

# THE MEDIATING ROLE OF EMOTIONAL INTELLIGENCE IN THE RELATIONSHIP BETWEEN PERCEIVED SOCIAL SUPPORT AND CYBERBULLYING VICTIMIZATION AMONG ADOLESCENTS IN EGYPT

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**Abstract:** Emotional intelligence and social support are important variables in handling and preventing cyberbullying. Few studies have examined the mediating role of emotional intelligence in the relationship between perceived social support and cyberbullying victimization among adolescents. A total of 120 (62.5% males, and 37.5% females) adolescents five middle schools from West El Mahalla, El Gharbeya. They ranged in age from 12 to 15 years ( $M = 13.88$ ,  $SD = 1.24$ ). For the purpose of this study, quantitative survey research was employed. For collecting data, Schutte Self Report Emotional Intelligence Test, (Schutte et al. 1998), The Cyber Victimization Experiences Scale (Betts and Spenser2017), and Multidimensional Scale of Perceived Social Support (MSPSS) (Zimet et al. 1988) were used. Descriptive statistics, inter-correlations and regression were employed for data analysis. The findings confirmed that emotional intelligence moderated the associations between cyberbullying and perceived social support. In this regard, the findings extend our knowledge on the association between cyberbullying and perceived social support by investigating the emotional intelligence of cyberbullies. Findings were discussed and conclusion was included.

**Keywords:** Emotional intelligence, perceived social support, cyberbullying victimization, adolescents.

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## INTRODUCTION

In a world which is characterized by huge and rapid increase in digitalism, there appears a serious psychosocial problem. It is called cyberbullying (Palermi, Servidio, Bartolo and Costabile (2017). Cyberbullying can be regarded as an aggressive behaviour which is seen as repetitive and intentional acts carried out by an individual or a group of people using internet and mobile phones against another person (or a group of people). Those people are called victims who are not able to protect or defend themselves (Peter et al., 2008). Cyberbullying is different from face-to-face bullying in that there is no physical exposure to an action.

Adolescents in our society, like most of their ages around the world, are engaged in virtual activities such as sharing and messaging (Cho and Yoo 2016). Many researchers have reported several problems caused by cyberbullying. It has various negative effects on individuals (Hoff and Mitchell 2009; Olweus and Breivik 2014; Patchin and Hinduja 2006). Cyber victimization pushes people to lead negative life conditions and they may have suicidal tendencies (Hinduja and Patchin 2008). Cyberbullying may lead to emotional and social disturbance and adjustment in victims (Elipse, Mora-Merchan, Ortega-Ruiz, and Casas 2015).

Raskauskas and Stoltz (2007) indicated that cyberbullying has negative effects on the victims such that it made them sad, hopeless, depressed and emotionally distressed. It is said that there are some variables that may help lessen the severity of cyberbullying among adolescents such as emotional intelligence and perceived family support.

## EMOTIONAL INTELLIGENCE AND CYBERBULLYING

Emotional intelligence is the ability to express, perceive, understand and manage emotions (Mayer and Salovey 1997). Emotional intelligence, according to Mayer, Roberts and Barsade (2008), is composed of four branches: recognizing or perceiving emotions, i.e., the capacity to perceive emotions in oneself and others efficiently; using emotions to facilitate thinking; understanding emotions; and managing emotions. People who can handle and process the emotionally relevant

information during the events that are supposed to be stressful are more likely to function positively and to have positive relationships with others (Rey et al., 2018). Emotional intelligence is variable that has shown growing evidence indicating its potential role as a buffer against negative effects of cyberbullying (Extremiera, Quintana-Orts, Mérida-López and Rey 2018).

It was revealed that adolescents with emotional intelligence are in the position of regulating and handling their emotions and others' negative emotions, and this leads to the improvement of their life, that is, happiness and psychological well-being, and thus preventing them from leading a maladjusted psychological life (Rey et al., 2018).

Moreover, students with higher levels of emotional intelligence are less likely to be exposed to cyberbullying by peers and are likely to experience more positive social behaviors (Elipse, Mora-Merchan, Ortega-Ruiz Jose and Casas 2015). On the other hand, those who are victims of cyberbullying have a higher ability to attend emotions and at the same time they have a lower ability to understand or regulate their emotions (Elipse et al. 2015).

Peláez-Fernández, Extremiera and Fernández-Berrocal (2014), among others, revealed that perceived emotional intelligence helps explain aggressive conduct over and above the effect of age, sex, and personality traits. It moderated the relationship between aggression and personality.

## PERCEIVED SOCIAL SUPPORT AND CYBERBULLYING

Being loved, appreciated, and valued by parent, peer, teacher or other significant person in one's environment is said to be the main source of social support. One needs to feel that his environment supports him whenever he needs help. In this study social support is limited to perceived family support.

Adolescents who are exposed to cyberbullying or who are cyberbullying victims have difficulties in relationship with their classmates and are more likely to be isolated and socially rejected from their peers and this in its turn may contribute to maintaining the cyberbullying behaviour (Odaci and Kalhan 2010).

Ortega-Barón et al. (2019) reported that adolescents who were involved in cyberbullying as perpetrators or victims avoided communication

with their parents compared to those who were not involved in cyberbullying. Additionally, victims of cyberbullying had lower feelings of affiliation with their classmates. These findings gave insight into the important role of family and peers in the prevention and eradication of the growing problem of cyberbullying.

Heiman, Olenik-Shemesh and Eden (2015) reported that those who are exposed to cyberbullying experienced greater feelings of emotional loneliness and a lower belief in their social self-efficacy. Nevertheless, students who have close relationship with their parents are less likely to be cyber victims (Accordino and Accordino 2011).

#### PROBLEM STATEMENT

Egypt has a new digital educational system. According to this system, students in the first-year secondary has been given tablets to be used at any setting. e.g. at school, at home, at cafes etc. Though students at this stage and the preparatory one too are technological individuals, as they were born and developed in a digital age, this will help them be in-depth- digital individuals. They may use social networks intensely. As a result, they may spread their personal information unintentionally and in an uncontrolled manner. In consequence of these reported wishes and tendencies, they may be exposed to negative behaviours of cyber experiences, something that is called cyberbullying.

#### THIS STUDY POSES FOLLOWING HYPOTHESES

- Hypothesis 1: Cyberbullying Victimization is negatively associated with Perceived Social Support.
- Hypothesis 2: Emotional Intelligence is positively associated with Perceived Social Support.
- Hypothesis 3: Emotional Intelligence is negatively associated with Cyberbullying Victimization.
- Hypothesis 4: Emotional Intelligence mediates the link between Cyberbullying Victimization and Perceived Social Support.

#### METHOD

##### DESIGN

For the purpose of this study, quantitative survey research was employed. The independent variable is perceived social support, cyberbullying victimization is the dependent variable and emotional intelligence is the moderating variable.

##### PARTICIPANTS

For the purpose of this study, convenient sampling method was used to recruit the participants. The researcher selected five middle schools from West El Mahalla, El Gharbeya. After obtaining the informed consent from the school and all students involved, a total of 120 (62.5% males, and 37.5% females) adolescents participated in this study. They ranged in age from 12 to 15 years ( $M = 13.88$ ,  $SD = 1.24$ ). The researcher told those students that although he hoped that all students could continue with him till the end of this study, they were free to refuse or discontinue participation at any time. The researcher told those students that any information they would provide would be top secret and confidential. It would not be revealed to anyone.

##### INSTRUMENTS

*Schutte Self Report Emotional Intelligence Test*, (Schutte et al., 1998). It is 33 items with a 5-point Likert scale from 1 (completely disagree) to 5 (completely agree). The scale takes only 5 minutes to complete. The English version of the scale was translated into Arabic by the researcher. Total scores typically range from 33 – 165. High scores on all items collectively indicate high levels of emotional intelligence. The reliability of the scale in terms of internal consistency was assessed by Cronbach's  $\alpha$ . The items demonstrated a satisfactory level of internal consistency reliability ( $\alpha = 0.89$ ). For convergent validity of emotional intelligence scale correlation with Al Kholi's (2002) emotional Intelligence Scale was significant [ $r(60) = 0.61$ ,  $p < 0.01$ ].

*The Cyber Victimization Experiences scale* (Betts and Spenser 2017). This scale comprises 15 items across three subscales: threats (6 items), sharing images (5 items), and personal attack (4 items).

Participants responded to the items using a six-point scale ranging from 1 (Never) to 6 (Everyday) the extent to which they had experienced the behaviour described in the item over the last three months. High scores indicated great Cyber victimization experiences. The coefficient of internal consistency of the total scale was found to be 0.85. The test-retest reliability value was 0.75. For convergent validity of The Cyber Victimization Experiences scale, correlation with the cyber bullying scale (Hisham, 2018) was significant ( $r = 0.71$ ,  $p < .01$ ).

*Multidimensional Scale of Perceived Social Support (MSPSS)* (Zimet, Dahlem, Zimet, Gordon 1988). It is a 7-point Likert- Type Scale. It consisted of 12 items comprising three factors, namely family (Fam), friends (Fri) and significant other (SO). The scale ranged from *very strongly disagree* (1), to *very strongly agree* (7). Internal Reliability Estimates were: 0.90 for family factor, 0.89 for friends, 0.83 for significant other, and 0.92 for total scale. For convergent validity of Multidimensional Scale of Perceived Social Support, correlation with Al Sersi and Abdul Maksoud's Social Support Scale (2001) was significant [ $r(60) = 0.64$ ,  $p < 0.01$ ].

## PROCEDURES

Prior to administering the scales, parents were notified and given the option of refusing to allow their adolescent 's participation in the study. Students were informed about purpose of the study and voluntarily completed a consent form. They were instructed not to look at their classmates' documents while responding to the scale's items. To ensure that the respondents responded to the items honestly and sincerely, they were told not to identify themselves in any way on the scale paper. They were also informed that they should not be concerned with anything concerns their participation in the study and their responses are for research purposes only and would be kept confidential. Each questionnaire took about 15-20 minutes to complete. All data were entered in an SPSS file.

## DATA ANALYSIS

Pearson correlation and moderated hierarchical multiple regression analyses were conducted to test the hypothesis of the study.

## RESULTS

### *Descriptive data and inter-correlations*

Table 1. shows the means, descriptive statistics and inter-correlations of emotional intelligence, cyberbullying and Perceived Social Support. Table 1 shows that there are significant correlations between cyberbullying and Perceived Social Support. cyberbullying correlates negatively with Perceived Family Support ( $r = -0.57$ ). On the other hand, emotional intelligence was found to be positively correlated with Perceived Social Support ( $r = 0.53$ ) and negatively with cyberbullying ( $r = -0.41$ ).

Table 1. Descriptive statistics and inter correlations of emotional intelligence, cyberbullying and Perceived Social Support

Variables	1	2	3
emotional intelligence	1.00		
cyberbullying	- 0.41**	1.00	
Perceived Social Support	0.53**	-0.57**	1.00
Mean	129.95	69.51	61.53
Standard deviation	7.92	8.15	5.21
** P <.01			

### *Testing the mediating role of emotional intelligence in the relationship between cyberbullying and perceived social support*

From tables 2-4, it is clear that  $R^2 = 0.677$ , Adjusted  $R^2 = 0.669$ , which means that the independent variable, emotional intelligence, explains 66.9% of the variability of the dependent variable, cyberbullying. The regression model is statistically significant,  $F = 9.867$ ,  $p = 0.002$ . This indicates that, overall, the model applied can statistically significantly predict the dependent variable, cyberbullying.

From tables 5-7, it is clear that  $R^2 = 0.677$ , Adjusted  $R^2 = 0.669$ , which means that the independent variable, emotional intelligence, explains 66.9% of the variability of the dependent variable, perceived social support. The regression

model is statistically significant,  $F= 9.869$ ,  $p = 0.002$ . This indicates that, overall, the model

applied can statistically significantly predict the dependent variable, perceived social support.

Table 2. The regression results of the relationship between emotional intelligence and cyberbullying. Model Summary b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change statistics				
					R Square change	F Change	Df1	Df2	Sig. F change
1	0.478a	0.677	0.669	11.73011	0.677	9.867	1	118	0.002

- Predictors (constant), EI
- Dependent variable: Cyb.

Table 3. The regression results of the relationship between emotional intelligence and cyberbullying. ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	1357.703	1	1357.706	9.867	0.002a
Residual	16236.260	118	137.595		
Total	17593.967	119			

- Predictors (constant), EI
- Dependent variable: Cyb.

Table 4. The regression results of the relationship between emotional intelligence and cyberbullying. Coefficients a.

Model	Unstandardized coefficients		Standardized coefficients	T	sig
	B	Std error	Beta		
1 (constant)	114.304	14.298	-.278	7.994	.000
EI	-.349	.111		-3.141	.002

- Dependent variable: Cyb.

Table 5. The regression results of the relationship between emotional intelligence and Perceived Family Support. Model Summary b.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change statistics				
					R Square change	F Change	Df1	Df2	Sig. F change
1	0.478a	0.677	0.669	8.71891	0.677	9.869	1	118	0.002

- Predictors (constant), EI
- Dependent variable: PSS

Table 6. The regression results of the relationship between emotional intelligence and Perceived Family Support. ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	750.211	1	750.211	9.869	0.002a
Residual	8970.289	118	70.019		
Total	9720.500	119			

- Predictors (constant), EI
- Dependent variable: PSS

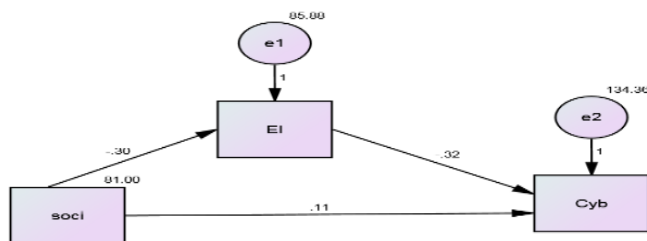
Table 7. The regression results of the relationship between emotional intelligence and Perceived Social Support. Coefficients a.

Model	Unstandardized coefficients		Standardized coefficients	T	sig
	B	Std error	Beta		
1 (constant)	91.542	10.628	-.278	8.614	.000
EI	0.295	0.083		3.141	.002

- Dependent variable: PSS



Figure 1: Regression model of the mediating role of emotional intelligence



According to table 8, as for the effect of social support on emotional intelligence, the probability of getting a critical ratio as large as 3.155 in absolute value is 0.002. In other words, the regression weight for soci in the prediction of EI is significantly different from zero at the 0.01 level (two-tailed). As to the effect of emotional intelligence on cyberbullying, the probability of getting a critical ratio as large as 2.787 in absolute value is 0.005. In other words, the regression weight for EI in the prediction of Cyb is significantly different from zero at the 0.01 level (two-tailed). When the mediator (emotional intelligence) mediates between soci; support and cyberbullying, the probability of getting a critical ratio as large as 0.915 in absolute value is 0.360. In other words, the regression weight for soci in the prediction of Cyb is not significantly different from zero at the 0.05 level (two-tailed). This means that the relationship between independent variable (social family support) and dependent variable (cyberbullying) became insignificant. This also means that emotional intelligence is a mediator between social support and cyberbullying, and this mediation is complete one.

Table 8. Regression Weights: (Group number 1 - Default model).

		Estimate	S.E.	C.R.	P
EI	<--- soci	-.298	.094	-3.155	.002
Cyb	<--- EI	-.320	.115	-2.787	.005
Cyb	<--- soci	.112	.123	.915	.360

## DISCUSSION

The study investigated the moderating role of emotional intelligence in the relationship between cyberbullying and perceived social support. The findings confirmed that emotional intelligence moderated the associations between cyberbullying and perceived social support. In this regard, the findings extend our knowledge on the association between cyberbullying and perceived social support by investigating the emotional intelligence of cyberbullies.

These findings are in the same line with Oluyinka and Erhabor (2013) who reported that emotional intelligence attenuated the influence of personality factors on the tendency to perpetrate cyberbullying. Also, with the findings of Elipe et al. (2015) which supported the idea that perceived emotional intelligence as a moderator, affects the relationship between cyber-victimization and emotional impact. Emotional intelligence in general is more likely to improve people's subjective well-being (Paulo et al., 2011) and hence they can stand in the face of cyberbullying acts, as they tend to experience less emotional distress when they face a stressful situation, like cyberbullying, and so they increase positive affect (Gohm, Corser and Dalsky 2005).

Findings also indicated that emotional intelligence contributed significantly to prediction of cyberbullying. One can presume that what distinguishes the cyber bullies from others and so sets them apart of all is that they are unable control their impulsiveness and their lack of understanding other's feelings. Accordingly, they are more likely to abuse relationships. It can be assumed that individuals with higher levels of total emotional intelligence and got higher level of social support from their families as well as peers, are more likely to have lower scores in cyber-victimization or at least their cyber-victimization lessens. This means that they are able to be resilient in the face of cyberbullies.

Social support can be a protective and adequate factor that give adolescents tools for coping with stressful events, like cyberbullying (Arriaga, Garcia, Amaral and Daniel 2017). This finding goes in the same line with Mehmet, Sinan and Halil (2018) who reported that perceived family support when social support decreased, cyberbullying

behaviours increased and vice versa. They found a moderate and negative correlation between students' cyberbullying levels and their perceived levels of family support. On the other hand, when climate is negative in the family there will be persistence in the dynamics of cyber-victimization (Cuesta, Cristina, Lady and Sayana 2018), and vice versa, if there is positive communication between the adolescent and his family, there will be resistance to cyberbullying.

## CONCLUSION

In conclusion, the present study provided evidence that perceived social support influence cyber bullies' tendency to perpetrate cyberbullying. Further, emotional intelligence moderated the association between cyberbullying and perceived social support. Exposing the cyberbullying damages the social relationships. However, when an individual gets social support from parents, peers, teachers, or from any other avenues, the impact of this damage is lessened. Social support is more likely to buffer the effect cyberbullying damages. Emotional skills can be an important protective factor against cyberbullying victimization and its negative consequences.

Finally, the findings have implications for prevention of cyberbullying among adolescents in Egypt. Therefore, policy makers are invited to combat cyberbullying among students. This they can be through teaching students about emotional intelligence and inviting parents to inform them about how perceived social support influence cyber bullies' tendency to perpetrate cyberbullying. The results of this study pointed to the importance of including the family and others, and emotional intelligence in cyberbullying prevention programs.

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