



IJIRR

International Journal of Information Research and Review
Vol. 07, Issue, 07, pp.6994-7005, July, 2020



RESEARCH ARTICLE

STRUCTURAL EQUATION MODEL ON ADOLESCENT RESILIENCE AMONG CRIMINOLOGY STUDENTS

^{1,*}Gladys T. Estrellanes and ²Rinante L. Genuba

¹PhD, University of Negros Occidental-Recoletos, Bacolod City, Philippines

²University of Mindanao, Davao City, Philippines

ARTICLE INFO

Article History:

Received 15th April, 2020
Received in revised form
19th May, 2020
Accepted 27th June, 2020
Published online 30th July, 2020

Keywords:

Criminal Justice, Adolescent Resilience,
Emotional Intelligence, Academic Stress,
Aggression, Philippines.

ABSTRACT

Using structural equation modeling, this study sought what model best fits for adolescent resilience among criminology students. Employing a quantitative non-experimental design research method. In the generation of the best fit model, structural equation model (SEM) was used. Data were obtained from 400 freshmen criminology students from various schools offering criminology programs in South Negros Occidental. From the results of the study, it was found out that there is moderate level of aggression more so the respondents of this study assessed academic stress as oftentimes manifested, a description of the moderate level rating for this particular variable; in addition the high rating on emotional intelligence is an indication that adolescent criminology students oftentimes manifested emotional intelligence which is very important in the promotion of social emotional learning; furthermore the high level of adolescent resilience among criminology student is a suggestion that criminology students are oftentimes manifested adolescent resiliency with this result, it was found that there is important relationship between emotional and adolescent resilience. However, aggression and adolescent resilience has no significant relationship; while academic stress and adolescent resilience are significantly linked, emotional Intelligence and adolescent resilience are indeed has the relationship. Hence, the best fit model of this study is highlighted on adolescent resilience among criminology student.

Copyright © 2020, Gladys T. Estrellanes and Rinante L. Genuba. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution and reproduction in any medium, provided the original work is properly cited.

INTRODUCTION

Adolescent resilience based on research sets out three critical conditions for the conception of resilience: younger or finding one's self in an adverse situation; the quality of protective factors and the ability to adapt positively given the experience of adversity (González-Torres & Artuch, 2014). As agreed by (Masten, 2015; Wright, Masten & Narayan, 2013) resilience can be defined loosely as potential or manifested capacity a dynamic system for effective adjustment to disruptions that threaten the system's, survival or growth. The study on adolescent resilience is socially important because this would help to assess the current conditions of criminology adolescent resilience in college life particularly in region VI colleges and universities. As observed, student life, especially college life, is a very important time for criminology students, most of whom are late teens, physically immature, and psychologically unstable. (Rajkumar, Sooraj, Sandeep, & Harish, 2015). In addition, psychosocial problems of criminology students has an

***Corresponding author: Gladys T. Estrellanes,**
PhD, University of Negros Occidental-Recoletos, Bacolod City,
Philippines.

important connection in the developing mental health disorders in general depression, anxiety, substance abuse and schizophrenia (Betancourt, Speelman, Onyang, & Bolton, 2009). However, if social support is available it positively not hampered the mental health (Ellison, 2004). Hence, to study criminology student resilience and trace out information's is substantial. Adolescent resilience linked to so many studies with different factors. However, the results of (Alizadeh, Homayouni, & Mojirani, 2017) linked aggression with adolescence resilience which stated that that there is a significant correlation between resilience with aggression which means when the score of resilience is high, criminology students aggression decreases. Academic stress is directly linked with adolescent resilience (Wilks, 2008). Academic stress which stated that the environment, likelihood, friend, faculty and school support plays a protective role with criminology student's resilience. It is further stated that as the number of stressful life events increased for criminology students, physical symptoms also increased. Emotional intelligence is directly linked with adolescent resilience (Sarrionandia, Ramos-Díaz, & Fernández-Lasarte, 2018) which stated that criminology students with better emotional intelligence have better resilience. With vast complications posed by these issues, numerous researchers around the world intended at identifying variables, drawing conclusions,

suggestion and comments distributed. The literature has a gap with regard to the hierarchy of adolescent resilience in criminology students and whether or not susceptible to different degrees of aggression, academic stress and emotional intelligence. For now, no research has been accepted covering all the above-mentioned variables in the Philippines, particularly in region VI colleges and universities schools. The purpose of this investigation is to gather evidence to the development of understanding and improve a new model that deals with other path of adolescent resilience strategy in school.

RESEARCH OBJECTIVE

The study's intent was to construct a causal model on adolescent resilience through aggression, academic stress and emotional intelligence. Specifically, this study dealt the following objectives:

1. To assess the level of aggression in terms of:

- 1.1 physical aggression,
- 1.2 verbal aggression,
- 1.3 Anger aggression; and
- 1.4 Hostility aggression

2. To ascertain the level of academic stress in terms of:

- 2.1 Relating to other people,
- 2.2 personal factors,
- 2.3 academic factors, and
- 2.4 environments factors.

3. To identify the level of emotional intelligence in terms of:

- 3.1 self-awareness,
- 3.2 self-management,
- 3.3 social awareness, and
- 3.4 relationship management.

4. To evaluate the level of adolescent resilience in terms of:

- 4.1 novelty seeking,
- 4.2 emotional regulation, and
- 4.3 positive future orientation.

5. To determine the significant relationship:

- 5.1 aggression and adolescent resilience,
- 5.2 academic stress and adolescent resilience, and
- 5.3 emotional intelligence and adolescent resilience.

6. To determine what exogenous variable that best fits on the adolescent resilience.

7. To determine what model best fits for adolescent resilience among criminology students.

Hypothesis

The following hypotheses are tested at a significance level of 0.05:

1. There is no significant relationship between:

- 1.1 aggression and adolescent resilience,
- 1.2 academic stress and adolescent resilience, and
- 1.3 emotional intelligence and adolescent resilience.

2. There is no variable that can best fits adolescent resilience among criminology student of Region VI.

3. There is no model that best fits adolescent resilience among criminology student of Region VI.

LITERATURE REVIEW

Aggression: Aggression comes in a relational aggression form, that in addition, during the development phase of emerging adulthood may be particularly important (Arnett, 2015). Aggression between children in the aged 14-19 years in the Indian context and students years. Another study showed the most influential predictors of both original and repeat delinquency, as well as significant factors on adult criminal behaviour, are parental relationship disturbances, school-related disabilities, and a history of early violence. (Barrett, Katsiyannis, & Zhang, 2014; Barrett & Katsiyannis, 2015; Murray-Close et al. 2014). Another study indicated that young people who see themselves as victims of an unfair system and have a high level of mistrust appear to have both poorer academic performance (Steinberg, 2014) and have better probability of aggressive behavior (Zapolski, Garcia, Jarjoura, Lau & Aalsma, 2016). If young people see the judicial system as fair, they are more likely to engage in positive, action (Tackett, Kushner, Herzhoff, Smack, & Reardon, 2014). A lot of researchers had introduced studies on aggression. One of these is the study on the human aggression where (Reyes, Foshee, Fortson, Valle, Breiding, & Merrick, 2015) found out that anger deregulation is one of the manifestations of human aggression. Therefore, teenagers who exhibit anger deregulation may be at risk of committing dating violence within romantic relationship. Physical and verbal/emotional dating violence, it was found to have prevalence among adolescents (Goncy, et al., 2016; & Niolon Vivolo-Kantor, et al., 2015).

Moreover, findings of (Sharma & Marimuthu, 2014) point out the correlation of resilience and risk factors such as drug use, mood changes, physical abuse, media influence and psychological problems. In fact, individuals are likely to exhibit risky behaviors, and teens are more likely to engage in risky behaviors as a result of a desire for excitement and creativity. Accordingly, (Bartol, 2002) stated that adolescence learns aggressive behaviors from watching other people model them. They drink alcohol and have the tendency to use drugs at least once (Akça & Selen, 2016; Javdani, Finy, & Verona, 2014).

Academic Stress: Academic stress is the key source of stress among adolescents and it may end up to low self-esteem. More so, psychological problems such as depression and suicide arise as a result of low self-esteem (Nikitha, Tessy, & Valsaraj, 2014). In addition to physical stimuli, each individual life event can cause different levels of stress that could activate a stress reaction (Akram & Khan, 2012; Dow, 2014). Despite various challenges, some of them with academic stress manage well in life and are considered resilient. Although protection lies within of person such as having sense of humor and grit

(Masten, 2014; Munford, & Sanders, 2015) and social ecological capacities (e.g. family care, supportive service providers, quality education, and cultural capital. Adolescence is often characterized as a period of significant risk, because to the many social and growth that is taking place at this time. In addition, adolescents face the daily challenges including mood and behavioural changes, negative interactions between peers, academic-related stress and autonomy and conflict with parents (Deb, Esben, & Jiandong, 2014). Over-control parents have children who are less motivated to learn and have lower overall academic achievement (Froiland & Oros, 2014). Academic pressure is a widespread phenomenon in the education system and it adversely affects the social, emotional, and physical well-being of students (Hoferichter, Raufelder, & Eid, 2014).

Definitely, academic stress would be mediated by supporting independence in education for homework and learning; support like listening empathically, helping children find the meaningful and fascinating facets of school work, and supporting educational development while avoiding use of learning and preventing the use of extrinsic reward systems and threats (Froiland, 2015). Positive relationships and social support are family engagement related academic success among college students are important (Budescu & Silverman, 2016). Equally important too is the influence of parents and teachers that fosters adolescents' engagement in healthy extra curricular activities (Almonacid-Fierro, Cossio-Bolanos, Gomez-Campos, Garcia-Rubio, & Olivares, 2015).

Generally, students have poor self-regulation and are unable to cope with their stress (Teh et al., 2015; Radeef et. al, 2014). Especially, Malaysian students cannot regulate themselves well when faced with high levels of academic stress (Ahmadi, Mustaffa, Haghdoost K, & Alavi, 2014). In order to overcome negative effects due to stress, a number of approaches can be used to overcome stress, such as self-regulation and conscientious intervention programs (Bamber & Schneider, 2016). More importantly, the study found that resilience played a mediating role in the association of adolescents between academic stress and school life adjustment (Kim et al., 2018).

Emotional Intelligence: Emotional intelligence is important in promoting social psychological communication because it helps reduce the risk associated with negative social circumstances by improving the mental health and social well-being of young people (Khanlou & Wray, 2014). Emotional intelligence is a valuable tool to be used in of adversity (Houston, 2019). Social well-being (Lin, Liebert, Tran, Lau, & Salles, 2016), reflects the social integration of the individual, social trust, and the willingness to understand the importance of social events around them that helps in their sense of direction towards society. Environmental mastery, purpose in life, and personal growth can be integrated across well-being discussions to represent positive functioning. Moreover, the large number of research in the field showed the people with stronger emotional intelligence have better resilience. Emotional intelligence facilitates resilience. It includes problems evaluations, more optimistic and less negative results, and physiological problems (Schneider, Lyons, & Khazon, 2013). Emotionally mature people have less apparent stress (Zysberg, Orenshtein, Gimmon & Robinson, 2017), levels of stress balances association of EI and burnout. Emotional intelligence can be enhanced by trainings and

intervention programs (Peña-Sarrionandia, Mikolajczak, & Gross, 2015). A relationship that exist there has been resilience perceived to be emotionally more intelligent psychologically in different facets (i.e., emotional self-awareness, emotional expression, emotional self-control, and self-management of emotions). In addition, the goal of the academe is greatness as a measurement they now recognize the need to develop the socio-emotional skills of students with a stronger focus on well-being for their success (Borkar, 2016; Solano-Gómez, 2013). More so, competencies are emotional intelligence and resilience (Mayer, Salovey & Caruso, 2004; Mayer & Salovey, 1997; Oshio, Taku, Hirano, & Saeed, 2018), and probably developable and therefore improvable. Moreover, the ability to understand one's mood and distinguish between emotions requires emotional insight. The ability to restore or mitigate a bad mood is linked to emotional repair. It is known that these emotional skills play a crucial role in helping develop the young people's happiness their own lives (Sanchez-Álvarez, Extremera, & Fernández-Berrocal, 2015). Theoretical and observational studies suggest that emotional skills may lead to the improvement of life satisfaction. Emotional Intelligence and Resilience are outlined as two powerful tools for the minors to overcome difficult situations successfully (Muñoz-Silva, 2012; Palma-García & Hombrados-Mendieta, 2013).

Adolescent Resilience: Adolescent resilience based on research sets out three critical conditions for the conception of resilience: younger or finding one's self in an adverse situation; the quality of protective factors and the ability to adapt positively given the experience of adversity (González-Torres & Artuch, 2014). As agreed by (Masten, 2015; Wright, Masten & Narayan, 2013) resilience can be defined loosely as potential or manifested capacity a dynamic system for effective adjustment to disruptions that threaten the system's, survival or growth. Indeed resilience is a primary source of healthy adaptation for students to challenging or negative circumstances. It is suggested adolescent resilience to be essential enabling factor for distinct positive indicators of adjustment (Rodríguez-Fernández, Ramos-Díaz, Fernández-Zabala, Goñi, Esnaola, & Goñi, 2016; Sagone & De Caroli, 2014; Wright, Masten, & Narayan, 2013). In fact, research have shown that a person who is resilient should maintain their psychological health by challenging negative effects during challenging times. In addition, individuals demonstrate resilience when they can face difficult experiences and soar above them with minimal effort. In addition, evidence shows adopting more health-promoting behaviors for adolescents who are resilient (Barger, Vitale, Gaughan & Feldman-Winter, 2017) and avoid harmful risks, such as substance use. Similarly, a auto-compassionate person's balanced outlook and lack of harsh life-criticism, could encourage "bouncing back" from life's problems (Warren, Smeets & Neff, 2016). Evidently, curiosity is also particularly relevant to adolescence, a stage of development where experimentation, novelty-seeking and danger-taking are common and necessary for development (Siegel, 2015). Of course, it cannot be ignored the importance of cognitive and emotional capacity predicting resilience. More so in cross-sectional researches have shown the ability to self-regulate behavior is associated with high levels of resilience of students (Artuch-Garde, González-Torres, de la Fuente, Vera, Fernández-Cabezas, & López-García, 2017). Moreover, personal attributes, such as self-concept and intellect, emerged to be as the most significant

indicators of resilience during adolescence (Garza, Bain & Kupczynski, 2014). Furthermore, (Barchard, Brackett, & Mestre, 2016) said that it is important to bear in mind that nurturing the potential adolescents to regulate their own and other emotions can improve their actual-life management of emotions (Nathanson, Rivers, Flynn, & Brackett, 2016).

RESEARCH MODEL

The hypothesized models were composed of two types of latent constructs, namely exogenous and endogenous variables as shown in figure 1. The exogenous variables of this study were aggression (agg_ress), academic stress (acd_str), and emotional intelligence (emo_int). On the other hand, the endogenous variable is adolescent resilience (ad0_res). Since latent variables were not observed directly, it follows that they cannot be measured directly. With this, each latent construct was associated with multiple measures or observed variables. Thus, the extent of regression paths from the latent variable to the variables observed were one of the primary interests of this study. The latent aggression has four indicators namely: *physical aggression* (PA), *verbal aggression* (VA), *anger aggression* (AA) and *hostility aggression* (HA). The latent academic stress has four indicators namely: relating to others (RP), personal factors (PF), academic factors (AF) and environments factors (EF). The latent emotional intelligence has four indicators namely: self-awareness (SA), self-management (SM), social awareness (SS) and relationship management (RT). While Adolescent Resilience consists of three indicators namely: novelty seeking (NS), emotional regulation (ER) and positive future orientation (PO)

METHODS

In this study, researcher utilized a quantitative non-experimental design research method. In the generation of the best fit model, structural equation model (SEM) was used. First, it has used the descriptive-correlational method of analysis in which this approach is a calculation of the relationship of variables with varying degrees of measurement. In addition, (Szapkiw, 2012) stated that the descriptive-correlational studies offered an explanation of what is in a specific situation with the identified population and investigated the degree to which two or more variables related to each other. Second, the structural equation model (SEM) was used in this analysis. As noted by (Lomax & Li, 2013) this approach incorporates factor analysis and path analysis to check conceptual relationships between latent variables. Models may vary from basic to complex in that any number of variables of any form may be involved (i.e. observable, latent, independent, and dependent variables). Structural equation modeling (SEM) is a category of statistical analyzes that explores the relationship between multiple variables both exogenous and endogenous. The approach can be seen as a mixture of three statistical techniques: multiple regression, path analysis and factor analysis. The aim is to determine the extent to which the proposed theoretical model, often represented by a collection of relationships between different constructs, is supported by the data collected. SEM is therefore a confirmatory rather than an exploratory research tool. This entry provides a non-mathematical introduction to SEM, with a focus on its advantages, use and basic underlying assumptions.

In addition, the use of factor analysis in structural equation modeling allows the researcher to use multiple measures of each latent variable instead of a single measure, thereby allowing better measurement conditions (i.e. precision and validity) than a single measure (Salkind, 2010). This approach was used to assess adolescent resilience concerning aggression, academic stress, and emotional intelligence. Since this study aimed to assess adolescent resilience, the researcher used stratified random sampling which determined the number of respondent of the study. The thumb rule was followed to determine the appropriate 400 respondents for the Structural Equation Modeling (Bentler, Yuan, & Wu, 2010) in which the author likes to use the right per strata sample for the 10-fold quota sampling (Changing Minds, 2012). In addition, the five South Negros Occidental Schools offering the Criminology program were the subject of the report, with a total of 400 respondents. There were five schools around South Negros Occidental Region VI offering criminology program, here is the breakdown of the 400 respondents, the first school was labeled as school A, with a total number of 136 number of respondents, followed by school B with 142 respondents, third participating school was named as school C with a total of 44 number of respondents; while school D had 42 number of participating respondents and lastly the fifth school renamed as school E, had 36 respondents. A total of 400 respondents was generated.

The statistical tools that were used in the computation of data and testing the hypotheses at alpha 0.05 level of significance are the following; mean was used to determine the level of attitudes towards school, student's engagement, academic self-concept and interest in school; Pearson was used to determine the interrelationship between attitudes towards school student's engagement, academic self-concept and interest in college; linear regression analysis was used to determine the significant influence among attitudes towards school student's engagement, academic self-concept and interest in college and finally structural equation modeling was used to explore the best fit model Factor analysis the latent variables have been tested.

RESULTS AND DISCUSSION

The level of aggression is presented hereunder and items of the indicators of this variable are analyzed and interpreted shown in the appendices. Divulged in Table 1 is the level of aggression among criminology student in South, Negros Occidental with means ranges from 2.60 to 3.25 and respective overall average is 2.96 or qualitatively labeled as moderate and standard deviation of 0.51. Information results showed that the indicator with very high average score is 3.25 or moderate-hostility aggression. In contrast, physical aggression is the indicator with the lowest average score with mean rating of 2.60 but still labeled as *moderate*. Furthermore, the remaining indicators were organized with their corresponding descriptive interpretation from the highest to the lowest average scores. For instance with mean rating of 3.08 which is described *moderate* for verbal aggression and anger aggression with rating of 2.93 described as *moderate* quantitative description and square root of the variance from highest to lowest. Accordingly (Bartol, 2002) adolescence learns aggressive behaviors from watching other people model them. In other words, relevant models include parents, teachers, siblings,

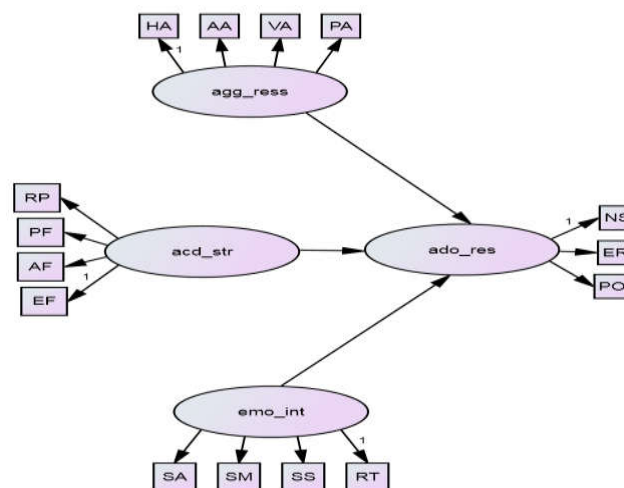


Figure 1.

Table 1 Level of Aggression among Criminology Students

Indicator	SD	Mean	Descriptive Level
Verbal Aggression	0.67	3.08	Moderate
Hostility Aggression	0.63	3.25	Moderate
Anger Aggression	0.69	2.93	Moderate
Physical Aggression	0.67	2.60	Moderate
Overall	0.51	2.96	Moderate

Table 2. Level of Academic Stress among Criminology Students

Indicator	SD	Mean	Descriptive Level
Academic Factors	0.55	3.06	Moderate
Personal Factors	0.57	2.97	Moderate
Environment Factor	0.71	2.57	Low
Relating to other people	0.66	2.53	Low
Overall	0.50	2.78	Moderate

Table 3. Level of Emotional Intelligence among Criminology Students

Indicator	SD	Mean	Descriptive Level
Relationship Management	0.67	3.46	High
Self-management	0.65	3.42	High
Self-Awareness	0.64	3.42	High
Social Awareness	0.63	3.39	Moderate
Overall	0.56	3.42	High

Table 4. Level of Adolescent Resilience among Criminology Students

Indicator	SD	Mean	Descriptive Level
Positive Future Orientation	0.84	4.06	High
Novelty Seeking	0.59	3.49	High
Emotional Regulations	0.54	3.31	Moderate
Overall	0.54	3.62	High

Table 5.1. Significance on the Relationship between Aggression and Adolescent Resilience

Aggression	Adolescent Resilience			
	Novelty Seeking	Emotional Regulation	Positive Future Orientation	Overall
Physical	.057	.079	.002	.048
Aggression	(.258)	(.116)	(.962)	(.341)
Verbal	.191**	.172**	.130**	.194**
Aggression	(.000)	(.001)	(.009)	(.000)
Hostility	.231**	.179**	.204**	.249**
Aggression	(.000)	(.000)	(.000)	(.000)
Anger Aggression	.049	.077	-.016	.035
	(.326)	(.122)	(.747)	(.482)
Overall	.168**	.163**	.100*	.168**
	(.001)	(.001)	(.045)	(.001)

Table 5.2. Significance on the Relationship between Academic Stress and Adolescent Resilience

Academic Stress	Adolescent Resilience			
	Novelty Seeking	Emotional Regulation	Positive Future Orientation	Overall
Relating to other	.177**	.205**	.028	.147**
People	(.000)	(.000)	(.577)	(.003)
Personal Factors	.210**	.190**	.105*	.194**
	(.000)	(.000)	(.037)	(.000)
Academic Factors	.253**	.181**	.164**	.238**
	(.000)	(.000)	(.000)	(.000)
Environment Factors	.221**	.196**	.026	.159**
	(.000)	(.000)	(.604)	(.001)
Overall	.265**	.240**	.093	.225**
	(.000)	(.001)	(.064)	(.000)

Table 6. Significance on the Influence of the Exogenous Variables on the Adolescent Resilience

		Adolescent Resilience			
Exogenous Variables		<i>B</i>	β	<i>t</i>	<i>Sig.</i>
Aggression		-.028	-.026	-.554	.580
Academic Stress		.139	.129	2.747	.006
Emotional Intelligence		.526	.544	12.769	.000
R	.575				
R ²	.331				
F	65.234				
p	.000				

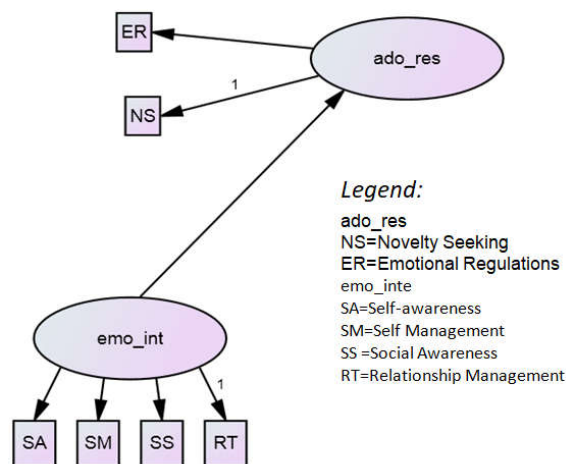


Figure 2

friends, and peers, as well as symbolic models like literary characters or television or movie personages and many more. It supports the study of (Goncy, Sullivan, Farrell, Mehari & Garthe (2016); NolonVivolo-Kantor, Latzman, Valle, Kuoh, Burton, Taylor & Tharp, 2015) which approve that criminology students view human aggression in the forms of Physical or verbal/emotional aggression among adolescents. This is an actualization of (Steinberg, 2014) which states that young people who see themselves as victims of an unfair system and have a high level of mistrust appear to have both poorer academic performance and have better probability of aggressive behaviour, also agreed by (Zapolski, Garcia, Jarjoura, Lau & Aalsma, 2016). The level of the academic stress is presented in table 2 which was organized from highest to lowest average score with corresponding quantitative description from highest to lowest with standard deviation. In addition, the indicators were evaluated and deduced in a simplified manner to improve the understanding of the other investigator. In addition, the outcome of the inquiry of this independent variable is an average score of 2.53 to 3.06 with overall average score of 2.78 which is labeled as moderate and with the respective standard deviation of 0.50.

The indication that academic stress of criminology students is sometimes manifested. The data for this indicator is consolidated from uppermost to lowermost average score of 3.06 or moderate for academic factors; 2.97 or moderate for personal factors 2.57 or low for environmental factors; 2.53 or low for relating to other people. The moderate level of academic stress among criminology students affirmed the study of (Deb, Esben & Jiandong, 2014) which stated that adolescents face the daily challenges including mood and behavioural changes, negative interactions between peers, academic-related stress such as autonomy and conflict with parents. In other words, academic stress is an individual's tendency to hold widespread positive expectations even when people face adversity or difficulty in their lives (Scheier, Carver & Bridges, 1994). The moderate level of academic stress among criminology students is allied to the contentions of (Hoferichter, Raufelder & Eid, 2014) which states that naturally, academic pressure is a widespread phenomenon in the education system and it adversely affects the social, emotional, and physical well-being of students. The level of the emotional intelligence is presented in Table 3 which was organized from the high level to the low level with their

corresponding quantitative depiction and standard deviation and mean from highest to lowest. In addition, the indicators were evaluated and deduced in a right manner to improve the understanding of the other investigator. In addition, the outcome of the inquiry of this independent variable with an average score of 3.46 to 3.39 with overall average score of 3.42 which is described as *high* and computed standard deviation of 0.56. This means that emotional intelligence of criminology students is oftentimes manifested. Further, the results indicate that the emotional intelligence is highly managed among criminology students. The data for this indicator is consolidated from highest to lowest average score of 3.46 or high for relationship management; 3.42 or high both for self-awareness and self-management; 3.39 or moderate for social awareness. The high rating on emotional intelligence is an indication that adolescent criminology students oftentimes manifested emotional intelligence which is very important in the promotion of emotional intelligence, (Mayer, Salovey, & Caruso, 2004) which stated that ability to perceive and show emotion, to assimilate emotion in thought, to comprehend and rationale with emotion, and restrict emotion in self and others adolescence interacting well with other people it is also undoubtedly a valuable tool to be used in of adversity (Houston, 2019). Moreover, social well-being (Lin, Liebert, Tran, Lau & Salles, 2016) reflects the social integration of the individual, social trust, and the willingness to understand the importance of social events around them that helps in their sense of direction towards society. In particular, (Schneider, Lyons, & Khazon, 2013) emotional intelligence facilitates resilience. It includes problems evaluations, more optimistic and less negative results, and physiological problems. Emotionally mature people have less apparent stress (Zysberg, Orenshtein, Gimmon & Robinson, 2017).

The adolescent resilience with reference to the three indicators is shown in Table 4 with respective overall average score of 3.62 or quantitatively labeled as *high* and standard deviation of 0.54. The outcomes showed that the indicator with the highest average score of 4.06 or *high* -positive future orientation. In reverse, the indicator with the lowest average score of 3.31 but still labeled as moderate -emotional regulation. On the other hand *novelty seeking* acquired a mean rating of 3.49 also described as high. The high level of adolescent resilience among criminology student is a suggestion that criminology students is allied to the study of (Zimmerman & Stevenson, 2005) which stated that adolescence resilience is connected through common issues of control and trust, action to overcome risk, and intergenerational support, guidance, and mentoring. Indeed resilience as a primary source of healthy adaptation for students to challenging or negative circumstances. Hence, some authors like (Rodríguez-Fernández, Ramos-Díaz, Fernández-Zabala, Goñi, Esnaola, & Goñi, 2016; Sagone & De Caroli, 2014; Wright, Masten & Narayan, 2013) it is suggested adolescent resilience to be essential enabling factor for distinct positive indicators of adjustment. In fact, research have shown that a person who is resilient should maintain their psychological health by challenging negative effects during challenging times. Presented in table 5.1 is the test of relationship between aggression and adolescent resilience with registered computed r-value .168 and with p-value which is equal to .001. On other hand, finding disclosed that p-value is lesser than the level significance of 0.05 which implies that there is significant

relationship between aggression and adolescent resilience. This means that aggression has a connection with adolescent resilience among criminology students. Analyzing further, physical aggression is correlated with novelty seeking with registered computed r-value of 0.57 and which is equal to .258 (*Non-significant*); emotional regulation with registered computed r-value of .079 and p value which is equal to .116 (*Non-significant*); positive future orientation with registered computed r-value of .002 and p value which is equal to .962 (*Non-significant*). The overall results on the correlation between physical aggression and adolescent resilience among criminology students obtained registered computed r-value of 0.48 and p-value which is equal to .341 (*Non-significant*).

In addition, verbal aggression is correlated with novelty seeking with registered computed r-value of .191 and p value which is equal to .000 (*Significant*); emotional regulation with registered computed r-value of .172 and p value which is equal to .001 (*Significant*); positive future orientation with registered computed r-value of .130 and p value which is equal to .009 (*Significant*). The overall results on the correlation between verbal aggression and adolescent resilience among criminology students gained with registered computed r-value of .194 and p value which is equal to .000 (*Significant*). Likewise, hostility aggression is correlated with novelty seeking with registered computed r-value of .231 and p value which is equal to .000 (*Significant*); emotional regulation with registered computed r-value of .179 and p value which is equal to .000 (*Significant*); positive future orientation with registered computed r-value of .204 and p value which is equal to .000 (*Significant*). The overall results on the correlation between hostility aggression and adolescent resilience among criminology students yielded a registered computed r-value of .249 and p value which is equal to .000 (*Significant*). In the same way, anger aggression is correlated with novelty seeking with registered computed r-value of .049 and p value which is equal to .326 (*Non-significant*); emotional regulation with registered computed r-value of .077 and p value which is equal to .122 (*Non-significant*); positive future orientation with registered computed r-value of -.016 and p value which is equal to .747 (*Non-significant*). The overall results on the correlation between anger aggression and adolescent resilience among criminology students gave-off registered computed r-value of .035 and p value which is equal to .482 (*Non-significant*).

The findings support the study of (Langley, Martin, Agha, Davies, Stergiakouli, Holmans & Thapar, 2011) which stated that adolescence learn from each other's behavior. In addition, social learning theory is contended that much of our behavior which initially acquired by watching others, who are called models. Moreover, the study is also anchored on pronouncement of (Kruti, 2002) which stated that early childhood appear in verbal aggression, this condition manifests itself more or less at the same way as boys and girls, these are forms of started aggression and later is generally hidden. In other words, aggressiveness is the primary force that may come as a reaction to aggression or frustration of primary needs. Further stated that aggression or frustrated conditions bringing as inevitable aggression response and aggressive behaviour based on social relationships and personal social interaction. Shown in Table 5.2 is the test of connection between academic stress and adolescent resilience among criminology students with overall registered computed r-value of .225 and p-value

which is equal to .000 is lesser than the tested significance value of 0.05. The findings imply the significant connection of academic stress between adolescent resilience among criminology students. It is further stated that academic stress provides significant bearing on the adolescent resilience.

Presenting the details of the data, relating to other people is correlated to: novelty seeking with registered computed r-value of .177 and p value which is equal to .000 (*Significant*); emotional regulation with registered computed r-value of .205 and p value which is equal to .000 (*Significant*); positive future orientation with registered computed r-value of .028 and p value which is equal to .577 (*Non-significant*). The overall results on the correlation between relating to other people and adolescent resilience among criminology students brought a registered computed r-value of .147 and p value which is equal to .003 (*Significant*). In the same view, personal factors is correlated to: novelty seeking with registered computed r-value of .210 and p value which is equal to .000 (*Significant*); emotional regulation with registered computed r-value of .190 and p value which is equal to .000 (*Significant*); positive future orientation with registered computed r-value of .105 and p value which is equal to .037 (*Significant*). The overall results on the correlation between personal factors and adolescent resilience among criminology students got a total registered computed r-value of .194 and p value which is equal to .000 (*Significant*). On the other hand, academic factors is correlated to: novelty seeking with registered computed r-value of .253 and p value which is equal to .000 (*Significant*); emotional regulation with registered computed r-value of .181 and p value which is equal to .000 (*Significant*); positive future orientation with registered computed r-value of .164 and p value which is equal to .000 (*Significant*). The overall results on the correlation between academic factors and adolescent resilience among criminology students accumulated a registered computed r-value of .238 and p value which is equal to .000 (*Significant*).

Similarly, environmental factor is correlated to: novelty seeking with registered computed r-value of .221 and p value which is equal to .000 (*Significant*); emotional regulation with registered computed r-value of .196 and p value which is equal to .000 (*Significant*); positive future orientation with registered computed r-value of .026 and p value which is equal to .604 (*Non-significant*). The overall results on the correlation between environmental factors and adolescent resilience among criminology students yielded a registered computed r-value of .159 and p value which is equal to .001 (*Significant*). The study is also anchored on the pronouncement of (Laurence, Williams & Eiland, 2009) which stated that academic stress is understood as a response by adolescence students to external pressures or stressors, such as too many assignments within a short period of time. In other words, academic stress is the perspective of major events such as humanitarian disasters, chronic and other life threatening activities. In addition, academic stress which stated that a complex set of interactions and adjustments between the person and the environment (Idzai, 2016). Shown in Table 5.3 is the relationship between emotional intelligence with adolescent resilience among criminology student with overall registered computed r-value of .563 and p-value of which is equal to .000 which is very much lesser than the level significance of 0.05. Thus, null hypothesis was rejected and implies that there is significant

relationship between emotional intelligence with adolescent resilience among criminology student. It is further stated that emotional intelligence has significance importance with adolescent resilience. Articulating the details of the data, self-awareness is correlated to: novelty seeking with registered computed r-value of .406 and p value which is equal to .000 (*Significant*); emotional regulation with registered computed r-value of .382 and p value which is equal to .000 (*Significant*); positive future orientation with registered computed r-value of .321 and p value which is equal to .000 (*Significant*). The overall results on the correlation between self-awareness and adolescent resilience among criminology students garnered a registered computed r-value of .442 and p value which is equal to .000 (*Significant*). Consequently, self-management is correlated to: novelty seeking with registered computed r-value of .441 and p value which is equal to .000 (*Significant*); emotional regulation with registered computed r-value of .413 and p value which is equal to .000 (*Significant*); positive future orientation with registered computed r-value of .338 and p value of .000 (*significant*).

The overall results on the correlation between self-management and adolescent resilience among criminology students gained an r-value of .474 and p value which is equal to .000 (*Significant*). More so, social awareness is correlated to: novelty seeking with registered computed r-value of .441 and p value which is equal to .000 (*Significant*); emotional regulation with registered computed r-value of .382 and p value which is equal to .000 (*Significant*); positive future orientation with registered computed r-value of .384 and p value which is equal to .000 (*Significant*). The overall results on the correlation between social awareness and adolescent resilience among criminology students gained a registered computed r-value of .487 and p value which is equal to .000 (*Significant*). Furthermore, relationship management is correlated to: novelty seeking with registered computed r-value of .439 and p value which is equal to .000 (*Significant*); emotional regulation with registered computed r-value of .442 and p value which is equal to .000 (*Significant*); positive future orientation with registered computed r-value of .444 and p value which is equal to .000 (*Significant*). The overall results on the correlation between relationship management and adolescent resilience among criminology students gained registered computed r-value of .538 and p value of >0.05 (*Significant*).

In like manner, emotional intelligence is anchored on the self-theory of personality by (Salovey & Mayer, 1990) and further developed by (Robbins, Allen, Casillas, Peterson & Lee, 2006) which concerns both the development of identity and the promotion of adaptive interpersonal relationships of adolescence. In addition self-theory of personality adolescence are less likely to report changes in personality over time and more likely to suffer impairment due to the link respectively their views about their own features and their answers to interpersonal pressures. In other words, adolescence those who believe less in the fragility of their character may experience distress as they indulge in the method of identity production and start working towards increased autonomy due to lack of belief behaviors and in novel relationships (Yeager & Dweck, 2012). Revealed in Table 6 is the significance on the influence of exogenous variables to the adolescent resilience among criminology student with computed F-value of 65.234, R-value of .575, R² value of .331 and p-value which is equal to

.000 is lesser the significance level of 0.05. It could be surmised that exogenous variables are predictor of adolescent resilience among criminology students. Looking at the R^2 value of .331 highlighted that only 33.1% of exogenous variables influence the adolescent resilience. The difference of 66.9% is associated to the other factors not incorporated in the study. Specifics on the exogenous variables on the adolescent resilience underscored that aggression had standardized and unstandardized coefficients of -.028 and -.026, registered computed t-value of -.554 and p-value which is equal to .580 (*Non-significant*); academic stress had standardized and unstandardized coefficients of .139 and .129, t-value of 2.747 and p-value which is equal to .006 (*Significant*) and emotional intelligence had standardized and unstandardized coefficients of .526 and .544, t-value of 12.769 and p-value which is equal to .000 (*Significant*). Among the three exogenous variables it is the emotional intelligence which is best predictors for adolescent resilience.

The significance on the influence of the variables to adolescent resilience disclosed that emotional intelligence is predictor of adolescent resilience among criminology student particularly on the indicators novelty seeking, emotional regulation and positive future orientation, and enhances students' adaptive management of students and help them avoid negative outcomes that are detrimental to their overall well-being (Laudet, Harris, Kimball, Winters & Moberg, 2015). Evidently, the findings support the conceptual analysis of (Peña-Sarrionandia et al., 2015) which stated that more emotional intelligence, the greater was the probability that students became resilient in the face of adversity. In that sense, individual emotional intelligence has been empirically found to be positively associated with adolescent resilience. In the same vein, the study supports the pronouncement of (Masten, 2014; Noble & McGrath, 2016; Wanda, 2008) which stated that emotionally intelligent can easily understand the difficult situation and manage stress. (Salovey & Mayer, 1990) stated that intelligent people can accurately recognize, express and control their emotions. They manage stress well and have good problem-solving skills. They are optimistic and consider challenges as opportunities, with these skills they become resilient, being able to overcome challenges, setbacks and bounce back under difficult circumstances and adapt well in the face of any trauma, disaster, risks, or even major sources of pressure.

Certainly, results of the study advocated the theory of The Empowerment Theory (Zimmerman & Stevenson, 2005) says that adolescent resilience is connected through common issues of control and trust, action to overcome risk, and intergenerational support, guidance, and mentoring. Adolescent health is described as the notion of primitive factors they are optimistic and consider challenges as opportunities by (Sandler, Wolchik, Davis, Haine & Ayers, 2003). More so, resiliency theory emphasizes the role of fundamental factors (Zolkoski & Bullock, 2012; García-Vesga & Domínguez-de la Ossa, 2013) between children growing up and provides the basis for understanding why some children and adolescents do not experience adverse health and social outcomes. Besides resiliency theory offers a conceptual framework for the evaluation of a strength-based approach to understanding and educating child and adolescent growth with informing intervention design (Larson & Angus, 2011; Zimmerman & Brenner, 2010).

Establishing the Best Structural Model for Adolescent Resilience: The research question related to the model that best represents the variables as predictor of adolescent resilience among criminology student, the proposed model sketched in Figure 1 needs to be modified to meet the requirements of the goodness of fit measures. The four models generated in the study were encapsulated in Table 7. Distinguishing the best fit model, all the indices included must consistently fall within acceptable ranges. Chi square/ degree of freedom value must be less than the level significance of 0.05 with its corresponding p-value greater or equal to 0.05. Root mean square of Error approximation value must be less 0.05 and its corresponding p-close value must be greater or equal to 0.05. The other indices such as Normed Fit Index, Tucker-Lewis Index, Comparative Fit Index and Goodness of Fit must be all greater than 0.90.

The first generated structural model showed direct causal relationship of the exogenous variables, aggression, academic stress and emotional intelligence to endogenous variable, adolescent resilience. Some of the computed indices of this model do not reach the acceptable ranges of values, thus, the model is a poor fit. The second generated structural model exhibits the interrelationship of the exogenous variables: aggression, academic stress and emotional intelligence and its causal relationship on the endogenous variable, adolescent resilience. This model found poor fit because the RMSEA .064 with p-close .014, all did not fall to the acceptable ranges of values. The third generated structural model highlights the direct causal link of the variables toward adolescent resilience and their relationships for each other. The results settled to non-fit model as indicated by its RMSEA .067 with p-close .025. Furthermore, the fourth generated structural model showing the direct causal link of the exogenous variable, emotional intelligence toward the endogenous variable, adolescent resilience and their relationship with each other. The generated model found to have indices that shows a very good fit to the data as indicated by CMIN/DF .1186, p-value .313, RMSEA .022, p-close .751 and indices such as NFI .998, CFI .999 and GFI .995. All of the indices with their corresponding values were greater than 0.90 or meet the requirements of goodness of fit measures. Since, modified model is a good fit model of adolescent resilience, this does not warrant for further testing to any models. The null hypothesis is therefore dismissed. It could be assumed that among criminology students, there is a model that best suits adolescent resilience. The model evidently exemplifies the edifice of emotional intelligence as predictors of adolescent resilience. Consequently, emotional intelligence is the most important ingredients in attaining the premium of adolescent resilience among criminology students. The findings thus endorse the resilience of adolescents as the base of emotional intelligence in relation to relationship management, social awareness, self-management and self-awareness. The generated best fit model supports the articulation of (Robbins et al., 2006) which stated that personality can be related to both the development of identity and the promotion of adaptive interpersonal relationships dealing with the environmental stressors. Adolescent resilience is significantly associated with emotional intelligence (Peña-Sarrionandia, Mikolajczak, & Gross 2015; Schneider, Lyons & Khazon, 2013) a well positive outlook to oneself in facing different challenges in life journey.

Apparently, the best fit model of adolescent resilience supports the articulation of (Yeager & Dweck, 2012) which stated that the more involved students are within their respective colleges, the greater the likelihood of those students persisting in college. The global expectations that good things will be plentiful in the future and bad things will be scarce. It refers to the extent to which individuals expect a good outcome rather than a bad outcome. This source affects adolescent resilience among criminology students who are in small groups tend to be more reliant and productive in the college life.

REFERENCES

- Ahmadi A., Mustaffa M., Haghdoust A. & Alavi M. 2014. Mindfulness and related factors among undergraduate students. *Procedia social behavior science* 159:20–24. Doi: 10.1016/j.sbspro.2014.12.321
- Akça, S. O., & Selen, F. 2016. Erkekergenlerderisklidavranışlar: Birliseörneği. *TAF Preventive Medicine Bulletin*, 15(3), 206–212.
- Akram, M., & Khan, M. I. 2012. Assessment of academic stress and problem solving among senior secondary school students. *Social Science International*, 28(2), 265.
- Alizadeh, M., Homayouni, A & Mojirian, F. 2017. *Correlation between resilience with aggression and hostility in university students*
- Almonacid-Fierro, Cossio-Bolanos, Gomez-Campos, Garcia-Rubio, and Olivares 2015. Influence of parents and physical education teachers in adolescent physical activity. *International Journal of Clinical and Health Psychology*, 15, 113–120. <http://dx.doi.org/10.1016/j.ijchp.2015.01.002>
- Arnett, J. J. (2015). *Emerging adulthood: The winding road from the late teens through the twenties*. New York: Oxford University Press.
- Artuch-Garde, R.; González-Torres, M.D.C.; de la Fuente, J.; Vera, M.M.; Fernández-Cabezas, M. & López García, M. (2017). Relationship between resilience and self-regulation: a study of spanish youth at risk of social exclusion. *Front Psychol*, 8, 612. doi:10.3389/fpsyg.2017.00612
- Bamber, M.D., & Schneider, J.K. (2016). Mindfulness-based meditation to decrease stress and anxiety in college students: A Narrative Synthesis of the Research. *Educ. Res. Rev.* 18, 1–32. doi: 10.1016/j.edurev.2017.12.004
- Barchard, K. A., Brackett, M. A., & Mestre, J. M. (2016). Taking stock and moving forward: 25 years of emotional intelligence research. *Emotional Revision*, 8, 289–289. 10.1177/1754073916650562
- Barger, J., Vitale, P., Gaughan, J. P., & Feldman-Winter, L. (2017). Measuring resilience in the adolescent population: a succinct tool for outpatient adolescent health. *Journal of Pediatrics*, 189, 201–206. <https://doi.org/10.1016/j.jpeds.2017.06.030>
- Barrett, D. E., & Katsiyannis, A. (2015). Juvenile delinquency recidivism: Are Black and White youth vulnerable to the same risk factors? *Behavioral Disorders*, 40, 174–195.
- Barrett, D. E., Katsiyannis, A., & Zhang, D. (2014). A structural equation modeling analysis of influences on juvenile delinquency. *Behavioral Disorders*, 39, 113–127.
- Bartol, C. (2002). *Criminal Behaviour: A Psychological Approach*. Upper Saddle River, N: Prentice Hall. Retrieved September 28, 2018 from <https://www.Children.gov-on.calhtdocs>.
- Betancourt TS, Speelman L, Onyango G, Bolton P. (2009). Psychosocial problems of war-affected youth in Northern Uganda: A qualitative study. *transcult psychiatry* 2009;46:238–56
- Borkar, V. N. (2016). Positive school climate and positive education: Impact on students' well-being. *Indian Journal of Health & Wellbeing*, 7(8), 861–862.
- Budescu, M., & Silverman, L. R. (2016). Kinship support and academic efficacy among college students: A cross-sectional examination. *Journal of Child and Family Studies*, 25, 1789–1801.
- Deb, S., Esben, S., & Jiandong, S. (2014). Academic-related stress among private secondary school students in India. *Asian Education and Development Studies*, 3, 118–134. doi:10.1108/AEDS-02-2013-0007
- Dow, J. A. T. 2014. Stress. *Journal of Experimental Biology*, 217(1), 5–5. doi:10.1242/jeb.099606
- Froiland, J. M. 2015. Parents' weekly descriptions of autonomy supportive communication: Promoting children's motivation to learn and positive emotions. *Journal of Child and Family Studies*, 24, 117–126.
- Froiland, J. M., & Oros, E. 2014. Intrinsic motivation, perceived competence and classroom engagement as longitudinal predictors of adolescent reading achievement. *Educational Psychology*, 34, 119–132.
- García-Vesga, M. C., & Domínguez-de la Ossa, E. 2013. Desarrolloteórico de la Resiliencia y su aplicación en situaciones adversas: Unarevisiónanalítica. [Technical development of resilience and its application in adverse situations: an analytical review.] *Rev. Latinoam. Ciencias Soc.* 11, 63–77. doi: 10.11600/1692715x.1113300812
- Garza K. K., Bain S. F., & Kupczynski L. 2014. Resiliency, self-efficacy, and persistence of college seniors in higher education. *Resilience High Educational Journal* 26, 1–19.
- Goncy, E. A., Sullivan, T. N., Farrell, A. D., Mehari, K. R., & Garthe, R. C. 2016. Identification of patterns of dating aggression and victimization among urban early adolescents and their relations to mental health symptoms. *Psychology of Violence*, 23, 43–68.
- González-Torres, M. C., & Artuch, R. 2014. Resilience and coping strategy profiles at university: contextual and demographic Variables. *Electron. J. Res. Educ. Psychol.* 12, 621–648. doi: 10.14204/ejrep.34.14032
- Grant, A.M., Franklin, J., & Langford, P. 2002. The Self-Reflection and Insight Scale: A new Measure of Private Self-Consciousness Social Behavior and Personality: *An International Journal*, 30 (8), 821–836
- Hoferichter, F., Raufelder, D., & Eid, M. 2014. The mediating role of socio-motivational relationships in the interplay of perceived stress, neuroticism, and test anxiety among adolescent students. *Psychology in the Schools* 51, 736–752. <http://dx.doi.org/10.1002/pits.21778>
- Houston, E. 2019. *The Importance of Emotional Intelligence*. Retrieved September 28, 2018
- Idzai, M 2016. The levels and impacts of stress on academic performance of masters' students in the faculty of arts at the university of Nairobi.
- Javdani, S., Finy, M. S., & Verona, E. 2014. Evaluation of the validity of the multidimensional Personality Questionnaire—Simplified Wording Form (MPQ-SF) in adolescents with treatment histories. *Assessment*, 21, 352–362.

- Khanlou, N., & Wray, R. 2014. A whole community approach toward child and youth resilience promotion: A review of resilience literature. *International Journal of Mental Health and Addiction*, 12, 64–79.
- Kim, I., Kim, W. S., & Bae, S. C. 2018. Effects of adolescents' academic stress on school life adjustment: focusing on mediator effect of resilience. *Medico Legal Update* 18, 290–295. doi: 10.5958/0974-1283.2018.00060.9
- Kruti, I. 2002. Aggression and Antisocial Behaviour of Teenagers
- Langley, K., Martin, J., Agha, S.S., Davies, C., Stergiakouli, E., Holmans, P., Thapar, A. 2011. Clinical and cognitive characteristics of children with attention-deficit hyperactivity disorder, with and without copy number variants. *British journal of psychiatry*, 199, 398–403. Retrieved September 28, 2018 from <https://www.ncbi.nlm.nih.gov/pmc/>
- Larson, R., & Angus, R. 2011. Adolescents' development of skills for agency in youth programs: Learning to think strategically. *Child Development*, 82(1), 277–294. doi:10.1111/j.1467-8624.2010.01555.x
- Laudet, A. B., Harris, K., Kimball, T., Winters, K. C., & Moberg, D. P. 2015. Characteristics of students participating in collegiate recovery Programs: A national survey. *Journal of Substance Abuse Treatment*, 51, 38–46.
- Laurence, B. Williams, C. and Eiland, D. 2009. 'The Prevalence and Socio-demographic Correlations of Depression, Anxiety, and Stress among a group of university students'. *Journal of American Health* Vol.58 pp.94-105
- Lin, D.T., Liebert, C., Tran, J., Lau, J., & Salles, A. 2016. Emotional Intelligence as a Predictor of Resident Well-Being. *The Journal of the American College of Surgeons*. doi.org/10.1016/j.jamcollsurg.2016.04.044
- Little, M., & Seay, D. 2014. By-gender risk paths of parental psychological control effects on emerging adult overt and relational aggression. *Journal of Social and Personal Relationships*, doi:10.1177/0265407513517808
- Lomax, R., & Li, J. 2013. Correlational research. Retrieved from <http://www.education.com/reference/article/correlational-research/>.
- Lonigro, A., Schneider, B. H., Laghi, F., Baiocco, R., Pallini, S., & Brunner, T. 2015. Is cyberbullying related to trait or state anger? *Child Psychiatry and Human Development*, 46, 445–454. doi:10.1007/s10578-014-0484-0
- Masten, A. S. 2014. Global perspectives on resilience in children and youth. *Child Development*, 85(1), 6–20. doi:10.1111/cdev.12205
- Masten, A. S. 2015. Pathways to integrated resilience science. *Psychol. Inq.* 26, 187–196. doi: 10.1080/1047840X.2015.1012041
- Mayer, J. D., & Salovey, P. 1997. *What is emotional intelligence?* In P. Salovey & D. Sluyter (Eds.), *Emotional development and emotional intelligence: Implications for educators*. New York, NY: Basic Books.
- Mayer, J. D., Salovey, P., & Caruso, D. R. 2004. Emotional intelligence: Theory, findings, and implications. *Psychological Inquiry*, 60.
- McKay, S., Skues, J. L., & Williams, B. J. 2018. With risk may come reward:
- Munford, R., & Sanders, J. 2015. Young people's search for agency: Making sense of their experiences and taking control. *Qualitative Social Work: Research and Practice*, 14(5), 616–633. doi:10.1177/1473325014565149
- Muñoz-Silva, A. 2012. El estudio de la resiliencia desde la perspectiva evolutiva y su aportación a la comprensión del riesgo y la protección en la intervención social. *Portularia. Revista de Trabajo Social*, 12 (1), 9-16.
- Murray-Close, D., Crick, N. R., Tseng, W., Lafko, N., Burrows, C., & Pitula, C. 2014. Physiological stress reactivity and physical and relational aggression: The moderating roles of victimization, type of stressor, and child gender. *Development and Psychopathology*, 26, 589–603. doi:10.1017/S09545794.1400025X
- Nakaya, M., Oshio, A., & Kaneko, H. 2006. Correlations for adolescent resilience scale with big five personality traits. *Psychological Report*, 98, 927-930. Retrieved from Mindtools.com, readily downloadable pdf online.
- Nathanson, L., Rivers, S. E., Flynn, L. M., & Brackett, M. A. 2016. Creating emotionally intelligent schools with ruler. *Sch. Adm.* 73, 19–22. 10.1177/1754073916650495
- Nikitha, S.; Tessy, T.J & Valsaraj, P.B. 2014. "A Correlational Study on Academic Stress and Self-Esteem Among Higher Secondary Students in Selected Schools of Udupi District", *Nitte University Journal of Health Science*, 4,(1),106-108.
- Niolon, P. H., Vivolo-Kantor, A. M., Latzman, N. E., Valle, L. A., Kuoh, H., Burton, T., Taylor, B. G., & Tharp, A. T. 2015. Prevalence of teen dating violence and co-occurring risk factors among middle school youth in high-risk urban communities. *Journal of Adolescent Health*, 56, S5–S14.
- Noble, T., & McGrath, H. 2016. *The prosper school pathways for student wellbeing: Policy and practices*. New York, NY: Springer. <https://doi.org/10.1007/978-3-319-21795-6>
- Oshio, A., Taku, K., Hirano, M., & Saeed, G. 2018. Resilience and big five personality traits: A meta analysis. *Personality and Individual Differences*, 127, 54–60. <https://doi.org/10.1016/j.paid.2018.01.048>
- Palma-García, M., & Hombrados-Mendieta, I. 2013. Trabajo Social y resiliencia: revisión de elementos convergentes. *Portularia. Revista de Trabajo Social*. 13 (2), 89-98.
- Peña-Sarrionandia, A., Mikolajczak, M., & Gross J. J. 2015. Integrating emotion regulation and emotional intelligence traditions: a meta-analysis. *Front Psychology*, 6, 160-169. 10.3389/fpsyg.2015.00160
- Radeef, A., Faisal, G., Ali, S., Ismail, M. 2014. Source of stressors and emotional disturbances among undergraduate science students in Malaysia. *International Journal Medical Residence Health Science*. 3:401–410. doi: 10.5958/j.2319-5886.3.2.082
- Rajkumar, E., Sooraj, K. V., Sandeep, H. B., Harish, C. 2015. Psychosocial Problems among Students of Central University of Karnataka: A Comparative Study
- Reyes, H. L. M., Foshee, V. A., Fortson, B. L., Valle, L. A., Breiding, M. J., & Merrick, M. T. 2015. Longitudinal mediators of relations between family violence and adolescent dating aggression perpetration. *Journal of Marriage and Family*, 77, 1016–1030.
- Robbins, S.B., J. Allen, A. Casillas, C.H. Peterson & H. Lee 2006. Unraveling the differential effects of motivational and skills, social, and self- management measures from traditional predictors of college outcomes. *Journal of Educational Psychology*, 98(3), 598-616.
- Rodríguez-Fernández, A., Ramos-Díaz, E., Fernández-Zabala, A., Goñi, E.,

- Sagone, E., & De Caroli, M. E. 2014. Relationships between psychological well-being and resilience in middle and late adolescents. *Procedia-Social and Behavioral Sciences*, 141, 881–887. <https://doi.org/10.1016/j.sbspro.2014.05.154>
- Salovey, P., & Mayer, J. D. 1990. Emotional intelligence. *Imagination, Cognition and Personality*, 9, 185 – 211.
- Sanchez-Álvarez, N., Extremera, N., & Fernández-Berrocá, P. 2015. Maintaining life satisfaction in adolescence: Affective mediators of the influence of perceived emotional intelligence on overall life satisfaction judgments in a two-year longitudinal study. *Frontiers in Psychology*, 6, 1892. <https://doi.org/10.3389/fpsyg.2015.01892>
- Sandler, I.N., Wolchik, S.A., Davis, C., Haine, R.A. & Ayers, T.S. 2003. *Correlational and Experimental Study of Resilience for Children of Divorce and Parentally Bereaved Children*. in S.S. Luthar (Ed.) *Resilience and Vulnerability: Adaptation in the context of Childhood Adversities* (pp.213-240). New York: Cambridge University Press
- Sarrionandia, A., Ramos-Díaz, E. & Fernández-Lasarte, O. 2018. Resilience as a Mediator of Emotional Intelligence and Perceived Stress: A Cross-Country Study
- Scheier, M.F., Carver, C.S., & Bridges, M.M. 1994. Distinguishing Optimism from Neuroticism and Trait Anxiety, Self-Mastery and Self-Esteem: A re-evaluation of the life orientation test. *Journal of Personality and Social Psychology*, 67 (6), 1063-1078
- Schneider, T. R., Lyons, J. B., & Khazon, S. 2013. Emotional intelligence and resilience. *Pers. Individ. Differ.*, 55, 909–914. [10.1016/j.paid.2013.07.460](https://doi.org/10.1016/j.paid.2013.07.460)
- Sharma, M. & Marimuthu P., (2014). Prevalence and psychosocial factors of aggression among youth. *Indian Journal of Psychological Medicine*; Kottayam, 36, (1), (2014): 48-53. DOI:10.4103/0253-7176.127249. Retrieved from <https://search.proquest.com/pqrl/docview/1502745431/fulltextPDF/4D68E4CB89584210PQ/13?accountid=34542>
- Siegel, D.J. (2015). *Brainstorm: the power and purpose of the teenage brain*. Penguin, New York, NY.
- Solano-Gómez, A. (2013). Inteligencia Emocional en el trabajo. Sus implicaciones y el rol de la psicología laboral. *Humanitas*. 10 (10). 201- 214.
- Steinberg, L. 2014. *Adolescence* (10th ed.). New York: McGraw-Hill.
- Szapkiw, A. 2012. Selecting and justifying your research design. Retrieved from [http://amandaszapkiw.com/artifacts/resources/tutorials/research process /Step4 – Selecting - and-Justifying-Your Research Design.pdf](http://amandaszapkiw.com/artifacts/resources/tutorials/research%20process/Step4%20Selecting%20and%20Justifying%20Your%20Research%20Design.pdf)
- Tackett, J. L., Kushner, S. C., Herzhoff, K., Smack, A. J., & Reardon, K. W. 2014. Viewing relational aggression through multiple lenses: Temperament, personality, and personality pathology. *Development and Psychopathology*, 26(3), 863–877. doi:10.1017/S0954579414000443.
- Wanda, M., 2008. Preparing administrators to serve diverse populations of students with learning challenges. September 28, 2018 from *Journal of Diversity Management* 3 (1), 55-66
- Warren, R., Smeets, E., & Neff, K. 2016. Self-criticism and Self-compassion: risk and resilience. *Current Psychiatry*, 15(12), 18-21. 24-28, 32.
- Wilks, S. E. 2008. Resilience amid Academic Stress: The Moderating Impact of Social Support among Social Work Students
- Wright, M., Masten, A. S., & Narayan, A. J. 2013. “Resilience processes in development: four waves of research on positive adaptation in the context of adversity,” in *Handbook of Resilience in Children*, eds Goldstein S., Brooks R. B., editors. (New York, NY: Springer Science ++ Business Media), 15–37. 10.1007/978-1-4614-3661-4-2
- Yeager, D.S. & Dweck, C.S. 2012. Mindsets that Promote Resilience: When Students Believe that Personal Characteristics can be Developed. *Educational Psychologist* Retrieved September 28, 2018 from <https://www.tandfonline.com/loi/hedp20>
- Zapolski, C. B., Garcia, C. A., Jarjoura, G. R., Lau, S. L., & Aalsma, M. C. 2016. Examining the influence of ethnic/racial socialization on aggressive behaviors among juvenile offenders. *Journal of Juvenile Justice*, 5, 65–79.
- Zimmerman & Brenner., 2010. *Resiliency Theory*. Retrieved September 28, 2018 from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3966565>.
- Zimmerman, M & Stevenson, F. 2005. *Adolescent Resilience: A Framework for Understanding Healthy Development in the Face of Risk*. Retrieved from <https://search.proquest.com/pqrl/docview/235233320/2CDAA37938DA4143PQ/1?accountid=34542>
- Zolkoski, S. M., & Bullock, L. M. 2012. Resilience in children and youth: a review. *Child. Youth Serv. Rev.* 34, 2295–2303. doi: 10.1016/j.childyouth.2012.08.009
- Zysberg L., Orenshtein C., Gimmon E., & Robinson R. 2017. Emotional intelligence, personality, stress, and burnout among educators. *Int. J. Stress Manag.* 24 122–136. [10.1037/str0000028](https://doi.org/10.1037/str0000028)
