the Louisiana Education Research Association, Lafayette, 1-70. http://ullresearch.pbworks.com/f/Fegenbush_Cyberbullying_LERAConferencePaper.pdf
- Fremouw, W. J., Keelan, C. M., & Schenk, A. M. (2013). Characteristics of college cyberbullies. *Computers in Human Behavior*, 26(6), 2320-2327. doi: 10.1016/j.chb.2013.05.013

- Gonzales, J. L., & Madrigal, D. V. (2020). Awareness and incidence of bullying among public high school students in antique. *Philippine Social Science Journal*, 3(2), 55-56. DOI:10.52006/MAIN.V3I2.240
- Gómez-Guadix, M., Orue, I., Smith, P. K., & Calvete, E. (2013). Longitudinal and reciprocal relations of cyberbullying with depression, substance use, and problematic internet use among adolescents. *The Journal of Adolescent Health: Official Publication of the Society for Adolescent Medicine*, 53(4), 446-452. <https://doi.org/10.1016/j.jadohealth.2013.03.030>
- González-Cabrera, J., Tourón, J., Machimbarrena, J. M., Gutiérrez-Ortega, M., Álvarez-Bardón, A., & Garaigordobil, M. (2019). Cyberbullying in gifted students: Prevalence and psychological well-being in a Spanish sample. *International Journal of Environmental Research and Public Health*, 16(12), 2173. <https://doi.org/10.3390/ijerph16122173>
- Heilat, M., & Seifert, T. (2019). Mental motivation, intrinsic motivation and their relationship with emotional support sources among gifted and non-gifted Jordanian adolescents. *Cogent Psychology*, 6(1), 1-13. <https://doi.org/10.1080/23311908.2019.1587131>
- Herrera, N. C., Zajonc, R. B., Wiczorkowska, G., & Cichomski, B. (2003). Beliefs about birth rank and their reflection in reality. *Journal of Personality and Social Psychology*, 85(1), 142-150. doi: 10.1037/0022-3514.85.1.142.
- Hinduja, S., & Patchin, J. W. (2008). Cyberbullying: An exploratory analysis of factors related to offending and victimization. *Deviant Behavior*, 29(2), 129-156. <https://doi.org/10.1080/01639620701457816>
- Hinduja, S.; Patchin, J.W. (2009). *Bullying beyond the schoolyard: preventing and responding to cyberbullying*. Sage (Corwin Press): Thousand Oaks, CA, USA.
- Hisada, M., Senda, S., & Minoguchi, M. (1989, September). *Development of social support scale* (1). Paper presented at the annual meeting of the Japanese Psychological Association, Tokyo, Japan.
- Hurllock, E. B. (1968). *Child Development* (6th Ed.). New York: McGraw-Hill.
- Jaradat, A. M. (2017). Differences in bullying and victimization between optimistic adolescents and those who are not optimistic. *International Journal of Social Science*, 3(3), 440-451.
- Jumper, R. L. (2010). *Gifted children's communication about bullying: understanding the experience* (Doctoral dissertation). *Dissertation Abstracts International Section A: Humanities and Social Sciences*, 71(3-A), 771. <https://hdl.handle.net/1969.1/ETD-TAMU-2009-12-7379>.
- Karaer, Y., & Akdemir, D. (2019). Parenting styles, perceived social support and emotion regulation in adolescents with internet addiction. *Comprehensive Psychiatry*, 92, 22-27. <https://doi.org/10.1016/j.comppsy.2019.03.003>
- Kim, E., & Glomb, T. M. (2010). Get smarty pants: Cognitive ability, personality, and victimization. *Journal of Applied Psychology*, 95(5), 889-901. <https://doi.org/10.1037/a0019985>
- Kiran, C. (2013). *There's nothing funny about cyber bullying*. Retrieved from: <https://www-khaleejtimes.com/article/theres-nothing-funny-about-cyber-bullying>.
- Kowalski, R., Limber, S. (2007). Electronic bullying among middle school students. *Journal of Adolescent Health*, 41, S22-S30. doi: 10.1016/j.jadohealth.2007.08.017.
- Lee, J. (2017). *Traditional bullying and cyberbullying in childhood and young adulthood: prevalence, relationship, and psychological distress outcomes among young adults* [Doctoral dissertation, The Florida State University]. Retrieved from http://purl.flvc.org/fsu/fd/FSU_SUMMER2017_Lee_fsu_0071E_13968
- MacDonald, C. D., & Roberts-Pittman, B. (2010). Cyberbullying among college students: Prevalence and demographic differences. *Procedia-Social and Behavioral Sciences*, 9, 2003-2009. <https://doi.org/10.1016/j.sbspro.2010.12.436>.
- Mitchell, M.S. (2011). *Cyberbullying and academic achievement: Research into the rates of incidence, knowledge of consequences, and behavioral patterns of cyberbullying* [Unpublished Master Thesis]. Storrs, CT University of Connecticut
- Mitchell, K. J. (2017). *Bullying in our schools: The impact of the Olweus bullying prevention program* [Master's theses]. Retrieved from https://digitalcommons.brockport.edu/cgi/viewcontent.cgi?referer=https://scholar.google.com/&httpsredir=1&article=1745&context=eht_theses.
- Moore, P. M. (2012). *Electronic bullies, victims, and bully-victims: an examination of life satisfaction in middle school students* [Doctoral dissertation in School Psychology College of Arts and Sciences]. University of South Carolina.
- Niklová, M., & Makúchová, J. (2018). Forms of cyber-bullying from the aspect of cyber-victims – elementary and secondary school pupils. *The New Educational Review*, 51(1), 150-161. <https://doi.org/10.15804/ner.2018.51.1.12>
- Ogurlu, U., Sarıçam, H. (2018) Bullying, forgiveness and submissive behaviors in gifted students. *Journal of Child and Family Studies*, 27(2): 2833-2843. doi:10.1007/s10826-018-1138-9
- Ogurlu, Ü., Sevgi-Yalin, H., & Yavuz-Birben, F. (2018). The relationship between social-emotional learning ability and perceived social support in gifted students. *Gifted Education International*, 34(1), 76-95. doi:<http://dx.doi.org/10.1177/0261429416657221>
- Olweus D. (1996). *The Revised Olweus Bully/Victim Questionnaire*. Norway: University of Bergen.
- Patel, V., Varma, J., Nimbalkar, S., Shah, S., & Phatak, A. (2020). Prevalence and Profile of Bullying involvement among students of rural schools of Anand, Gujarat, India. *Indian Journal of Psychological Medicine*, 42(3), 268-273. https://doi.org/10.4103/IJPSYM.IJPSYM_172_19
- Pelchar, T. K., & Bain, S. K. (2014). Bullying and victimization among gifted children in school-level transitions. *Journal*

- for the Education of the Gifted, 37(4), 319–336. <https://doi.org/10.1177/0162353214552566>.
- Peterson, J.S. (2009). Myth 17: Gifted and talented individuals do not have unique social and emotional needs. *Gifted Child Quarterly*, 53(4), 280-282. doi:10.1177/0016986209346946
- Peterson, J. S., & Ray, K. E. (2006). Bullying and the gifted: victims, perpetrators, prevalence, and effects. *Gifted Child Quarterly*, 50, 148–164.
- Peters, M. P., & Bain, S. K. (2011). Bullying and victimization rates among gifted and high-achieving students. *Journal for the Education of the Gifted*, 34(4), 624–643.
- Renzulli, J. S. (2012). Reexamining the role of gifted education and talent development for the 21st century: A four part theoretical approach. *Gifted Child Today*, 56(3), 150-159. doi:10.1177/0016986212444710
- Robson, C., & Witenberg, R. T. (2013). The influence of moral disengagement, morally based self-esteem, age, and gender on traditional bullying and cyberbullying. *Journal of school violence*, 12(2), 211-231. <https://doi.org/10.1080/15388220.2012.762921>.
- Ryan, B. (2014). *Do perceptions of cyber bullying change with age and gender? A study of college age students* [Unpublished Doctoral Dissertation]. Walden University, Minneapolis, MN.
- Ryoo, J. H., Wang, C., Swearer, S. M., & Park, S. (2017). Investigation of transitions in bullying/victimization statuses of gifted and general education students. *Exceptional Children*, 83(4), 396–411. <https://doi.org/10.1177/0014402917698500>
- Schunk, D. H. (2000) *Learning Theories: An educational perspective* (3rd Ed.). New jersey: Merrill and Imprint of Prentice Hall.
- Sharab, A. & Sharab, S. (2019). The family climate as an intermediate variable between cyber violence and psychological security for the 14-16 age group. *International Journal of Educational and Psychological Studies*, (7), 10-33.
- Shorap, A. A. (2020). The Ability of Family Environment and Psychological Security to Predict E-Violence among a 14-16 Age Group in the Governorate of Khan Yunis in Gaza. *Journal of the University of Sharjah for the Humanities and Social Sciences*, 17(1), 175-197. <https://doi.org/10.36394/jhss/17/1B/6>
- Kazarian, S. & Ammar J. (2013). School bullying in the Arab world: A Review. *The Arab Journal of Psychiatry*, 24(1), 37 - 45 (doi: 10.12816/0000097).
- Smith, P.K., Mahdavi, J., Carvallo, M., Fisher, S., Russell, S., & Tippett, N. (2008). Cyberbullying: Its nature and impact in secondary school pupils. *Journal of Child Psychology and Psychiatry*, 49(4), 376-385. <https://doi.org/10.1111/j.1469-7610.2007.01846>.
- Solberg, M., & Olweus, D. (2003). Prevalence estimation of school bullying with the Olweus bully/victim questionnaire. *Aggressive Behavior*, 29, 239–268.
- Sureda Garcia, I., López Penádes, R., Rodríguez Rodríguez, R., & Sureda Negre, J. (2020). Cyberbullying and internet addiction in gifted and non-gifted teenagers. *Gifted Child Quarterly*, 64(3), 192–203. <https://doi.org/10.1177/0016986220919338>
- Tan, K. A. (2019). The effects of personal susceptibility and social support on Internet addiction: An application of Adler's theory of individual psychology. *International Journal of Mental Health and Addiction*, 17(4), 806-816. <https://doi.org/10.1007/s11469-018-9871-2>
- Toseeb, U., McChesney, G., Dantchev, S., & Wolke, D. (2020). Precursors of sibling bullying in middle childhood: Evidence from a UK-based longitudinal cohort study. *Child Abuse & Neglect*, 108, 104633. <https://doi.org/10.1016/j.chiabu.2020.104633>
- Uchida, Y., Kitayama, S., Mesquita, B., Reyes, J., & Morling, B. (2008). Is perceived emotional support beneficial? Well-being and health in independent and interdependent cultures. *Personality and Social Psychology Bulletin*, 34, 741–754. doi:10.1177/0146167208315157.
- Van der Wal, M. F., de Wit, C. A., & Hirasig, R. A. (2003). Psychosocial health among young victims and offenders of direct and indirect bullying. *Pediatrics*, 111(6 Pt 1), 1312–1317. <https://doi.org/10.1542/peds.111.6.1312>
- Wang, J., Iannotti, R. J., & Nansel, T. R. (2009). School bullying among adolescents in the United States: Physical, verbal, relational, and cyber. *Journal of Adolescent Health*, 45(4), 368-375.
- Willard, N. E. (2007). *Cyberbullying and cyber threats: Responding to the challenge of online social aggression, threats, and distress*. Research Press.
- You, S., Lee, J., Lee, Y., & Kim, A. Y. (2015). Bullying among Korean adolescents: The role of empathy and attachment. *Psychology in the Schools*, 52(6), 594-606.