



*Faculty of Education*  
*Journal of Education*  
\*\*\*

*Direct and Indirect Effects of Difficulties in Emotion  
Regulation on Bullying in High School Adolescents*

**BY**

**Dr. Adel M. Elsadek**  
Associate Professor of Mental  
Hygiene  
Faculty of Education,  
Aswan University

**Dr. Adel S. Abbady**  
Associate Professor of  
Mental Hygiene  
Faculty of Education,  
Aswan University

**DOI: 10.12816/EDUSOHAG. 2020.**

**Journal of Education – Volume (76) August, 2020**

**Print:(ISSN 1687-2649) Online:(ISSN 2536-9091)**

***Abstract***

In an Egyptian context, in addition to identifying the direct and indirect effects of difficulties in emotion regulation on bullying, this study aims at identifying the order of bullying forms perceived by bullies and bullying victims. Moreover, the study aims at showing the differences of difficulties in emotion regulation among bullies, bullying victims and normal adolescents. The Bullying Scale and the Scale of the Difficulties in Emotion Regulation were implemented to the main study sample which includes 86 Egyptian adolescents in addition to 100 adolescents for validation sample. The regression analysis mainly used to identify the direct and indirect effects of difficulties in emotion regulation and various forms of bullying among adolescents in addition to various statistical methods to identify other objectives. The bullying forms perceived by bullies were social bullying, psychological bullying and physical bullying respectively. Bullying forms perceived by bullying victims were physical bullying, psychological bullying and social bullying respectively. There were significant differences in difficulties in emotion regulation dimensions among bullies, bullying victims and normal adolescents. Mainly, the study suggested that there are direct and indirect effects of all the dimensions of difficulties in emotion regulation on bullying.

## التأثيرات المباشرة وغير المباشرة لصعوبات التنظيم الانفعالي على التمر لدى المراهقين في المرحلة الثانوية

د. عادل محمد الصادق

د. عادل سيد عبادي

أستاذ الصحة النفسية المساعد

أستاذ الصحة النفسية المساعد

كلية التربية - جامعة أسوان

كلية التربية - جامعة أسوان

المستخلص

هدفت الدراسة الحالية بالإضافة إلى تحديد التأثيرات المباشرة وغير المباشرة لصعوبات التنظيم الانفعالي على التمر لدى المراهقين بالمرحلة الثانوية، وتحديد ترتيب أشكال التمر لدي كل من المتممين وضحايا التمر، علاوة على التعرف على الفروق في صعوبات التنظيم الانفعالي وأبعادها بين المتممين وضحايا التمر والمراهقين العاديين بالمرحلة الثانوية، حيث تم تطبيق مقياس التمر من إعداد الباحثين، ومقياس صعوبات التنظيم الانفعالي من إعداد Gratz & Roemer (2004) وترجمة الباحثين على عينة الدراسة الأساسية التي تضم ٨٦ مراهقاً؛ حيث تم استخدام تحليل الانحدار بشكل رئيسي لتحديد الآثار المباشرة وغير المباشرة لصعوبات التنظيم الانفعالي؛ وقد أسفرت نتائج الدراسة عن وجود تأثيرات مباشرة وغير مباشرة لجميع أبعاد صعوبات التنظيم الانفعالي على التمر وصلت الى ٩٧٪، كما أسفرت النتائج عن ترتيب أشكال التمر لدى المتممين كما يلي: التمر الاجتماعي ثم التمر النفسي ثم البدني على التوالي. كما كان ترتيب أشكال التمر لدى ضحايا التمر: التمر البدني ثم النفسي ثم الاجتماعي على التوالي. كما وجدت فروق ذات دلالة إحصائية في صعوبات التنظيم الانفعالي بين المتممين وضحايا التمر والمراهقين العاديين، حيث تم في ضوء تفسير هذه النتائج تقديم بعض المقترحات والتوصيات.

الكلمات المفتاحية: صعوبات التنظيم الانفعالي - التمر - المراهقين

**Introduction:**

The problem of bullying mostly refers to a negative, purposeful and consistent behavior directed towards a person or a certain group of people from their most vulnerable peers (Salkind, 2008), it refers also to the repeated aggressive behavior towards a certain vulnerable victim who can be physically and emotionally exploited (Strickland, 2001). The behavior of bullying is characterized by intentional aggression, repetition and an imbalance between the bully and the victim (Furlong, Soliz, Simental, & Greif, 2004), which leads to some negative effects on either the bully or the victim of bullying, including sometimes the emergence of the signs of depression and anxiety, suffering low self-esteem, in addition to the emergence of some physical symptoms such as headaches, fatigue, loss of appetite, and absences from school etc.. (Teel, 2009)

appears in different forms or levels, including physical, psychological, verbal, or social bullying; whether some or all of them (Salkind, 2008) .This is manifested through direct or indirect aggression, which can be observed through behaviors such as harming others, beating, etc., or indirect aggression such as taunting, threats, etc. (Daniels & Bradley, 2011.).

Some believe that bullying is due to the bully's desire to exercise power over others and the need to feel strong, others see bullying as a result of social learning within or outside family because the bully has been a victim of bullying by others. Others believe bullying as a challenging reaction to family pressures, resulting in bullying on those who are weaker as a means of taking revenge or gaining a sense of self-affirmation. The child may withdraw and become a victim of bullying. In addition, that bullying may be seen as an educated behavior reinforced by the sense of power that the bully gets by showing his power to others and this, in turn, reinforces the negative behavior inside him. (Fundukian & Wilson, 2008; Jacobs, 2008)

In light of this, negative behaviors practiced on or by the individual usually make the individual confronts the painful feelings that he has experienced in various ways that may be effective or ineffective. In addition to the anxiety associated with these feelings, these individuals face problems in recognizing and accepting these feelings as well as using them positively. Therefore, the recent years have witnessed an

## *Direct and Indirect Effects of Difficulties in Emotion Regulation .....*

increasing interest in the role of treatment and emotional regulation in many psychological problems (Leahy, Tirch, & Napolitano, 2011)

Emotion regulation performs many tasks, and a goal is set accordingly to adjust the process of generating emotions, that involves the process of impulse employment which is considered one of the most important processes that affect emotion generation (Gross, Sheppes, & Urry, 2011), and emotion regulation also involves an important set of skills that control the emotions of individuals. Therefore, emotion regulation has become very important in many disciplines (Macklem, 2008, 2), so psychological studies have recently focused on the difficulties in emotion regulation in the context of psychological defenses, pressures, confrontation, self-regulation, etc. (Gross, 2014, 3).

Gratz & Roemer (2004) is the most common model in the study of emotion regulation, as it includes the study of incompatible strategies of emotional regulation. This model measures the difficulties of understanding and expression of emotions, and the inability to determine the appropriate emotion when undergoing negative emotional experience as well as the lack of knowledge on the positive strategies of emotion regulation. It is a model designed for determining the ineffective strategies of emotion regulation; in addition, it is suitable for identifying emotions, especially with mental disorders.

Gratz & Roemer (2004), therefore, focused on assessing the deficiencies in emotion regulation strategies by developing a tool for measuring difficulties in emotion regulation in addition to measuring understanding and emotional awareness, the ability to engage in the appropriate behavior when undergoing a negative emotional experience, and the knowledge of the emotional and regulatory strategies.

Some studies have shown the importance of difficulties in emotion regulation for individuals and their contribution to many problems and variables; for example, the possibility of drug addiction (Nikmanesh, 2014) and depression (Kokonyie, 2014). Moreover, Mahady et al (2000) noted that emotion regulation may cause severe harm to bullying victims, and the results of the Shields & Cicchetti (2001) study indicated that bullies have encountered difficulties in emotion regulation.

The authors observed, when applying some of the studies in an Egyptian school environment, that students' problems acutely increase when they enter adolescence, because in addition to the physiological and

## **Direct and Indirect Effects of Difficulties in Emotion Regulation .....**

physical changes experienced by adolescents, adolescence is also considered a period of complexity in the psychological lives of individuals in terms of social pressures, autonomy, self-fulfilment, belongingness, gender compatibility, etc, that's why adolescence is a risky period and full of problems. Studies show that bullying behaviour is at the top of these problems, and is most evident in the school environments, that contain a direct interaction between students and their peers at this age. Adolescents also have greater difficulties in facing problems because of their inability to regulate their emotions (Nicol, 2002).

Therefore, the authors try to study the difficulties in emotion regulation among teenage bullies, victims of bullying and ordinary adolescents through the study of direct and indirect effects in the case of proving these relations between the variables of the study.

### **Difficulties in Emotion Regulation**

It is defined by the authors in this study as "the inability to use appropriate strategies in a certain situation for achieving individual goal-directed behavior and situational demands through the awareness of the emotional responses, controlling the emotional behaviors, the individual's ability to understand, accept, and express his emotions, and emotional clarity".

### **Bullying**

The researcher's definition of bullying in this study as "an aggressive, repeated, purposeful and persistent behavior towards a particular person or people, and abusing them physically, psychologically and socially, which leads to some negative consequences for both the bully and the victim of bullying".

### **Current Study**

In addition to the physiological and physical changes experienced by adolescents, adolescence is also considered a period of complexity in the psychological lives of individuals in terms of social pressures, autonomy, self-fulfilment, belongingness, gender compatibility, etc. That's why adolescence is a risky period and full of problems.

Studies show that bullying behaviour is at the top of these problems, and is most evident in the school environments, that contain a direct interaction between students and their peers at this age.

## **Direct and Indirect Effects of Difficulties in Emotion Regulation .....**

Adolescents also have greater difficulties in facing problems because of their inability to regulate their emotions (Nicol, 2002). Therefore, the authors try to study the difficulties in emotion regulation among adolescent bullies, victims of bullying and normal adolescents through the study of direct and indirect effects on bullying degrees in the case of proving these relations between the variables of the study.

### **Methods**

#### **Participants and procedures**

Data were obtained from volunteered adolescents from Egyptian secondary schools at Aswan. The sample of the study consisted of 185 adolescents, distributed to validation Sample which includes 100 adolescents and Main sample which includes 100 adolescents. After verifying the efficiency and psychometric characteristics of the study tools; Bullying Scale and Scale of Difficulties in Emotion Regulation implemented on the validation sample; they were implemented to the 85 adolescents' sample (males). The participants were between 15 and 18 years old, with an average 17.6 (SD = 1.10) years. No statistical differences in demographic information or psychometric measures used in this study were found.

### **Measures**

#### **Bullying Scale**

The authors have prepared a bullying scale for secondary school students in order to get a suitable tool for the individuals of the sample, the objectives, and the nature of the study. After extrapolating the current study terms in its origins as well as formulating items and measurable procedural phrases, the parameters of the scale have been formulated in a preliminary form commensurate with the nature and the objectives of the present study. The scale includes 14 item that have five choices: starting with "Strongly Reject, Reject, I do not know, Agree and Strongly Agree", with scores from 1 to 5, respectively. Alpha Cronbach was calculated for reliability (n = 100) which was 0.79. The Split-half reliability was also calculated which reached 0.75.

For validity, the factor analysis of the bully scale was conducted after applying it to a sample of 100 adolescents out of the validation sample. The factor analysis of the correlation matrix extracted from the raw data was conducted using the basic components method. Varimax method was used for rotation using Statistical package for Social

**Direct and Indirect Effects of Difficulties in Emotion Regulation .....**

Sciences SPSS 0.16, then the loadings less than 0.3 was omitted. In the light of the factor analysis, three main factors of the scale were derived, which were named according to the terms to three dimensions respectively: physical bullying includes 4 items, psychological bullying includes 6 items, and social bullying includes 4 items as shown in Table (1).

Table (1)  
The rotated factorial matrix of bullying scale

Items	F†1	F 2	F 3	Communalities
1			0.70	0.56
2			0.62	0.50
3			0.74	0.77
4		0.72		0.59
5		0.82		0.72
6		0.57		0.69
7		0.83		0.84
8		0.65		0.72
9		0.65		0.60
10	0.95			0.90
11	0.95			0.93
12	0.93			0.88
13	0.90			0.86
14			0.64	0.45
<b>Eigen Value</b>	4.31	4.06	1.64	<b>Total</b>
				<b>Variance%</b>
<b>Variance%</b>	30.77	28.98	11.68	71.44

†F: Factor

***Bullying Victim Scale***

The authors prepared the victim scale for secondary school students with the aim of obtaining a tool suitable for the sample and the nature and the objectives of the study. The results of extrapolating the terms of the present study have been interpreted into measurable items, where the parameters of the scale were formulated in their initial form commensurate with the nature and objectives of the current study. The scale includes 14 items that have five alternatives: starting with "Strongly Reject, Reject, I do not know, Agree and Strongly Agree", with scores from 1 to 5, respectively. For reliability, The alpha reliability of the victim scale was calculated after applying it to the validation



**Direct and Indirect Effects of Difficulties in Emotion Regulation .....**

sample (n = 100) which was 0.87. The split-half reliability was calculated which reached 0.76.

For validity, the factor analysis of the victim scale was conducted after applying it to the same sample as well. Three main factors of the scale were derived, which were named according to the terms to three dimensions respectively: physical bullying consists of 4 items, psychological bullying includes 6 items, and social bullying includes 4 items, as shown in table (2).

Table(2)

The rotated factorial matrix of victim scale

Items	F 1	F 2	F 3	Communalities
1	0.59			
2	0.52			
3	0.42			
4	0.69			
5	0.75			
6	0.89			
7		0.55		
8		0.77		
9		0.72		
10			0.63	
11			0.75	
12			0.53	
13			0.79	
14			0.45	
<b>Eigen Value</b>	3.04	2.33	2.09	<b>Total Variance%</b>
<b>Variance%</b>	21.68	16.61	14.91	53.21

***Scale of Difficulties in Emotion Regulation***

Depending on Gratz and Roemer work (2004), authors prepared a Scale which contains 36 items divided into six main dimensions: Nonacceptance of Emotional Responses which includes 6 items, Difficulties of Engaging in Goal-Directed Behavior which includes 5 items, Impulse Control Difficulties which includes 6 items, Lack of Emotional Awareness which includes 6 items, Limited Access to emotion Regulation which includes 8 items, Lack of Emotional Clarity which includes 5 items. The Scale is done in five levels (Always, Most of the

**Direct and Indirect Effects of Difficulties in Emotion Regulation .....**

time, Often, Sometimes and Never) with scores (5, 4, 3, 2 and 1) respectively.

For reliability, the alpha value was calculated by applying the scale to the validation sample (n = 100). The reliability of the prepared scale was 0.89, which is a high value indicating the reliability of the Scale. The split-half reliability for the Scale was calculated on the sample of 100 adolescents which was 0.86.

For validity, the authors calculated the factor reliability using the confirmatory factor analysis by the method of the basic components with the rotation by Varimax method. The factor analysis of the Scale items responses has been conducted after applying it to a sample of 100 adolescents in order to identify the reliability of the items in measuring what they were set to measure. This analysis resulted in significant loadings. Items of the scale distributed over 6 dimension representing all the dimensions of difficulties in emotion regulation. It took more than 86.60% of the total variance, as shown in Table (3).

**Table (3)**

**The rotated factorial matrix of difficulties in emotion regulation scale**

<b>Items</b>	<b>F 1</b>	<b>F 2</b>	<b>F 3</b>	<b>F 4</b>	<b>F 5</b>	<b>F 6</b>	<b>Communalities</b>
1	0.40						0.84
2	0.41						0.86
3	0.86						0.85
4	0.86						0.79
5	0.86						0.77
6	0.86						0.75
7		0.86					0.81
8		0.93					0.85
9		0.94					0.91
10		0.68					0.89
11		0.79					0.88
12			0.82				0.93
13			0.71				0.87
14			0.40				0.89
15			0.65				0.87
16			0.66				0.95
17			0.60				0.85
18				0.82			0.77
19				0.89			0.90
20				0.54			0.92
21				0.89			0.78

***Direct and Indirect Effects of Difficulties in Emotion Regulation .....***

<b>Items</b>	<b>F 1</b>	<b>F 2</b>	<b>F 3</b>	<b>F 4</b>	<b>F 5</b>	<b>F 6</b>	<b>Communalities</b>
22				0.54			0.80
23				0.89			0.90
24					0.88		0.88
25					0.64		0.85
26					0.88		0.82
27					0.47		0.92
28					0.42		0.81
29					0.66		0.92
30					0.65		0.81
31					0.44		0.83
32						0.79	0.94
33						0.61	0.86
34						0.40	0.94
35						0.40	0.86
36						0.68	0.94
<b>Eigen Value</b>	<b>7.46</b>	<b>7.24</b>	<b>6.38</b>	<b>4.22</b>	<b>3.18</b>	<b>2.70</b>	<b>Total Variance</b>
<b>Variance</b>	<b>20.71</b>	<b>20.11</b>	<b>17.73</b>	<b>11.72</b>	<b>8.82</b>	<b>7.51</b>	<b>%</b>
							<b>86.60</b>

**Hypotheses of the study**

- 1- There are variations of the order of the bullying types perceived by bullies in adolescence"
- 2- "There are variations of the order of the bullying types perceived by bullying victims in adolescence"
- 3- that "There are statistically significant differences between the mean scores of adolescents in the difficulties in emotion regulation among bullies, bullying victims and normal adolescents"
- 4- "There are statistically significant positive relationships between the difficulties in emotion regulation and the forms of bullying as perceived by adolescent bullying victims"
- 5- "There are direct and indirect causal effects of the difficulties in emotion regulation on the forms of bullying as perceived by adolescent bullying victims"

**Result of the study**

The first hypothesis of the current study states that "There are variations of the order of the bullying types perceived by bullies in adolescence". To verify the validity of this hypothesis, after applying the study tools to study sample of 86 adolescents, the frequency, averages and relative weight of bullying scores in bullying students in adolescence were calculated as shown in Table (4).

**Table (4)  
Ranking of the bullying types of the bullies**

<b>Bullying Types</b>	<b>Ranking</b>	<b>R W†</b>	<b>SD‡</b>	<b>Means</b>	<b>No of Items</b>
<b>Social Bullying</b>	<b>1</b>	<b>71.2</b>	<b>3.4</b>	<b>17.8</b>	<b>5</b>
<b>Physical Bullying</b>	<b>2</b>	<b>69.3</b>	<b>3.3</b>	<b>17.3</b>	<b>5</b>
<b>Psycho Bullying</b>	<b>3</b>	<b>69.2</b>	<b>3.8</b>	<b>13.8</b>	<b>4</b>

†RW: Relative Weight &‡SD: Standard Deviation

The second hypothesis states that "There are variations of the order of the bullying types perceived by bullying victims in adolescence" To verify the validity of the second hypothesis, after the application of the study tools on the basic study sample of 86 adolescents as previously done in the first hypothesis, the frequency, averages and relative weight of the scores of bullying types among bullying students in adolescence have been calculated as shown in Table (5).

**Table (5)  
Ranking of the bullying types of the victims**

<b>Bullying Types</b>	<b>Ranking</b>	<b>R W</b>	<b>SD</b>	<b>Means</b>	<b>No of Items</b>
<b>Social Bullying</b>	<b>3</b>	<b>62.3</b>	<b>3.3</b>	<b>12.5</b>	<b>4</b>
<b>Physical Bullying</b>	<b>1</b>	<b>74.5</b>	<b>2.1</b>	<b>15</b>	<b>4</b>
<b>Psycho Bullying</b>	<b>2</b>	<b>72.3</b>	<b>2.8</b>	<b>21.7</b>	<b>6</b>

The third hypothesis states that "There are statistically significant differences between the mean scores of adolescents in the difficulties in emotion regulation among bullies, bullying victims and normal adolescents", and to verify the validity of this hypothesis, after the application of the tools of the basic study sample of 86 adolescents, Variance analysis was used among the three groups on the dimensions of

**Direct and Indirect Effects of Difficulties in Emotion Regulation .....**

the Scale of six difficulties in emotion regulation and the overall score. Table (6) shows the results of the variance analysis.

**Table (6)**

Differences among bullying, victims and normal adolescents in DER\*

<b>DER†</b>	<b>SV‡</b>	<b>SS§</b>	<b>DF¶</b>	<b>MS*</b>	<b>F††</b>	<b>Sig‡‡</b>
<b>Nonacceptance of Emotional Responses</b>	Between Groups	868.63	2	434.32	19.85	0.01
	Within Groups	1815.80	83	21.88		
	Total	2684.43	85			
<b>Difficulties of Engaging in Goal-Directed Behavior</b>	Between Groups	237.78	2	118.89	6.05	0.05
	Within Groups	1630.22	83	19.64		
	Total	1868.00	85			
<b>Impulse Control Difficulties</b>	Between Groups	3940.77	2	1970.77	120.36	0.01
	Within Groups	1358.73	83	16.37		
	Total	5299.50	85			
<b>Lack of Emotional Awareness</b>	Between Groups	1.34	2	0.67	0.02	Not sig
	Within Groups	2659.50	83	32.04		
	Total	2660.84	85			
<b>Limited Access to Emotion Regulation</b>	Between Groups	26.90	2	13.45	0.34	Not sig
	Within Groups	2600.64	83	31.33		
	Total	2627.53	85			
<b>Lack of Emotional Clarity</b>	Between Groups	493.59	2	246.79	16.81	0.01
	Within Groups	1218.24	83	14.68		
	Total	1711.83	85			
<b>Total Score of DER</b>	Between Groups	10081.61	2	5040.81	13.53	0.01
	Within	30933.37	83	372.69		

***Direct and Indirect Effects of Difficulties in Emotion Regulation .....***

<b>DER†</b>	<b>SV‡</b>	<b>SS§</b>	<b>DF¶</b>	<b>MS*</b>	<b>F††</b>	<b>Sig‡‡</b>
	Groups					
	Total	41014.99	85			

†Sig: Significance, ‡F: F value, §MS: Means Squares, ¶DF: Degrees of Freedom, ††SS: Sum of Squares, ‡‡SV: Source of Variance&§§DER: Difficulties in Emotion Regulations

Table (7)

Tendencies of differences among bullying, victims and normal in DER

	<b>DER</b>	<b>Samples</b>	<b>Normals</b>	<b>Victims</b>
<b>Nonacceptance of Emotional Responses</b>		Bullyings	6.94*	6.74*
		Victims	0.20	-
<b>Difficulties of Engaging in Goal-Directed Behavior</b>		Bullyings	2.69	1.24
		Victims	3.93*	-
<b>Impulse Control Difficulties</b>		Bullyings	3.07*	12.45*
		Victims	15.53*	-
<b>Lack of Emotional Awareness</b>		Bullyings	5.41*	0.85
		Victims	2.57	-
<b>Total Score of DER</b>		Bullyings	19.24*	5.70
		Victims	24.95*	-

\* There are statistically significant differences

The fourth hypothesis states that "There are statistically significant positive relationships between the difficulties in emotion regulation and the forms of bullying as perceived by adolescent bullying victims". To verify the validity of the fourth hypothesis, after the application of the study tools on the sample of the study which includes 86 adolescents, the correlation coefficients were calculated using Pearson correlation coefficient, which was 0.97. This positive statistically significant correlation were found at the level of 0.01, between the total score of difficulties in emotion regulation and the total scores of bullying in adolescent bullying victims.

The fifth hypothesis states that "There are direct and indirect causal effects of the difficulties in emotion regulation on the forms of bullying as perceived by adolescent bullying victims" to verify the fifth hypothesis, the "difficulties in emotion regulation" and "bullying victims" scales have been applied to the sample of the 86 adolescents. To determine the direct effects of difficulties in emotion regulation, linear regression analysis was carried out as shown in Table (7). Mainly, the

**Direct and Indirect Effects of Difficulties in Emotion Regulation .....**

study found statistically significant direct and indirect effects of all the dimensions of difficulties in emotion regulation on bullying.

Bullying and the dimension of the nonacceptance of emotional responses with a correlation coefficient of 0.71, the difficulties of engaging in goal-directed behaviour with 0.75, impulse control difficulties with 0.71, lack of emotional awareness with 0.75, the limited access to emotion regulation with 0.75, the lack of emotional clarity with 0.97, and 0.97 for total scores, all of which are statistically significant at 0.01. The results indicate the direct and indirect effects as shown in Table 9.

Table (8)

Regression analysis of bullying among adolescent bullying victims predicted by DER

<b>DER</b>	<b>Models</b>	<b>SS</b>	<b>DF</b>	<b>MS</b>	<b>F</b>	<b>Sig</b>	<b>R</b>	<b>R<sup>2</sup></b>
<b>Nonacceptance of Emotional Responses</b>	Regression	657.52	1	657.52	84.86	0.01	0.71	0.50
	Residual	650.85	84	7.75				
	Total	1308.37	85					
<b>Difficulties of Engaging in Goal-Directed Behavior</b>	Regression	740.52	1	740.52	109.54	0.01	0.75	0.56
	Residual	567.86	84	6.76				
	Total	1308.37	85					
<b>Impulse Control Difficulties</b>	Regression	654.33	1	654.33	84.04	0.01	0.71	0.50
	Residual	654.04	84	7.79				
	Total	1308.37	85					
<b>Lack of Emotional Awareness</b>	Regression	726.50	1	726.50	104.87	0.01	0.75	0.56
	Residual	581.90	84	6.93				
	Total	1308.37	85					
<b>Limited Access to Emotion Regulation</b>	Regression	731.88	1	731.88	106.64	0.01	0.75	0.56
	Residual	576.49	84	6.86				
	Total	1308.37	85					
<b>Lack of Emotional Clarity</b>	Regression	1241.47	1	1241.47	1.56	0.01	0.97	0.95
	Residual	66.90	84	0.80				
	Total	1308.37	85					

Table (9)

Direct and indirect effects of DER on bullying victims

***Direct and Indirect Effects of Difficulties in Emotion Regulation .....***

<b>DER</b>	<b>R<sup>2</sup></b>	<b>β</b>	<b>Direct effects</b>	<b>Indirect effects</b>	<b>Total effects</b>	<b>External effects</b>
<b>Nonacceptance of Emotional Responses</b>	0.50	0.705	50%	21%	71%	29%
<b>Difficulties of Engaging in Goal-Directed Behavior</b>	0.56	0.752	56%	18%	74%	6%
<b>Impulse Control Difficulties</b>	0.50	0.707	50%	21%	71%	29%
<b>Lack of Emotional Awareness</b>	0.56	0.745	56%	18%	74%	26%
<b>Limited Access to Emotion Regulation</b>	0.56	0.748	56%	18%	74%	26%
<b>Lack of Emotional Clarity</b>	0.95	0.974	95%	2%	97%	3%
<b>Total Score of DER</b>	0.94	0.971	94%	3%	97%	3%

**Results Discussion**

It is clear from Table (4) that the most frequent forms of bullying in the present study sample are social bullying with a relative weight of 71.2, followed by psychological bullying with a relative weight of 96.2, and at last physical bullying with a relative weight of 69.3.

This result can be explained by the fact that the bully, by the behavior of bullying, is primarily aiming at achieving social visibility among his peers, in addition to trying to show his strength in front of others. According to Fundukian & Wilson (2008) and Jacobs (2008), it is what the bully feels of appearance within his group that gives him a sense of strength and appearance, and according to them studies indicated that the bullying does this to exercise authority over others, a sense of power, gaining more power among peers, and also gaining social power. The bullying is aware of the physical bullying of the



**Direct and Indirect Effects of Difficulties in Emotion Regulation .....**

victim, so this dimension comes second. They attack their victims to get some enthusiasm and excitement (Saklofske & Zeidner, 2009, p. 4).

In the third place comes psychological bullying, due to the fact that the bullying does not feel sufficiently empathic reincarnation towards the victim and this is what the Almeida & Machado (2006) study points out. The bullies do not have empathic reincarnation towards the victim, that is, they cannot put themselves in the position of the victim or try to modify their ideas.

Table (5) shows that the most common forms of bullying in the study sample of bullying victims are physical bullying with a relative weight of 74.5, followed by psychological bullying with a relative weight of 72.3, and at last social bullying with a relative weight of 62.3.

The authors attribute this order to the fact that physical bullying represents the apparent and direct behaviour experienced by the victim. The victim finds that he is physically weak compared to the bully, and the current findings are consistent with the findings of Gromann & Krabbendam (2013) study which pointed that victim's perception centred on the direct and indirect relationships of the bully on the victim that appears more in physical bullying versus verbal bullying. The results of the current study are consistent with the Wang & Nansel (2009) study which indicated that 53.6% of students were subjected to physical bullying, 51.4% were subjected to verbal bullying and 20.8% for social bullying.

Demaray & Malecki (2003) found that there were differences between different groups in the importance of social support. The study also found that direct and indirect verbal bullying is more common than physical bullying in addition that the degree of bullying in males is higher than that of females. The findings also showed that younger students are more likely to be victims of bullying, while older students are more likely to be bullies.

Psychological bullying comes second, and the authors are likely to think that the victim often feels oppressed by the bully and this is reflected directly on the psychological side; as the victim feels emotional pressure as a result of repeated attempts of bullying towards him, resulting in a feeling of psychological weakness. The results of the current study are consistent with those of Juvonen & Schuster (2003) which indicates that bullies are psychologically stronger and have a higher position among their colleagues, while victims of bullying have

**Direct and Indirect Effects of Difficulties in Emotion Regulation .....**

experienced emotional stress and social marginalization among colleagues.

The current study also found that social bullying comes in third and last place as for the victim, this is because the victim feels low self-esteem than others and is unable to confront and that's why he prefers to be isolated from others. The results of the current study are consistent with those of Fox & Boulton (2005), which indicated that bullying victims have lack of social skills compared to normal adolescents.

Table (6) shows that there are statistically significant differences on the dimensions of the measure of difficulties in emotion regulation and the total score between the three groups except the fourth and fifth dimension of lack of emotional awareness, and the limited access to emotion regulation, and to determine the differences between the three groups on the Scale of difficulties in emotion regulation. Tendencies of differences were calculated using the Post Hoc test by Scheffe method as shown in Table (8).

It is clear from Table (7) that there are differences between bullies and victims on one hand and normal adolescents on the other hand in the "Nonacceptance of emotional response" towards bullies with the highest average, while there are no differences between the victims of bullying and normal adolescents, this can be attributed to the fact that bullies have a high level of non-acceptance of the emotions they feel, and this can be evident in the lack of a sense of remorse with the victim, as well as the weakness and negativity that the victims of bullying show, which reinforces the bully's behaviour and nurtures the sense of strength and control inside him.

The results of the current study are consistent with the study of Mahady et al (2000) which pointed out that the bully interprets the victim's anger as resistance to his dominance, or an attempt by the victim to show that the bully's behaviour is abnormal which reinforces uncomfortable feelings, which results in the bully's Nonacceptance of these emotions and the exacerbation of his socially unacceptable behaviour.

While there were no differences between bullying victims and normal adolescents, this is because the victims of bullying have a level equivalent to the level of normal adolescents in understanding their emotions, and this is evident in the victims feeling of inferiority and that they are inferior to the bully as well as the sense of contempt which

**Direct and Indirect Effects of Difficulties in Emotion Regulation .....**

causes a sense of vulnerability and psychological threat inside the victim, this is consistent with some studies results such as Mahady et al. (2000).

The results of the hypothesis also indicate that there are no differences between bullies and victims of bullying on one hand and normal adolescents on the other in the "difficulties of engaging in goal directed behaviour", while there are significant differences between bullying victims and normal adolescents for the sake of the bullying victims with the highest average. This can be due to the fact that the bully feels compatible within the classroom, as he wants to study because he finds himself in it through the practice of bullying behaviour on others, and the sense of strength when he assaults the victim in addition to the support of the spectators on his behaviour. On the other hand, the bully is more insistent than others on assaulting a specific individual.

The results of the hypothesis also indicate that there are differences between bullying victims and bullies on one hand and the normal adolescents on the other hand in the "Impulse control difficulties" in the sake for bullying victims with the highest average, as well as there are significant differences between bullying victims and normal adolescents in the sake for bullying victims with the highest average. This may be due to the inconsistency of the victims of bullying in their responses to situations, as the bully feels a balanced level of emotional control compared to the normal adolescents, and this is evident in the bully's sense of power and control when assaulting the victim.

Miller & Beane (2010, 367), In this regard, point out that when a bully exploits the victim, this shows a balance of power and a difference in the intensity of emotion; The victim looks sad and upset, while the bully looks calm and in control, and blames the victim for what happened, moreover the degree of anxiety and sensitivity to the victim's emotions decreases. This is consistent with Carlson & Wang study (2007), which indicated that irritable individuals have difficulty in emotional regulation, which in turn increases the risk of disruption in emotional regulation and increases the feelings of failure.

The results of the current study are consistent with those of the Camodeca & Goossens (2005) study, which indicates that bullying victims have a high level of anger expressed inappropriately as a result of their failure to confront the bully, and as a result of intimidation and contempt, the victim's desire for revenge decreases allowing the bully to control. Hunter & Warden (2004) also indicates that the victim

### **Direct and Indirect Effects of Difficulties in Emotion Regulation .....**

expresses the exposure to bullying through violence and some emotional strategies such as verbal violence, physical violence, or emotional venting, by as much as 43%, as well as the try to re-evaluate the situation differently.

The hypothesis also shows that there are differences between bullying victims and bullies on one hand and normal adolescents on the other hand in terms of the "Lack of emotional clarity" in favour of higher-average bullying victims. This is because both the bully and the victim can make less conscious decisions and be extremist in their emotional response compared to the normal adolescents, and this is in line with the study of Mahady et al (2000), which indicates that bullies and bullying victims are similar in some emotional characteristics, including the high sense of anger and contempt, as well as a low degree of emotional understanding of others. These results are consistent with studies such as Jolliffe & Farrington (2011) which indicates that bullies have a lack of empathy.

The results of the hypothesis also indicate that there are no differences between bullies and victims of bullying and normal adolescents in the "Lack of emotional awareness", and "limited access to emotion regulation ", it can be attributed to the fact that bullies and victims of bullying are aware of the emotions associated with the behaviour of bullying, but the problem lies in explaining the nature of these emotions, moreover the strategies of emotional regulation are similarly used, but the problem is in the quality of the strategies used; Smokowski & Kopasz (2005) point out that bullying adolescents often think they feel insecure, aggressive, and feel the lack of empathy.

These findings agree with Basharpour et al (2013) findings which indicated that the difficulties in emotion regulation in adolescence play an important role in becoming a victim of bullying. In addition to the previous significant correlations, the results of the studies confirm that emotion regulation in adolescents account for more than 36% of the bullying variance among bullying victims, but also up to 19% of the variance among bullies, this requires more studies on bullies in this context.

On the other hand, these results confirm that the significant correlations have reached over 0.70, which means that whatever the sample size and when calculating the value of the correlation coefficient, these correlations are real and substantive, especially with regard to the

**Direct and Indirect Effects of Difficulties in Emotion Regulation .....**

last dimension of the difficulties in the emotion regulation, namely; "Lack of emotional clarity", with a correlation coefficient of 0.97 between it and bullying among the victims, Woods et al (2009) indicates that it is a common feature in adolescents and that bullying victims are characterized by low ability to recognize emotions compared to normal adolescents and bullies.

Therefore, the current authors suggest that in the light of the above, separate training courses should be conducted to develop the emotion regulation capabilities of adolescents to overcome bullying problems among victims of bullying, if the causality of these relationships is confirmed.

The results of the analysis of variance in the table (6) show that the value of "p" is statistically significant at the level of 0.01, for all dimensions of the difficulties in emotion regulation, and the table also shows that the values of correlation coefficients between the dimensions of the difficulties in emotion regulation and the total score of bullying were as follows: the dimension of the nonacceptance of emotional responses with a correlation coefficient of 0.71, the difficulties associated with the goal directed behaviour with a correlation coefficient of 0.75, the difficulties of impulse control with a correlation coefficient of 0.71, the lack of emotional awareness with a correlation coefficient of 0.75, the limited access to emotion regulation strategies with a correlation coefficient of 0.75, and the lack of emotional clarity with a correlation coefficient of 0.97, all of which are statistically significant at 0.01.

These values confirm a linear correlation of 0.71, 0.75, 0.71, 0.75, 0.75 and 0.97 that directly contribute to the variance degrees of bullying among bullying victims (explained variance) by 50%, 56%, and 50%, 56%, 56%, 95% respectively confirming the direct effects of difficulties in emotion regulation on adolescent bullying victims as shown in Table 9.

The results of the fifth hypothesis are significantly agree with the results of studies such as Shields & Cicchetti (2010) in which regression analysis methodology was used to predict some bullying factors, especially among the victims of bullying. As expected, it is proved that both bullies and victims have difficulties in emotion regulation. Moreover, regression analyzes indicated that the difficulties in emotion regulation made a unique contribution to the distinction between bullies,

## **Direct and Indirect Effects of Difficulties in Emotion Regulation .....**

victims and the normal, and it was easy to predict the difficulties in emotion regulation among the victims of bullying.

According to Gratz & Roemer (2004), the authors agree that the impact of the nonacceptance of emotional responses on bullying victims is due to the feelings of guilt, shame, and possibly self-anger, while the impact of the difficulties of engaging in goal directed behaviour is due to the difficulty of concentration and thinking when being upset. The impact of the difficulties of impulse control is due to the loss of control over situations so that emotions become out of control, the impact of the lack of awareness is due to the fact that the victim of bullying takes a long time to realize what he feels as a real victim, while the impact of limited access to emotion regulation is attributed according to authors opinion to the feelings of pressure and resentment and perhaps feelings of depression that victim feels and which take a long time to be overcome, while the lack of emotional clarity is one of the most effective factors because it involves an emotional weakness in correctly recognizing all previous emotions.

### **Limitations**

There are cultural limitations for recent study. The little variety of some Arab cultures may not give the exact of Egyptian one. The findings of this study may remain in the limit of current study tools, design culture. Future studies should incorporate a longitudinal or experimental design as well as covariates controlling for social desirability. Similarly, the use of self-report information to compute our measures may present limitations due to errors associated with under or inaccurate reporting. Despite these limitations, our study provides an important contribution to the understanding of contextual as well as psychological correlates of bullying and emotion regulation for the sake of developing interventions for bullying and emotion regulation problems.

### **Conclusion**

There is no doubt that the lack of understanding or indifference to the feelings of others is the basis for all disagreements and is a prelude to the misunderstanding that often lead to unacceptable behaviours that are fundamentally aggressive or bullying. So that, the authors suggest the need for individual and group training programmes for victims of bullying in order to overcome their negative feelings, as well as overcoming the difficulties in emotion regulation and training on the

**Direct and Indirect Effects of Difficulties in Emotion Regulation .....**

appropriate use of suitable strategies that can be considered strategies for emotional regulation.

**Acknowledgements**

The authors would like to thank the Egyptian volunteered students for their honesty and their time. The authors have no funding to report.

**Conflicts of interest**

All authors declare no conflict of interest.

## **References**

Almeida, A., Caurcel , M., & Machado, J. (2006). Perceived characteristics of victims according to their victimized and nonvictimized peers. *Journal of Research in Education Psychology*, 9(4), 371-396 .

Basharpoor, S., Molavi, P., Sheykhi, S., Khanjani, S., Rajabi, M. & Mosavi, S. (2013). The Relationship between Emotion Regulation and Emotion Expression Styles with Bullying Behaviors in Adolescent Students. *Journal of Ardabil University of Medical Sciences*, 13(3), 264-275.

Camodeca, M., & Goossens, F. (2005). Aggression, social cognitions, anger and sadness in bullies and victims. *Journal of Child Psychology and Psychiatry*, 46(2), 186-197 .

Carlson, S. M., & Wang, T. S. (2007). Inhibitory control and emotion regulation in preschool children. *Cognitive Development*, 22(4), 489-510 .

Daniels, J., & Bradley, M. (2011). *Preventing Lethal School Violence (Advancing Responsible Adolescent Development)*. New York: Springer.

Demaray, M., & Malecki, K. (2003). Perception of the Frequency and Important of Social Support by Student Classified as A Victims, Bullies, Bully/Victim in an Urban Middle School. *School Psychology*, 32(3), 471 - 489.

Fox, C., & Boulton, M. (2005). The social skills problems of victims of bullying: Self, peer and teacher perceptions. *British Journal of Educational Psychology*, 75(2), 313-328 .

Fundukian, L., & Wilson, J. (2008). *The Gale encyclopedia of mental health*. Detroit: Gale.

Furlong, M., Soliz, A., Simental, J.& Greif, L. (2004). Bullying and abuse in school cumpus, Encychlopedia of Applied Psychology, Volum1, Elsever Inc.

Gratz, K., & Roemer, L. (2004). Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and initial validation of the difficulties in emotion regulation scale. *Journal of Psychopathology and Behavioral Assessment*, 26(1), 41-54 .

Gromann, P., Goossens, F., Olthof, T., Pronk, J., & Krabbendam, L. (2013). Self-perception but not peer reputation of bullyingvictimization is associated with non-clinical psychotic experiences in adolescents. *Psychological medicine*, 43(4), 781-787 .

Gross, J. (2014). Emotion regulation: Conceptual and empirical foundations. In J. J. Gross (Ed.), *Handbook of emotion regulation* (pp. 3-20). New York, Guilford Press.

Gross, J., Sheppes, G., & Urry, L. (2011). Emotion generation and emotion regulation: A distinction we should make (carefully) .*Cognition and Emotion*, 25(5), 765–781 .



**Direct and Indirect Effects of Difficulties in Emotion Regulation .....**

Hunter, S., Boyle, J., & Warden, D. (2004). Help seeking amongst child and adolescent victims of peer-aggression and bullying: The influence of school-stage, gender, victimisation, appraisal, and emotion. *British Journal of Educational Psychology*, 74(3), 375-390.

Jacobs, A. (2008). Components of Evidence-Based Interventions for Bullying and Peer Victimization *Handbook of Evidence-Based Therapies for Children and Adolescents* (pp. 261-279): springer.

Jolliffe, D., & Farrington, D. (2011). Is low empathy related to bullying after controlling for individual and social background variables? *Journal of Adolescence*, 34(1), 59-71.

Juvonen, J., Graham, S., & Schuster, M. (2003). Bullying among young adolescents: the strong, the weak, and the troubled. *Pediatrics*, 112(6), 1231 - 1237.

Kököneyi, G., Urbán, R., Reinhardt, M. Józán, A. & Demetrovics, Z. (2014). The Difficulties in Emotion Regulation Scale: Factor Structure in Chronic Pain Patients, *Journal of Clinical Psychology*. 70 (6), 589–600.

Leahy R., Tirch D., & Napolitano, L. (2011). *Emotion Regulation in Psychotherapy A Practitioner's Guide*. New York, The Guilford Press.

Macklem, G. (2008). *Emotion dysregulation, Practitioners Guide to Emotion Regulation in School-Aged Children*. New York, Springer Science.

Mahady Wilton, M., Craig, W., & Pepler, D. (2000). Emotional regulation and display in classroom victims of bullying: Characteristic expressions of affect, coping styles and relevant contextual factors. *Social Development*, 9(2), 226-245 .

Miller, T., & Beane, A. (2010). Loss of the Safety Signal in Childhood and Adolescent Trauma. In T. W. Miller, *Handbook of Stressful Transitions Across the Lifespan* Springer (pp. 367-376). springer.

Nicol, R. (2002). Practice in Non-medical Settings. In M. Rutter, E. Taylor, & 4 (Ed.), *Child and Adolescent Psychiatry* (pp. 1077-1089). Malden: Oxford, Blackwell Scienc.

Nikmanesh, Z., Kazemi, Y., & Khosravy, M. (2014). Study Role of Different Dimensions of Emotional Self-Regulation on Addiction Potential, *J Family Reprod Health*. 8(2), 69–72.

Saklofske, D., & Zeidner, M. (2009). *Treating Child and Adolescent Aggression Through Bibliotherapy*. New York: Springer.

Salkind, N. (2008). *Encyclopedia of educational psychology*. California: Sage Publications.

Shields, A., & Cicchetti, D. (2001).

Shields, A., & Cicchetti, D. (2010). Parental maltreatment and emotion dysregulation as risk factors for bullying and victimization in middle childhood. *Journal of Clinical Child Psychology*, 30(3), 349-363 .

**Direct and Indirect Effects of Difficulties in Emotion Regulation .....**

Smokowski, P. & Kopasz, K. (2005). Bullying in school: An overview of types, effects, family characteristics, and intervention strategies, *Children and Schools*, 27(2), 101-109.

Strickland, B. R. (2001). *The Gale encyclopedia of psychology* (2 ed.). Ohio: Gale Group.

Teel, S. (2009). *Defending and Parenting Children Who Learn Differently: Lessons from Edison's Mother*. Westport: R&L Education.

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, 368–375.

Woods, S., Wolke, D., Nowicki, S., & Hall, L. (2009). Emotion recognition abilities and empathy of victims of bullying. *Child abuse & neglect*, 33(5), 307-311.