

Correlation between Dissociative Symptoms and Psychological Stress among Adolescents

Doha Abdelbaseer Mahmoud ¹, Mawaheb Mahmoud Zaki², Hend Ahmed Mostafa³

¹Lecturer of Psychiatric and Mental Health Nursing, Faculty of Nursing, Benha University-Egypt.

²Assistant professor of Psychiatric and Mental Health Nursing, Faculty of Nursing, Benha University-Egypt.

³Lecturer of Psychiatric and Mental Health Nursing, Faculty of Nursing, Benha University-Egypt.

Abstract

Background: Dissociative symptoms is characterized by a disruption in the normal integration of consciousness, memory, emotion, perception, identity, body representation, motor control, and behavior. **Aim:** The aim of this study was to assess correlation between dissociative symptoms and psychological stress among adolescents. **Design:** A descriptive correlational design was utilized to fulfill the aim of the study. **Setting:** The study was carried out at faculty of nursing at Benha University in Benha City, Qalubia Governorate. **Sample:** A purposive sample composed of 572 first grade students. **Tools:** Three tools were used. **Tool (I):** A structured Interview Questionnaire. **Tool (II):** Dissociative Experience scale. **Tool (III):** Stress scale. **Results:** The study revealed that less than one quarter of the studied students have high level of total dissociative symptoms while half of the studied students have moderate level of total stress. **Conclusion:** The study concluded that there was a statistical significant positive correlation between total students dissociative symptoms and their total stress level. **Recommendations:** Psycho-educational program focused on the psychological, physiological and social needs of adolescents.

Keywords: Adolescents, Dissociative symptoms, Psychological stress.

Introduction

Adolescence is the phase of life between childhood and adulthood; some studies distinguish between early adolescence (from 11 or 12 to 14 years), mid-adolescence (15–17 years) and late adolescence (18–21 years). Adolescents experience rapid physical, cognitive and psychosocial growth in this period. This affects how they feel, think, make decisions, and interact with the world around them. It is also a time to develop knowledge and skills, learn to manage emotions and relationships, and acquire attributes and abilities that will be important to the adolescent for enjoying the life (World Health Organization, 2020).

Dissociative disorder is a mental disorder that characterized by a disturbance in the normal integration of consciousness, memory, emotion,

perception, identity, body representation, motor control, and behavior. People of any age, ethnicity, gender, and social background can develop dissociative disorder; Periods of dissociation can last for a relatively short time (hours or days) or for much longer (weeks or months) (American Psychiatric Association, 2020).

The most prevalent dissociative symptoms across disorders can be clustered as forms of derealization (feeling detached from one's surroundings) or depersonalization (feeling detached from one's self). Among patients without a dissociative disorder, pathological levels of derealization and depersonalization are most prevalent and central in patients suffering from posttraumatic stress disorder and borderline personality disorder (Scalabrini, 2019).

Adolescents with dissociative disorder are often misdiagnosed several times because they show signs, symptoms and behaviors that are characteristic of other important psychiatric disorders (psychosis, personality disorders, mood and anxiety disorders). When Adolescents with dissociative disorder accurately diagnosed, they tend to respond well to specialized psychological treatments. On the other hand, incorrect or incomplete diagnosis may lead to consequently inappropriate treatment, including high-dose psychotropic medications and hospitalizations. Therefore, it is important that clinicians and researchers recognize symptoms that might suggest the presence of a complex dissociative disorder **(Brand&Classen, 2020)**.

Furthermore, adolescents with dissociation symptoms are Unable to do tasks and follow instructions like learning at college. They might appear slowed down, physically still, glazed look in their eyes or a blanking out (this can look like a daydream).Adolescents with dissociation has extreme mood changes without any obvious trigger. One minute they might appear safe and calm, the next minute they might appear frightened, angry, and sad or any other emotion **(Lyons, 2020)**.

Dissociative disorder in adolescents is also associated with stressful life events. Stress lead to stress-related diseases and cognitive impairment in adolescents. Most important mental health consequences of stress in adolescence, such as dissociative disorder, depression, anxiety, suicide, substance use, and antisocial behavior **(Susman, 2018)**. Adolescents who experience this form of stress also are more likely to use harmful substances, engage in other risky behaviors, and experience post-traumatic stress disorder, a condition in which a person relives a traumatic event through persistent memories or flashbacks. However, adolescents respond to stress

differently, and a strong support system can help protect adolescents from long lasting negative effects and create an environment that enables youth to thrive **(Haque, 2020)**.

The parents should learn the dissociative symptoms and try to cope with adolescents problem and needs which traumatized adolescent may have been emotionally and verbally abused by screaming, shouting, and name calling. These emotional scars are hidden scars, which can be more damaging to the adolescent's self-worth and identity than physical scars. The most challenging task for the tired, frustrated, and angry parent to maintain a calm, low voice when the adolescent is screaming or refusing to listen.**(Waterbury, 2019)**.

Psychiatric mental health nurse enhance adolescent to learn distress tolerance skills that make the adolescent to be able to tolerate with painful emotions and uncomfortable feelings without resorting to impulsive and unhealthy behavior like dissociation. The aim of distress tolerance is to increase the adolescents' capacity to bare the painful emotion when the situation cannot be changed immediately. First, nurse learn the adolescents the role of emotions in life, the consequences of resisting them and how to identify and label an emotion. Once the adolescents learn this emotional first-aid, they start to feel relatively confident and safe in the face of an emotion because now they have tools to manage them**(Spiegel, 2021)**.

Significance of the Study

Dissociative experiences are common in our daily lives in the general population, ranging from mild to severe detachment, affects approximately 2–18% of individuals in the general population. Few mental health professionals receive systematic training in the assessment and treatment of trauma related psychological

problems, and even fewer about traumatized individuals who have dissociative reactions (Cook et al., 2021). In light of this, increasing knowledge of the relationship between dissociative symptoms and psychological stress among adolescents is imperative. Therefore, this study aims to assess correlation between dissociative symptoms and psychological stress among adolescents.

Aim of the study:

This study aimed to assess correlation between dissociative symptoms and psychological stress among adolescents .

Research questions:

- What is the level of dissociative symptoms among adolescents?
- What is the level of psychological stress among adolescents?
- Is there a correlation between dissociative symptoms and psychological stress among Adolescents?

Theoretical and Operational definitions

Dissociative symptoms is the deterioration in the unification of experiences (perception, memory, cognition and emotions) at the mental level , occurring on a continuum . Initially it is an involuntary physical and psychological experience suffered during the initial episode of abuse or during a traumatic event. It will be measured in the current study by using dissociative experience scale to assess dissociative symptoms among adolescents(Lyssenko et al.,2020).

Psychological stress is the process by which a person reacts when

faced with external or internal problems and challenges. Stress affects all body systems including nervous, cardiovascular, respiratory, musculoskeletal, immune, gastrointestinal, and endocrine systems. It will be measured in the current study by using stress scale to assess level of stress among adolescents (Steptoe, 2019).

Subject and methods

Subject and methods of this study are portrayed under four main designs as follows: -

- 1- Technical design
- 2- Operational design
- 3- Ethical consideration design
- 4- Statistical design

1- Technical design

Technical design for this study included research design, research setting, and study subjects and data collection tools.

Research design

A descriptive correlational design was utilized to fulfill the aim of this study.

Research Setting

The study was carried out at faculty of nursing at Benha University in Benha City, Qaluobia Governorate which affiliated to the Ministry of High Education. The faculty consisted of three floors containing four educational grades. It contains six scientific departments namely, medical surgical department, pediatric department, maternal and neonate health department, administration department, psychiatric and mental health department.

Subject:

A purposive sample of first grade students in faculty of nursing at benha university. The total number of them is 572 students.

This subject will be selected according to the following inclusion and exclusion criteria:

Inclusion criteria:

- Late adolescents (18-21)years.
- Both sexes.
- Willing to participate in this study.

Exclusion criteria:

- Adolescents with psychotic disorders.
- Adolescents with neurotic disorders.

Tools for data collection:

In order to fulfill the aim of the study, the data was collected by using the following three tools.

Tool (I): A structured Interview Questionnaire Sheet:

This questionnaire was developed by the researcher after reviewing the related literature and it include two parts

Part 1: socio-demographic characteristics of studied students such as age, sex, residence

Part2:students'familycharacteristics such as, Type of family, Number of family member, Monthly family income, Relation to father, Relation to mother, Mother personality, Exposure to violence previously.

Tool (II): Dissociative Experience Scale (DES)

This scale was developed by(Carison& Putnam (1993). This scale is composed of 27 items designed to

assess the severity of dissociative symptoms. Scoring system of Dissociative Experience Scale was categorized as follows: -Each answer is scored on a scale value of 1 to 3. The degrees were distributed as (1) for rarely, (2) for sometimes & (3) for always.

<60% indicate high dissociative symptoms as range from(0-48)degree.

>60% indicate high dissociative symptoms as range from(48-81)degree.

Tools (III): Stress scale.

This scale was developed by (Jacop, 2005). It has been translated into Arabic and tested for reliability and validity by (Hassanin, 2018). It's used to measure stress among adolescents; it consisted of 25items in the form of likart scale using psychological, physiological, social and spiritual areas of stress. Positive and negative statements were included in the scale. The response alternatives were always, sometimes, rarely and never. These responses score as 1, 2, 3 and 4 for positive items and 4, 3, 2 and 1 for negative items.

Positive statements(12statements): 1,2,3,4,5,6,7,14,15,18,19and24.

Negative statements (13statements): 8, 9,10,11,12,13,16,17, 20, 21, 22, 23 and 25.

Scoring system of stress scale was categorized as follows:

- 50-60% Mild level of stress.
- 61-70% Moderate level of stress.
- >70% Severe level of stress.

II. Operational Design

The operational design for this study included preparatory phase, validity, reliability, pilot study and fieldwork.

Preparatory phase:

This phase included reviewing of past, current, local, and international relevant literatures and different studies related to the topic of research, using textbooks, articles, magazines, internet search was done to get a clear picture of all aspects related to the research topic. This helped the researcher to be acquainted with magnitude and seriousness of the problem, and guided the researcher to prepare the required data collection tools.

Validity of tools:

The tools were tested by five experts in psychiatric and mental health nursing field to measure the validity of tools. Some modifications done in dissociative experience scale(modify some words in Arabic translation in both scales to be easier and understandable for the study sample).

Reliability of tools:

Test-retest was repeated to the same sample of the students on two occasions and then compares the scores. The Cronbach's coefficient alpha of Dissociative Experience Scale is 0.81 for total score, Stress scale is 0.84 .

Pilot study:

The purpose of the pilot study was to test the applicability, feasibility and clarity of the tools. In addition, it served to estimate the approximate time required for interviewing the students as well as to find out any problems that might interfere with data collection. Pilot study is conducted on (10%) of study sample (57 students).This sample was included from the actual study sample. Purpose of the pilot study were to ascertain the clarity, applicability relevance and content validity of the tools, estimate the time

needed to complete the sheet, and the necessary changes were undertaken.

The results of the pilot study:

After conducting the pilot study, it was found that:

- (1) The tools were clear and applicable; however, few modifications were made in rephrasing of some sentences in both Dissociative Experience scale and Stress scale to be easier and more understandable.
- (2) Tools were relevant and valid.
- (3) No problem that interferes with the process of data collection was detected.
- (4) Following this pilot study the tools were made ready for use.

Fieldwork /Procedure of data collection:

The researcher started data collection by introducing herself to the studied students and providing explanation to clarify the aim and the significance of the study to gain cooperation of the studied students ,then oral consent was obtained from every one of studied students before data collection. Data was collected through interviewing with 572 first grade students .The researcher collected data from the studied students over a period of three months started from (October 2020 till the end of December 2020),3days /week,(Saturday, Monday, Wednesday) six hours per day, from 9am to 3pm. The studied students divided into 20groups to prevent crowding and spread of virus corona. The researcher conducted an interview with the studied students individually about (15-16 student/day).All studied students were informed that participation is voluntary and the investigator obtained the oral acceptance from students to participate in the present study before data collection, each student needs about30 minutes to complete the study tools.

Ethical consideration design:

Administrative approval

Official permission was obtained from the dean of Faculty of Nursing, Benha University. The purpose and the nature of the study were explained to the dean of the faculty of nursing to obtain cooperation to conduct the study.

Ethical consideration:

The research approval of the study was obtained from scientific research ethical committee in faculty of nursing in Benha University before starting the study. An oral consent was obtained from the studied sample after explaining the purpose and significance of the study to the studied students. All studied students were informed that the participation in the study is voluntary and no name was to be included in the questionnaire sheet. Studied students were informed that the content of the tools was used for research purposes only. The researcher respects the right of the study sample to be withdrawn from the study at any time of data collection without any consequences.

III. Statistical Design:

All data collected were organized, coded, computerized, tabulated and analyzed by using statistical package for social science (SPSS) programs version 20. Data were presented using descriptive statistics in the form of frequencies and percentage for categorical data, the arithmetic mean (\bar{X}) and standard deviation (SD) for quantitative data. Qualitative variables were compared using chi square test (χ^2), P-value to test association between two variables and R-test to the correlation between the study variables.

Result

Table (1): Shows the percentage distribution of socio-demographic characteristics of studied students, it clarifies that, the Mean SD of age of the studied students is 18.41 ± 2.08 years. As regard to sex, about two thirds (66.8%) of the studied students are females. In addition, more than three quarters (79.7%) of them residing in rural areas.

Table (2): Demonstrates percentage distribution of the students 'family characteristics, it shows that, nearly two thirds (65%) of the studied students live in nuclear family. Also, more than half (57.9%) of them have from 3 to 5 family member. In addition, more than half (50.3%) of the studied students their monthly family income is not enough. Moreover, the minority (17.5%) of the studied students has not good relation to father, more than half (54%) their father is permanent tanning. Also, the majority (88.1%) of them have good relation to mother. Moreover, the majority (82.9%) of the studied students their mother has kindness personality. In addition, more than half (54.2%) of the studied students suffer from shy during childhood. Furthermore, more than two thirds (68.5%) of the studied students have history of violence.

Figure (1): Illustrates percentage distribution of the studied students regarding to their total dissociative symptoms, it clarifies that, 86% of the studied students have low level of total dissociative symptoms. While, 14% of them have high level total dissociative symptoms.

Figure (2): Reflects percentage distribution of the studied students according to their total stress level, it clarifies that, half (50%) of the studied students has moderate level of total stress. Also, less than one quarter (24%) of them

have high level. While, more than one quarter (26%) of them of the studied students have low level of total stress.

Table (3): Illustrates relationship between socio-demographic characteristics of studied students and their total dissociative symptoms, it reveals that, there is statistically significant relation between total students' dissociative symptoms and their personal data as age and sex at ($P < 0.05$). While, there is no statistically significant relation with their residence at ($P > 0.05$).

Table(4): Shows relationship between students' family characteristics and their total dissociative symptoms, it reports that, there is highly statistically significant relation between total students' dissociative symptoms and their family characteristics as type of family, relation to father and mother and exposure to violence at ($P < 0.01$). Also, there is statistically significant relation with their monthly income, and mother personality. While, there was no statistically significant relation with their childhood period at ($P > 0.05$).

Table (5): Represents relationship between socio-demographic characteristics of studied students and their total stress level, it reveals that, there is statistically significant relation between total students' stress disorder and their personal data as age and sex at ($P < 0.05$). While, there is no statistically significant relation with their residence ($P > 0.05$).

Table(6): Shows relationship between students' family characteristics and their total stress level, it reports that, there is highly statistically significant relation between total students' stress level and their family characteristics as, relation to father and mother and exposure to violence at ($P < 0.01$). Also, there is statistically significant relation with their type of family, monthly income, and mother personality. While, there was no statistically significant relation with their childhood period at ($P > 0.05$).

Table(7): Illustrates correlation between total students' dissociative symptoms and total stress level, it reports that, there is significant positive correlation between total students' dissociative symptoms and their total stress level at ($P < 0.05$).

Table (1): Percentage distribution of socio-demographic characteristics of studied students (n=572).

Personal data	(n = 572)	
	N	%
Age		
18<20	564	98.6
≥ 20	8	1.4
Mean± SD	18.41±2.08	
Sex		
Male	190	33.2
Female	382	66.8
Residence		
Rural	456	79.7
Urban	116	20.3

Table (2): Percentage distribution of students' family characteristics (n=572).

Family characteristics	(n = 572)	
	N	%
Type of family		
Nuclear family	372	65
Extended family	200	35
Number of family member		
<3	28	4.9
3 to5	331	57.9
5+	213	37.2
Monthly family income		
Enough	216	37.8
Not enough	288	50.3
Enough and more	68	11.9
Relation to father		
Good	472	82.5
Not good	100	17.5
If answer is not good		(n=100).
Permanent tanning	54	54
Dictatorial despot	7	7
Doesn't fulfill my desires	25	25
Prefer my brothers over	12	12
Others	2	2
Relation to mother		
Good	504	88.1
Not good	68	11.9
Mother personality		
Kindness	474	82.9
Cyclothymic mood	70	12.2
Despotic	6	1
Controlled	17	3
Prefer isolation	5	0.9
During childhood you suffer from		
Fear	155	27.1
Shy	310	54.2
Severe compliance	60	10.5
Feeling miserable	25	4.4
Other	22	3.8
Exposure to violence previously.		
Yes	392	68.5
No	180	31.5

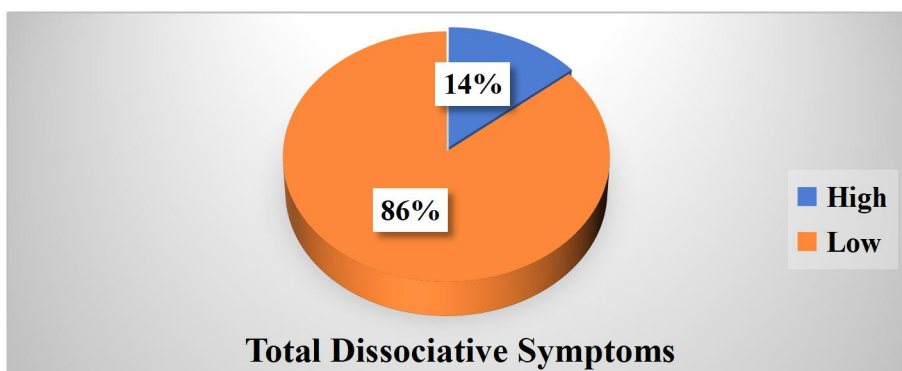


Figure (1): Percentage distribution of the studied students according to their total dissociative symptoms (n=572).

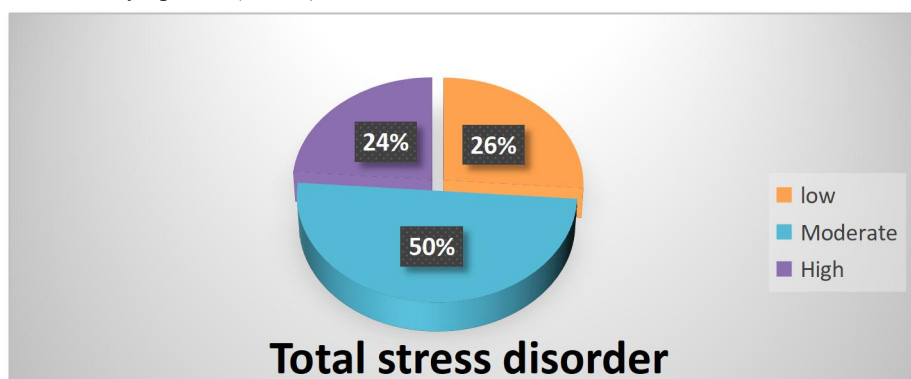


Figure (2): Percentage distribution of the studied students according to their total stress level (n=572).

Table (3): Relationship between socio-demographic characteristics of studied students and their total dissociative symptoms(n=572).

Personal data of the studied students		Total dissociative symptoms				X ²	P-Value
		High (n=80)		Low (n=492)			
		N	%	N	%		
Age	18 yrs.	78	97.5	434	88.2	9.657	< 0.05*
	19 yrs.	2	2.5	50	10.2		
	≥ 20 yrs.	0	0.0	8	1.6		
Sex	Male	10	12.5	180	36.6	10.67	< 0.05*
	Female	70	87.5	312	63.4		
Residence	Rural	55	68.8	401	81.5	2.239	> 0.05
	Urban	25	31.2	91	18.5		

No significant at $p > 0.05$. *Significant at $p < 0.05$.

Table (4): Relationship between students' family characteristics and their total dissociative symptoms (n=572).

Students' family characteristics		Total dissociative symptoms				X2	P-Value
		High (n=80)		Low (n=492)			
		N	%	N	%		
Type of family	Nuclear	72	90	300	61	15.67	<0.001**
	Extended	8	10	192	39		
Monthly family income	Enough	12	15	204	41.5	10.96	< 0.05*
	Not enough	68	85	220	44.7		
Relation to father	Enough and more	0	0.0	68	13.8	16.08	<0.001**
	Good	4	5	468	95.1		
Relation to mother	Not good	76	95	24	4.9	13.87	<0.001**
	Good	12	15	492	100		
Mother personality	Bad	68	85	0	0.0	10.60	< 0.05*
	Kindness	0	0.0	474	96.3		
	Cyclothymic mood	52	65	18	3.7		
	Despotic	6	7.5	0	0.0		
	Controlled	17	21.2	0	0.0		
During childhood you suffer from	Prefer isolation	5	6.3	0	0.0	5.324	> 0.05
	Fear	36	45	119	24.2		
	Shy	24	30	286	58.1		
	Severe compliance	5	6.3	55	11.2		
Exposure to violence	Feeling miserable	10	12.5	15	3	17.30	<0.001**
	Other	5	6.2	17	3.5		
	Yes	75	93.8	317	64.4		
	No	5	6.2	175	35.6		

No significant at $p > 0.05$. *Significant at $p < 0.05$. **highly significant at $p < 0.001$.

Table (5): Relationship between socio-demographic characteristics of studied students and their total stress level (n=572).

Personal data of the studied students		Total stress level						X2	P-Value
		High (n=136)		Moderate (n=286)		Low (n=150)			
		N	%	N	%	N	%		
Age	18yrs.	136	100	284	99.3	92	61.3	12.63	< 0.05*
	19yrs.	0	0.0	2	0.7	50	33.3		
	≥ 20yrs.	0	0.0	0	0.0	8	4.4		
Gender	Male	36	26.5	86	30.1	68	45.3	8.592	< 0.05*
	Female	100	73.5	200	69.9	82	54.7		
Residence	Rural	90	66.2	236	82.5	130	86.7	2.227	> 0.05
	Urban	46	33.8	50	17.5	20	13.3		

No significant at $p > 0.05$. *Significant at $p < 0.05$.

Table (6): Relationship between students' family characteristics and their total stress level (n=572).

Students' family characteristics		Total stress level						X2	P-Value
		High (n=136)		Moderate (n=286)		Low (n=150)			
		N	%	N	%	N	%		
Type of family	Nuclear	120	88.2	242	84.6	10	6.7	10.10	< 0.05*
	Extended	16	11.8	44	15.4	140	93.3		
Monthly family income	Enough	10	7.4	134	46.9	72	48	14.62	< 0.05*
	Not enough	126	92.6	152	53.1	10	6.7		
Relation to father	Enough and more	0	0.0	0	0.0	68	45.3	16.55	<0.001**
	Good	46	33.8	276	96.5	150	100		
Relation to mother	Not good	90	66.2	10	3.5	0	0.0	17.19	<0.001**
	Good	71	52.2	283	99	150	100		
Mother personality	Bad	65	47.8	3	1	0	0.0	12.82	< 0.05*
	Kindness	38	27.9	286	100	150	100		
	Cyclothymic mood	70	51.5	0	0.0	0	0.0		
	Despotic	6	4.4	0	0.0	0	0.0		
During childhood you suffer from	Controlled	17	12.5	0	0.0	0	0.0	2.660	> 0.05
	Prefer isolation	5	3.7	0	0.0	0	0.0		
	Fear	25	18.4	100	35	30	20		
Exposure to violence	Shy	79	58.1	151	52.8	80	53.4	19.62	<0.001**
	Severe compliance	15	11	15	5.2	30	20		
	Feeling miserable	10	7.4	10	3.5	5	3.3		
	Other	7	5.1	10	3.5	5	3.3		
Exposure to violence	Yes	136	100	250	87.4	6	4	19.62	<0.001**
	No	0	0.0	36	12.6	144	96		

No significant at $p > 0.05$.*Significant at $p < 0.05$.**highly significant at $p < 0.001$.**Table (7):** Correlation between total students' dissociative symptoms and total stress level(n=572).

Items	Total Dissociative symptoms
Total stress level	r =.210 P =.011*

*Significant at $p < 0.05$.

Discussion

Dissociative disorders in adolescents develop as a reaction to traumatic stress. Dissociation is viewed as an adaptive coping mechanism which keeping the adolescents safe by momentarily removing them from perceived stress in their day to day life, but dissociation leads to a range of behaviors which can often be misunderstood by adults as daydream, being a liar, or problems with concentration and causing disruption in

every area of psychological functioning including consciousness, memory, identity, emotion, perception, body representation, motor control, and behavior(Rafiq, 2018). Therefore, the present study aimed to assess dissociative symptoms and its relation to psychological stress among adolescents.

Regarding to personal characteristics of studied students, this study illustrated that more than two third of studied students are females. From the

researcher point of view it might be due to number of females students in faculty is more than number of male student in this study. This result is consistent with **Allison,(2019)** who showed that most of his sample around two thirds were females.

Also, the present study revealed that more than half of studied sample live in rural areas. From the researcher point of view it may be due to geographical distribution of the studied students, most of studied sample live in rural areas. This result is similar to **Garg, (2020)**who showed that most of his sample around two thirds were lived in rural areas.

The result of the present study regarding to exposure of studied students to violence in early stage of life. This study revealed that, more than two third of studied sample exposure to violence in early stage of their life. From the researcher point of view it is might be due to regarding to our culture Punishment by physical beating is the common way in the adolescence period to change negative behavior. This result is consistent with **Campodonico, (2019)**who studied the adolescents with dissociative symptoms and showed that majority of studied sample had history of violence.

Concerning to total dissociative symptoms of the studied students. This study revealed that less than one quarter of the studied students have high level of total dissociative symptoms. From the researcher point of view it might be due to adolescence experience traumatic events and cannot able to cope with stress positively may develop dissociative symptoms . Moreover, it might be due to when adolescent exposure to social stress such as (aggressive social interaction, social evaluation),this social stress affect psychological status of the adolescent(, anger, irritability, restlessness, Trouble sleeping, Problems with memory or concentration),then body respond to

psychosocial stress through neuroendocrine system in which brain send impulses topituitary gland and adrenal gland to release cortisol and adrenaline hormone for control and coping with stress.

This study is consistent with **Choi et al.,(2019)**who showed that less than of one quarter of the studied students have high level of total dissociative symptoms. In contrast to that, **Goffinet,(2018)**who showed that three quarter of studied adolescent had pathological dissociative symptoms.

Concerning to total stress disorder among studied students. It showed that less than half of the studied students have moderate level of psychological stress. From the researcher point of view it may be due to inability of the adolescent to manage stress and lack of social skills in adolescence period. This result is in agreement with **Rochelet al.,(2020)** who showed that more than half of studied adolescents had moderate degree of social stress.

Regarding to relation between personal data of the studied students and their dissociative symptoms, the findings of current study demonstrated that there was significant relation between total students' dissociative symptoms and their personal data as age and sex. This result is consistent with **Shah,(2018)** who reported that there was a significant relation between total students' dissociative symptoms and their personal data as age and sex.

In contrast to that **Harvey, (2019)** who showed that there was no significant relation between total students' dissociative symptoms and their personal data as age and sex. Harvey studied dissociative symptoms and showed that the dissociative symptoms occurring as dysfunctional stress responses regardless of age, sex. In addition, **Schuengel, (2020)** who showed that there was no significant

relation between total students' dissociative symptoms and their personal data as age and sex. Schuengel reported that males and females did not significantly differ in their level of dissociative symptoms.

Also, this study results showed that there is no statistically significant relation between residence of studied students and dissociative symptoms. From the researcher point of view it is may be due to dissociative symptoms occur as a dysfunctional stress response regardless of residence. In contrast to that, **Mishra,(2018)**who showed that there was a statistically significant relation between residences of studied students and their total dissociative symptoms.

According to relation between students' family characteristics and their total dissociative symptoms. This study shows that there was highly statistically significant relation between type of family and total students' dissociative symptoms. From the researcher point of view regarding to our culture, it might be due to living in extended family with (grandparents, uncle, aunt and cousins)provide emotional support, security , social skills that enable the adolescent to deal with social situation effectively and provide coping with any stress. This result is similar to **Tutkun, (2021)** who showed that there was highly statistically significant relation between type of family and total students' dissociative symptoms.

This disagrees with **Diseth, (2020)** who showed that there was no statistically significant relation between type of family and total students' dissociative symptoms. reported that dissociative symptoms has been related to some alterations in the brain (decreased in left hippocampal volume) and decreased in cerebrospinal fluid levels of neurotransmitters and their metabolites not as a result of type of family.

Regarding to relation between personal data of the studied students and their total stress level. This study revealed that there is statistically significant relation between total students' stress disorder and their personal data as age. From the researcher point of view it could be due to adolescents are highly sensitive to the effects of chronic stress and related to immature cognitive functions and lack of emotion-regulation skills. It is consistent with **Meyers,(2021)** who showed that there was statistically significant relation between total stress level of studied sample and their personal data as age.

Also, there was a statistically significant relation between total students' stress disorder and their personal data as sex. This study is consistent with **Murberg&Bru (2019)** who showed that there was a statistically significant relation between total students' stress and their sex. Murberg reported that females report experiencing significantly more stress symptoms than males. In contrast to that **DeAndaetal., (2019)**who showed that there was no statistically significant relation between total students' stress disorder and their sex.

Also, there was no statistically significant relation between total students' stress and their personal data as residence. From the researcher point of view it might be due to that stress is present in rural and in urban areas . Stress in rural area may be due to less access to health and human services that lead to greater levels of disability, impairment, mental and physical disorders. Stress in urban area may be due to crowding, high prices and high cost of living which have negative effect on parents and then on adolescents. In contrast to that **Elgar,(2021)** who showed that there was statistically significant relation between total students' stress and their residence.

Regarding to correlation between students' dissociative symptoms and stress disorder. This study revealed that there was a significant positive correlation between total students' dissociative symptoms and their total stress. From the researcher point of view it could be due to that the adolescent is still less emotionally stable and does not have social or emotional regulation skills that enable adolescent to cope with stress, therefore in the time of stress this adolescent use the dissociative symptoms as a coping mechanism. This result is similar to **Noor & Alwi, (2020)** showed that there was significant positive correlation between total students' dissociative symptoms and their total stress.

Conclusion

From the result of the present study one can conclude that:

Dissociative symptoms in adolescents are often known psychological response to a traumatic event. This study revealed that less than one quarter of the studied adolescents have high level of total dissociative symptoms and majority of studied adolescents have low level of total dissociative symptoms. This study also illustrated that half of the studied adolescents have moderate level of total psychological stress disorder. In addition to study results, this study revealed that there was a statistically significant positive correlation between total adolescents dissociative symptoms and their total stress.

Recommendations:

Based on the findings of this study, the following recommendations are suggested:

- Psycho-educational program focused on the psychological, physiological and social needs of adolescents.
- Stress management program for all adolescents concerning with identifying

stress manifestations, sources and generating intervention strategies to improve such students' quality of life.

- Psychiatric mental health nurse should provide health education to all parents who have adolescents with dissociative disorder which focused on signs, symptoms, causes and treatment of dissociative disorder for enable parents to deal with their sons.
- Psychiatric mental health nurse should provide counseling therapy to all adolescents with dissociative disorder concerning with stress management for avoid using dissociation as a coping mechanism with stress.
- Studies about dissociative disorder in childhood stage should be done for early prevention of this disorder in adolescence period and later in adulthood.
- **Further studies for larger Sample should be done to generalized results.**

References

- Allison, K. (2019):** Psychological dissection of patients having dissociative disorder: A cross-sectional study. *Indian journal of psychological medicine*, 40 (1)41-46.
- American Psychiatric Association (2020):** Diagnostic and statistical manual of mental disorders (5th Ed), dissociative disorder. Washington, DC, USA: American Psychiatric association.
- Brand, B., & Classen, C. (2020):** A naturalistic study of dissociative identity disorder and dissociative disorder not otherwise specified patients treated by community clinicians. 2020, (1) 153–171.
- Camponico, C. (2019):** The relationship between childhood adversities and dissociation in severe mental illness: a metaanalytic review. The relationship between childhood adversities and dissociation in severe

- mental illness: a meta-analytic review. 138(6):509-525.
- Carison, E., & Putnam, F. (1993):** An update on the dissociative experience scale dissociation 6(1),p.16-27.
- Choi, K., Seng, J., King, E., Lee, R., & Ford, J. (2019):** The Dissociative Subtype of Posttraumatic Stress Disorder (PTSD) Among Adolescents: Co-Occurring PTSD, Depersonalization/Derealization, and Other Dissociation Symptoms. *Journal of the American Academy of Child & Adolescent Psychiatry.*
- Cook, J., Dinnen, S., Rehman, O., Bufka, L., Courtois, C., (2021).** Responses of a sample of practicing psychologists to questions about clinical work with trauma and interest in specialized training. *Psychological Trauma: Theory, Research, Practice, and Policy* (3),253-257.
- DeAnda, D., Baroni, S., Boskin, L., Buchwald, L., Morgan, J., & Weiss, R. (2019):** Stress, stressors and coping among high school students. *Children and Youth Services Review*, 22 (6), 441-463.
- Diseth, T. (2020):** Dissociation in children and adolescents as reaction to trauma. an overview of conceptual issues and neurobiological factors. *Journal of Psychiatry.* 2018,59(2)79-91.
- Elgar, F.(2021):** Stress, coping and behavioral problems among rural and urban Adolescents Article in *Journal of Adolescence* : (5), 44–45.
- Garg, R. (2020):** Adolescent coping with everyday stressors: a seven-nation study of youth from central, eastern, southern, and northern Europe. *European Journal of Developmental Psychology* 4 (2), 129–156.
- Goffinet, S.(2018):** Prevalence of dissociative symptoms in adolescents psychiatric inpatients. *European Journal of Trauma & Dissociation*, 2018: (2), 39–45.
- Haque, S. (2020):** The effect of a school-based educational intervention on menstrual health: an intervention study among adolescent girls in Bangladesh; (4)23-30.
- Harvey, L. (2019):** Posttraumatic stress disorder: a model of the longitudinal course and the role of risk factors. *Journal of Clinical Psychiatry* (61), 15-23.
- Hassanin, H. (2018):** "Effect of Psycho-educational program on Psychological stress and quality of life among patients with hepatitis c virus ".*Egyptian Journal of health care.* March, 2018, (9): 94-107
- Jacop, V.(2005):**"Effectiveness of guided imagery in reduction of stress among patients with chronic illness in a selected hospital in mangalore.*American Journal of Nursing Research.* 6(6), 380-387.
- Lyons, S. (2020):** Dissociation in children and teens. Beacon house of therapeutic services & trauma. Available at www.beaconhouse.org.uk/useful-resources. Retrieved on 4/2021
- Lyssenko, L., Schmahl, C., Bockhacker, L., Vonderlin, R., Bohus, M., & Kleindienst, N. (2020):** Dissociation in psychiatric disorders: A meta-analysis of studies using the Dissociative Experiences Scale. *American Journal of Psychiatry*, 175, 37–46
- Meyers, C. (2021):** Uncontrollable stress, coping, and subjectivewell-being in urban adolescents. *Journal of Youth Studies*, (16),391–403.
- Mishra, P.(2018):** Dissociative disorder in children and adolescents and their personality profile: a comparative study. *International Journal of Research in Medical Sciences*,(2), 100–112.
- Murberg, T., & Bru, E. (2019):**School-related stress and psychosomatic symptoms among Norwegian adolescents. *School Psychology International*, 25 (3)317-332.

- Noor, N., & Alwi, A. (2020):** Stressors and well-being in low socioeconomic status Malaysian adolescents: The role of resilience resources. *Asian Journal of Social Psychology*, (16):292–306.
- Rafiq, S. (2018):** The relationship between childhood adversities and dissociation in severe mental illness: a meta-analytic review. *Acta Psychiatrica Scand*, 2018, (138): 509–525.
- Roekel, V., Verhagen, M. & Kuntsche, E. (2020):** Trait and state levels of loneliness in early and late adolescents. *Journal of Clinical Child and Adolescent Psychology*, 47,(2):888-899.
- Scalabrini, A. (2019):** The extent of dissociation in borderline personality disorder: a meta-analytic review. *Journal of Trauma & Dissociation* 19(4), 522–543.
- Schuengel, C. (2020):** The measurement of dissociation in normal and clinical populations: Meta-analytic validation of the dissociative experiences scale (DES). *Clinical Psychology Review* (16), 365–382.
- Shah, S.(2018):** A study of clinico-demographic profile of patients with dissociative disorder, *Journal of College of Medical Sciences-Nepal*, 2018, 8 (3):30-35.
- Spiegel, D.(2021):** Trauma and dissociation implications for borderline personality disorder. *Current Psychiatry Reports*. 2021;16 (2):434 -440.
- Stepoe, A. (2019):** Tools of psychosocial biology in health care research. In: Bowling A, Ebrahim S, eds. *Handbook of Health Research Methods*. Oxford: Oxford University Press; 2019: 471–493.
- Susman, E. (2018):** Puberty and psychological development. In: Lerner, R.M., Steinberg, L. (Eds.), *Handbook of Adolescent Psychology*, second ed. John Wiley and Sons,13(8)15–44.
- Tutkun, H. (2021):** Frequency of dissociative identity disorder in the general population in Turkey. *Comprehensive Psychiatry*, 40(2), 151–159.
- Waterbury, M. (2019):** Treatment of dissociative disorders. *Proceedings of the Ninth International Conference on Multiple Personality/Dissociative States*, Chicago, IL.2019,12(4)45-50.
- World Health Organization, (2020):** Adolescent health and development. Available at <https://www.who.int/westernpacific/news/q-a-detail/adolescent-health-and-development>.