

An Investigation of a Relationship between Aggression and Wellbeing among Adolescents

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(Received 3 October 2018; Revised 13 October 2018; Accepted 28 October 2018; Available online 3 November 2018)

Abstract - The study investigated the relationship between aggression and wellbeing among adolescents. A sample of 250 adolescents equally divided among males and females aged 16-18 years were taken. Various self-report measures were administered, for example, aggression questionnaire by Buss and Perry (1992), satisfaction with life scale by Diener, Emmons, Larsen, and Griffin (1985), positive affect and negative affect scale by Watson, Clark, and Tellegen (1988), and psychological wellbeing scale by Ryff and Keyes (1995). Means and Standard deviations, *t*-ratios and Correlation Analysis were carried out. Findings indicated significant and inverse relationship between aggression and wellbeing. Significant gender differences emerged in physical aggression where males scored higher as compared to females.

Keywords: Aggression, Adolescents, Wellbeing

I. INTRODUCTION

World Health Organization (2016) has reported that youth violence has taken a stride among 10-29 year olds and peaks during late adolescence and early adulthood. Reviewing the findings of studies on teenage aggression in India, it has been found that aggression as well as intensity of aggression among Indian adolescents has increased over the years leading to severe physical, psychological, communal and economic consequences (Kumar, Bhilwar, Kapoor, Sharma, & Parija, 2016). Aggression is defined as “a behavior with an intention to harm, hurt, or injure others (Bushman & Huesmann, 2010).

A. Forms of Aggression

Aggression can take distinct forms which can range from physical fighting and bullying, emotional abuse, homicides, assaults to dating violence (WHO, 2016). Buss *et al.*, (1992) identified four sub-traits of aggression: physical aggression, verbal aggression, anger, and hostility. Hostility, anger and aggression are related constructs and it is also termed as “anger-hostility-aggression” (Pérez-Nieto, Camunas, Cano-Vindel, Miguel-Tobal, & Iruarrizaga, 2000). Physical Aggression is intended to harm other person physically (such as hitting, kicking, biting, stabbing, shooting etc.). Verbal Aggression is intended to harm another person by using verbal language (such as yelling, screaming, name calling etc.). Verbal Aggression can be direct or indirect (Bushman *et al.*, 2010). Relational Aggression is intended to harm other person’s social network. This type of aggression is also known as Social Aggression. Direct Aggression is directed towards the physically present victim. Indirect

Aggression is intended to harm another person indirectly. Cold Aggression is involves a deliberate plan to harm the target person (as discussed in Warburton & Anderson, 2015). The term violence is often used synonymously with aggression. However, social psychologists have regarded violence as a sub-type of aggression to avoid confusion.

B. Gender Differences

Majority of the studies have indicated the differences in gender in relation to preferred styles of aggression. Findings have indicated that males have consistently been found to be more physically aggressive as compared to women (Buss *et al.*, 1992; Dutt *et al.*, 2013; Sharma & Marimuthu, 2014). Similar results were reported in studies conducted among adolescents (Smith-Khuri *et al.*, 2004). Studies related to gender differences in verbal aggression showed a mixed pattern and small size effects (Buss *et al.*, 1992).

C. Factors Influencing Aggression

World Health Organization Youth Violence Fact Sheet (2016) has indicated various possible risk factors which put youth to practice violence, for example, risk factors within individual (such as destructive behavior/ behavioral disorders, drugs/alcohol abuse, failures in school, family violence etc.), risk factors within close relationships (such as inadequate parental supervision of children, parental bonding, parental depression, antisocial peer groups), risk factors within community (such as living in poverty/ high income, weak implementation of government, education and social laws/ policies).

Psychophysiological studies have indicated that persistent and impulsive aggression is linked with low baseline heart rate, increased autonomic reactivity to stressful stimuli, increased EEG slow wave activity, decreased P300 brain potential response, disruptions in affective regulatory systems i.e. front-cortical and limbic brain regions (Patrick, 2008; Sterzer & Stadler, 2009). Genetic studies have indicated that Monoamine Oxidase A gene (MAOA) polymorphism and 5-Ht serotonin transporter gene are two widely studied genetic markers that predispose one towards aggression and also interact with childhood maltreatment and adversity (Kim-Cohen *et al.*, 2006).

Violent behavior in adolescence is linked with a history of childhood aggression, disruptive behavior patterns, conduct

disorders and juvenile delinquency in early childhood (Laub & Sampson, 1993). Early aggression is linked with continuity in antisocial behavior leading to crime (Tfofi, Farrington, Lösel, & Loeber, 2011). Studies have indicated that child maltreatment in the form of physical abuse, sexual abuse, emotional abuse and neglect of children is linked with the occurrence of antisocial and violent behavior in childhood and adolescence (Smith & Thornberry, 1995; Maxfield & Widom, 1996; Fang & Corso, 2007). Negative personality traits are associated with aggression (Barlett & Anderson, 2012).

Peer pressure plays an important role in adolescent aggression. Adolescent aggressive behavior usually occurs in groups or gangs displaying risky behaviors (Lopez & Emmer, 2002). Negative parent-child relationship may lead to non-compliance behavior. Estévez, Moreno, Jiménez, and Musitu (2013) indicated that lack of protection from adult figures is linked with adolescent aggression. At school, poor relationship of the child with teacher is a risk factor for developing aggression (Valadez, 2008). Evidence has indicated that insecure attachment styles during early years contribute to aggression during adolescence (Bowlby, 1988). Children with parents suffering from depression and alcohol abuse have an increased risk for developing antisocial behavior (Hill & Muka, 1996; Pemberton *et al.*, 2010).

Other established risk factors like low maternal education, poverty, harsh, abusive, or lax parenting have been linked with violence (Hunter, Jain, Sadowski, & Sanhueza, 2000; Blum, Ireland, & Blum, 2003; Simons-Mortons, Hartos, & Haynie, 2004). Psychological conditions like hyperactivity, impulsivity, negative life events, concentration problems, restlessness, risk taking, low self-control, low-self-esteem, low happiness levels, sensation seeking, childhood attention deficit-hyperactivity disorders increase the chances of manifesting aggressive behavior and violence in youth (Krakowski, 2003; Puskar, Bernardo, Hailey, & Hetager Stark, 2008; Moffitt *et al.*, 2011; Bernat, Oakes, Pettingell, & Resnick, 2012; Lee, Gil, Yoo, & Kim, 2012; Penton-Voak, Thomas, Gage, McMurrin, McDonald, & Munafò, 2013). Studies have indicated that depression and academic stress as the strong causes of aggression among adolescents (Kim & Lee, 2008; Jin, Park, & Bae, 2011).

D. Theories related to aggression

Dollard, Doob, Miller, Mowrer, and Sears (1939) proposed frustration-aggression hypothesis. The theory was based on the following assumptions:

1. Aggressive behavior stems from the existence of frustration.
2. Frustration always leads to some form of aggression.

Miller (1941) revised the theory and explained that frustration stimulates number of other aggressive and non-aggressive behaviors like escaping etc. and not only aggression. Research evidence has supported that aggression can be learned through conditioning processes

(positive reinforcement, negative reinforcement, stimulus generalization) (Patterson, Littman, & Bricker, 1967). Classic 'Bobo Doll' experiments conducted by Bandura and associates with children indicated that aggressive behavior was learnt by children by observing an actor hitting the doll in several ways (Bandura, Ross, & Ross, 1963). Exposure to violent pornography has been found to be associated with negative outcomes (Malamuth & Brown, 1994). Huesmann (1982) theorized that "scripts define situations in a way that a person first chooses a script to represent the situation and then assumes a role in the script. Scripts guide behavior in a way that is well-rehearsed and retrieved at some later time (Abelson, 1981; Anderson *et al.*, 2002). For example, if an adolescent has witnessed several instances of aggressive behavior will be likely to have an accessible script that can be generalized across many situations.

A unified model was proposed by Anderson *et al.*, (2002) i.e. general aggression model which has integrated existing major theories of aggression. The model stated that "aggression involves person responding to an aggressive situation. Person and situation variables influence the person's present internal state (cognitions, affects, and physiological arousal) which activate knowledge structures (which include affect) and the amount of arousal. A person may act on impulsively or thoughtfully depending on the appraisal process. The resulting behavior will feedback into the immediate situation and also influence the person's personality" (Anderson *et al.*, 2002; Warburton *et al.*, 2015). Studies have indicated that aggression in childhood and adolescence deteriorates physical and psychological wellbeing (Boynton-Jarrett, Ryan, Berkman, & Wright, 2008; Haynie, Petts, Maimon, & Piquero, 2009; Skapinakis *et al.*, 2011; Swahn, Bossarte, Palmier, Yao, & Dulmen, 2013).

E. Wellbeing

Wellbeing is a multifaceted construct i.e. it is concerned with two distinct yet overlapping paradigms of wellbeing i.e. the hedonic and the eudaimonic viewpoints (Ryan & Deci, 2001). The present investigation has taken both viewpoints i.e. hedonic and eudaimonic wellbeing.

F. The Hedonic Viewpoint

The viewpoint has been expressed by Greek philosophers as bodily pleasures, positive emotional states and enjoyment (Ryan *et al.*, 2001). Many Indian thinkers held the view that pleasure is a desirable feeling which rests on gratification or satisfaction (Prasastapada, 400 CE, Sridhara, 1000 CE, Kesavamisra, 1300 CE, Annambhatta, 1700 CE, to name a few). Similarly, pain has been regarded by many Indian thinkers as an undesirable feeling when one encounters undesirable object or event and feels stuck. Kahneman *et al.*, (1999) defined hedonic psychology as the study of "what makes experiences and life pleasant and unpleasant" (p. 9). Diener (2000) clearly indicated that subjective wellbeing has three components: satisfaction with life (cognitive

part), positive affect and absence of negative affect (affective apart). Positive affect refers to “frequency and intensity of pleasant emotions”. Negative affect refers to “frequency and intensity of unpleasant emotions” (Diener *et al.*, 1999). Life satisfaction has been referred to as “cognitive judgment concerning how satisfied a person is with his life” (Diener *et al.*, 1999). High levels of wellbeing are associated with frequent occurrences of positive experiences and less frequent occurrences of negative experiences (Diener *et al.*, 1999).

G. The Eudaimonic Viewpoint

The eudaimonic concept of well-being has been defined as “living in accordance with one’s true self” by Waterman (1993). The followers of eudaimonic psychology held that true happiness is attained in meaningful life. Ryff and Singer (1998) defined psychological wellbeing “as the striving for perfection which indicates the realization of one’s true potential and not just the attainment of pleasure”. Ryff and Keyes (1995) proposed six essential components of psychological wellbeing i.e. autonomy, environmental mastery, personal growth, positive relations with others, purpose in life and self-acceptance.

The concept of wellbeing in Indian philosophy refers to wellbeing at physical, psychological as well as spiritual levels which is parallel to Western models of wellbeing i.e. hedonic wellbeing and eudaimonic wellbeing (Singh, Junnarkar, & Kaur, 2016). Both Western and Indian perspectives of wellbeing maintain that the umbrella term ‘wellbeing’ is connected with the concept of happiness, mental health, life satisfaction, and actualization of one’s full potential. Researchers in the field of positive psychology in India have tried to relate well-being to traditional concepts such as Sat-chit-ananda (bliss), Koshas (self), Doshas (imbalance of mind, body and soul), Gunas (virtues), Vikaras (vices), Sakti (divine energy) and Anasakti (detachment). These concepts have been found in various religious texts and ancient texts on Ayurveda (Singh *et al.*, 2016). Some of the newer models of wellbeing take into account the combined view of hedonic and psychological wellbeing. For example, Flourishing model (Keyes, 2002; 2005), Thriving model (Diener *et al.*, 2010), PERMA model (Seligman, 2011).

H. The Current Study

While reviewing research papers, articles and databases like PubMed and Google Scholar, it has been found that although reporting of adolescent aggression is increasing but limited research evidence has been published studying the relationship between aggression, subjective wellbeing and psychological wellbeing among adolescents in India. Considering the above, study was conducted. Adolescence is marked by significant and rapid developmental changes which have been linked with increased stress, low levels of happiness and increased turbulent emotional experiences (Silvers *et al.*, 2012).

II. METHODS

A. Participants

Data were drawn by obtaining a list of Government Model Senior Secondary Schools of Chandigarh. The total sample size taken was 250 adolescents aged 16-18 years which was equally divided among males and females. Informed consent was obtained from the subjects before they were enrolled in the study. All the interested subjects were administered self-reports measures in a booklet form in a group setting. Confidentiality was maintained. Proper standardized instructions were given to the subjects as specified in the manuals.

B. Hypotheses

1. Aggression will be negatively related to subjective wellbeing.
2. Aggression will be negatively related to psychological wellbeing.
3. Gender differences will be expected in Aggression.

III. MEASURES

A. Aggression

Aggression was measured using aggression questionnaire (Buss *et al.*, 1992). It consists of 29 items. It has 4 subscales measuring Physical Aggression, Verbal Aggression, Anger and Hostility. The responses are given using a 5-point Likert type scale. The questionnaire demonstrates good psychometric properties with adolescent sample (Reyna, Lello, Sanchez, & Brussino, 2011). In India, the scale has been used by various researchers like Shaheen *et al.*, (2014), Singh (2016).

B. The Satisfaction with Life Scale

Cognitive component of subjective wellbeing was assessed using the scale devised by Diener *et al.*, (1985). The scale consists of 5-items. The scale has favorable psychometric properties including high internal consistency and high temporal stability. It is suitable to be used with range of age-groups (Diener *et al.*, 1985). The scale has been used with various age groups in Indian settings (Yadav, 2010).

C. Positive Affect and Negative Affect Scale

Affective component of wellbeing was assessed using positive affect and negative affect scale. It is a short measure devised by Watson *et al.*, (1988). It has 20 items. There are 10 items for positive affect and 10 items for negative affect. The responses are given by using a 5-point Likert-type rating scale. The scale has good reliability and validity. The scale has been used with adolescents in Western and Indian settings (Yadav, 2010; Moreira *et al.*, 2014).

D. Psychological Wellbeing Scale

The scale has been developed by Ryff *et al.*, (1995) to measure six dimensions of psychological wellbeing. The six dimensions measured by the scale are Autonomy, Environmental Mastery, Personal Growth, Positive Relations with Others, Purpose in Life, and Self-Acceptance.

A total of 6 measurement scales have been developed to assess psychological wellbeing. Each scale has been different in length of items. For the present study, 84-item scale has been used. There are 14 items for each dimension. The responses are given using a six-point format. The scale

bears good psychometric properties. The scale has been used with adolescents in Indian setting (Yadav, 2010).

E. Statistical Analyses

Statistical analyses were carried out by using Statistical Product and Service Solutions (SPSS) Package. Means and Standard Deviations, *t* ratios and Correlation Analysis were carried out.

IV. RESULTS

Mean, standard deviation, and *t*-ratios depicting gender differences are reported in Table I. Correlation coefficients are reported in Table II and Table III.

TABLE I MEANS AND STANDARD DEVIATIONS

Variables	Males (n = 125)	Females (n = 125)	<i>t</i>	<i>p</i>
	Mean (SD)	Mean (SD)		
P-AGG	M = 21.81 (SD = 6.82)	M = 17.86 (SD = 6.72)	4.61	0.01**
V-AGG	M = 14.84 (SD = 4.59)	M = 14.92 (SD = 4.35)	0.14	0.89
ANG	M = 19.80 (SD = 6.96)	M = 20.39 (SD = 6.85)	0.68	0.50
HOS	M = 20.83 (SD = 7.03)	M = 22.22 (SD = 8.18)	1.43	0.15
AGG	M = 77.28 (SD = 23.54)	M = 75.39 (SD = 22.41)	0.65	0.52

Note: P-AGG = Physical Aggression, V-AGG = Verbal Aggression, ANG = Anger, HOS = Hostility, AGG = Overall Aggression

A. Significant Gender Differences in Aggression

Significant gender difference was found in physical aggression sub-trait of aggression. Males (*M* = 21.81, *SD* =

6.82) scored higher than females (*M* = 17.86, *SD* = 6.72) in physical aggression, *t* (248) = 4.61, *p* ≤ 0.01.

TABLE II PEARSON PRODUCT MOMENT CORRELATIONS OF AGGRESSION AND SUBJECTIVE WELLBEING (N = 250)

Variables	PA	NA	SWL	SWB	P-AGG	V-AGG	ANG	HOS	AGG
PA	1	-.67**	.81**	.92**	-.64**	-.69**	-.75**	-.77**	-.81**
NA		1	-.70**	-.88**	.55**	.65**	.70**	.72**	.75**
SWL			1	.88**	-.63**	-.69**	-.801**	-.78**	-.83**
SWB				1	-.67**	-.75**	-.82**	-.83**	-.88**
P-AGG					1	.64**	.64**	.62**	.83**
V-AGG						1	.76**	.74**	.86**
ANG							1	.81**	.91**
HOS								1	.91**
AGG									1

Note: PA = Positive Affect, NA = Negative Affect, SWL = Satisfaction with Life, SWB = Subjective Wellbeing, P-AGG = Physical Aggression, V-AGG = Verbal Aggression, ANG = Anger, HOS = Hostility, AGG = Overall Aggression

B. Relationship between Aggression and Subjective Wellbeing among Adolescents

A perusal of inter-correlation matrix (Table II, N=250) revealed significant negative correlations between aggression and subjective wellbeing. Significant negative correlation was found between physical aggression and subjective wellbeing (*r* = -0.67, *p* ≤ 0.01), verbal aggression and subjective wellbeing (*r* = -0.75, *p* ≤ 0.01), anger and subjective wellbeing (*r* = -0.82, *p* ≤ 0.01), hostility and

subjective wellbeing (*r* = -0.84, *p* ≤ 0.01), overall aggression and subjective wellbeing (*r* = -0.88, *p* ≤ 0.01).

C. Relationship between Aggression and Psychological Wellbeing among Adolescents

A perusal of inter-correlation matrix (Table III, N=250) revealed significant negative correlations between aggression and psychological wellbeing.

Significant negative correlation was found between physical aggression and psychological wellbeing ($r = -0.64, p \leq 0.01$), verbal aggression and psychological wellbeing ($r = -0.74, p \leq 0.01$), anger and psychological wellbeing ($r = -0.83, p \leq 0.01$), hostility and psychological wellbeing ($r = -0.79, p \leq 0.01$), overall aggression and psychological wellbeing ($r = -0.85, p \leq 0.01$).

V. DISCUSSION AND CONCLUSION

We investigated the relationship between aggression and wellbeing among adolescents. Males scored higher in physical aggression as compared to females. Present finding has been supported by existing findings. Evidence published on aggressive behavior among children and adolescents in India, although limited, has indicated that physical aggression is a pressing issue among males (Dutt *et al.*, 2013; Sharma & Marimuthu, 2014). Media has reported increase in destructive behaviors in India like slapping, hitting, eve-teasing, rape, shooting, truancy, road rage, use of weapons etc. more among boys.

A possible explanation behind the prevalence of physical aggression among adolescent boys comes from Bjorkqvist, Osterman, and Kaukiainen (1992) study in which they claimed that developmentally direct aggression strategies develop earlier as compared to indirect aggression strategies among boys. Indirect aggression strategies are dependent on certain level of maturation and social skills which boys develop later. Another reason could be that in Indian culture, girls suppress their aggression and are expected to be less overt. Hence, they resort to less physical aggression strategies or do not exhibit anger in overt way much often (Bjorkqvist, Lagerspetz, & Kauhiainen, 1992; Murlidhar & Shastri, 2016). Correlation analysis revealed significant and inverse relationship between aggression and subjective wellbeing.

Significant and inverse relationship was found between aggression and psychological wellbeing. Existing evidence has clearly indicated the repercussions of aggressive behavior on physical and psychological wellbeing outcomes. For example, Miller, Smith, Turner, Guijarro, and Halley (1996) conducted a meta-analytic study on hostility and physical health. The results suggested that hostility is an independent risk factor for coronary heart disease.

Musante and Trieber (2000) indicated that anger expression and anger suppression related to unhealthy lifestyle like lack of physical activity and high consumption of alcohol, cigarettes and caffeine among adolescents. Diong *et al.*, (2005) examined the relationships between anger, stress, perceived social support, coping strategies and health.

Results indicated that high dispositional anger was found to be directly related to high levels of stress and low levels of perceived social support. It was indirectly related to greater use of avoidance coping. It was directly and indirectly related to low psychological wellbeing and high

psychological distress. Mitrofan and Ciuluvică (2011) examined the relationship between difficulties with emotion regulation, aggression, and life satisfaction among high school students and undergraduates. The results indicated significant and negative correlation between anger, hostility and life satisfaction. Kaplan (2017) study indicated that subjective wellbeing is significantly and negatively correlated with hostility and overall emotional problems. According to Broaden and Build model, the purpose and influence of negative emotions such as anger is that they narrow one's thought-action repertoires which in turn produce negative effects on one's physical and mental health (Fredrickson, 2000). Present study and review of literature has suggested that aggression drains one's adaptive coping and thus, debilitates one's subjective and psychological wellbeing. It has a shadowing effect on one's effective emotion regulation strategies to deal with distressing situations.

Peace building workshops with a special emphasis on psychoeducation, emotional self-management, cognitive restructuring skills, interpersonal skills etc. should be conducted in school settings in order to sensitize school-going children and building a sustainable future for them (McGuire, 2008). Social psychologists have begun to focus on human strengths as protective factors for reducing youth violence (Borum, Bartel, & Forth, 2005).

Evidence has suggested that positive psychology based interventions are effective in enhancing subjective and psychological wellbeing and reducing negative symptoms (Sin & Lyubomirsky, 2009; Tweed, Bhatt, Dooley, Spindler, & Douglas, 2011).

Employing positive psychology based tools in therapeutic settings may have a significant effect on reducing aggression and inhibiting violence among youth. Given the rise of aggression among children and adolescents, early-intervention programs based on enhancing social and emotional skills can be helpful in preventing aggression. Parents can be involved in certain sessions where they can be imparted short training on helping their adolescents.

A. Limitations

The study is limited in the form of a research design, sample chosen and measures undertaken. The current study has limited itself to study relationship between aggression and wellbeing. It is difficult to draw causal inferences i.e. whether aggression is leading to low wellbeing or vice-versa. Sample is not nationally representative. We limited our data collection to one city in North India. Future research will focus on a much bigger representative sample and cross-national comparative research. We relied on self-report measures for data collection.

Future research will benefit from using different approaches in addition to self-report measures such as observation method, parent-teacher reports and observations,

experimental designs, intervention-based designs etc. Also, linking positive psychology and psychology of aggression may bring out some strength variables largely ignored in existing research literature. Such researches will help counsellors and psychotherapists in incorporating strength-based interventions in anger management programs.

B. Conflicts of Interest

There is no conflict of interest.

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