

FAMILY ENVIRONMENT AND PERSONALITY AS PREDICTORS OF AGGRESSION

Rohtash Singh

ABSTRACT

Personal and social factors as well as their cumulative effect may contribute to aggression. The present study examined the relationship of personality and family environment with aggression. Sample for the study consisted of 250 youth between age 17 to 22 years (M = 18.5) drawn from various districts of Haryana. The objectives of the study were (a) to explore the relationship of aggression with personality and family environment (b) to determine the role of personality and family environment in aggression. The participants were assessed with Buss-Perry Aggression Questionnaire, NEO Five –Factor Inventory (NEO-FFI) and Family Environment Scale. Results showed that aggression was found to be positively associated with neuroticism, and conflict dimension of family environment and negatively associated with agreeableness and conscientiousness dimensions of personality. Stepwise multiple regression analysis reveals agreeableness, conflict, active-recreational orientation and neuroticism are the potent predictors of aggression among youth.

Keywords: agreeableness, conscientiousness, neuroticism, conflict, active-recreational orientation

INTRODUCTION

Human aggression is explained in many ways by psychologists, with any given explanation depending on the particular orientation of the individual. Even within the subspecialty of social psychology, variation in viewpoints can be found, with some stressing cognitive factors, others pinpointing emotional and affective determinants, and still others dealing with aggression as a part of broader social interaction system. Aggression carries a negative connotation even in modern society. Aggression is a negative emotion shown by the individual in the stressful situations. On one matter, however, virtually all social psychologists agree: Aggression is a response to specific conditions in the environment. Baron and Richardson (1994) suggests “Aggression is any form of behaviour directed toward the goal of harming or injuring another living being who is motivated to avoid such treatment”. World Health Organization (2002) defines, “Aggression, such as kicking, fighting and biting is a major concern for modern societies as the physical, emotional, cognitive and societal consequences of violent acts are serious, far reaching and long term.”

Various forms of aggression have been identified in the literature, including direct, physical, verbal, material, relational, indirect, and social aggression. Debates are ongoing regarding the labeling and conceptual distinctions among the various forms. The literature suggests that at most of these dimensions overlap considerably but at least two higher-order forms can be meaningfully distinguished, which can be chosen as overt and relational aggression. Overt aggression is generally defined as verbal and physical behaviours that are directed at individuals with the intent to harm them (e.g., pushing, kicking, hitting, threatening, insulting, etc.)- a more direct and “in your face” form of aggression (Buss & Perry, 1992) Relational aggression, on the other hand, is generally defined as acts that are intended to significantly damage another child's friendships or feeling of inclusion in the peer group (e.g., purposefully withdrawing friendship or group acceptance from a child, ostracism, spreading, rumors, gossiping etc.)- A more indirect and relationship-based form of aggression (Cairns, Cairns, Neckerman, Ferguson & Garipey, 1989).

Although humans are similar to non-human animals in some aspects of aggression, they differ from most of these animals in the complexity of their aggression because of factors such as culture, morals and social situations. A wide variety of studies have been done on these situations. Empirical cross- cultural research has found differences in the level of aggression between cultures. Male-male, male-female and female-female encounters should all be clearly distinguished from one another. Same sex encounters are more frequent than inter-sex encounters and this could affect the level of aggression present (Bjorkqvist, 1994). Patterns of aggression can be switched, with males using female patterns of aggression or female using male patterns, by manipulating either the fruitless or transformer genes in the brain. It is expressed in both sexes, is correlated with levels of aggression among male mice and increases dramatically in females after parturition and during lactation, corresponding to the onset of maternal aggression (Potegal, Ferris, Herbert, Meyerhoff, and Skaredoff, 1996). Studies by Iqbal, Ahmad, Shukla, & Akhtar (1993) suggest Indian women to score higher than men on intra- aggression (i.e., repressed aggression, and self- blame). These studies bring to mind Western studies of covert female aggressive tendencies, which will not necessarily show at the overt, behavioural level. Sex differences on aggression appear to be greater in India than in the West which reflects differences in cultural norms and status between the sexes (Kanekar, Dhir, Fransco, Sindhakar, Vaz & Nazareth 1993). Perhaps women in India are oppressed to such an extent that they have to suppress their aggression more than Western women, or perhaps they develop even subtler forms of aggression than indirect aggression as we know in the West.

Research on aggressive behaviour has examined the influences of a variety of specific personality variables (e.g., trait aggressiveness, trait anger, Type A personality) without reference to these major dimensions. However, a few researchers (Gleason, Jensen-Campbell, & Richardson, 2004; Graziano, Jensen-Campbell, Hair, 1996; Suls, Martin, & David, 1998) have sought to understand the relation between aggression and dimensions of personality using the five-factor model. The Neuroticism and Agreeableness dimensions appear to be particularly associated with aggression (Costa, McCrae, & Dembroski, 1989; Gleason et al. 2004; Graziano et al. 1996; Miller, Lynam, & Leukefeld, 2003; Suls et al. 1998). In a recent study Type A behaviour pattern found to be associated with aggression (Singh, 2010).

There is strong emerging evidence for the capacity of functional and well-adjusted families to successfully moderate various developmental threats and reduce the chances of maladjustment in children at risk (Masten & Shaffer, 2006). Andreas and Watson (2009) reported that aggressive beliefs were associated with greater aggression at youngest age as well as with increased aggression over time and family environment moderated this association. Aggression can be reduced in children with high aggressive beliefs if they experienced better than average family environment, which included less family conflict and more family cohesion. Parental influences may not be felt in a specific situation, but the attitudes and ideas expressed day after day inevitably leave their mark. Nizamuddin and Banu (1995); Salmivalli and Helteernvuori (2007); Valles and Knutsen (2008); Yu and Gamble (2008) reported various personal and environmental factors which are associated with aggression. Anderson and Bushman's (2002) model includes person factors as predictors of aggression. They suggested that the development of aggression related knowledge structures can shape an individual's personality and thus, influence the likelihood that the individual will engage in aggressive behaviour. Keeping in view this, the present study is planned in the direction with the objectives (a) to explore the relationship of aggression with personality and family environment (b) to determine the role of personality and family environment in aggression.

METHOD

Sample

The present study was conducted on a sample of 250 (145 male & 105 female) youths selected randomly from various districts of Haryana. The age of selected subjects was between 17 and 22 years (mean = 18.5). The sample consists

Family Environment and Personality

of participants from all walks of society from low to middle socioeconomic status. Only those participants were included in sample who had given consent to participate.

Psychological Measures:

a) Buss – Perry Aggression Questionnaire: Buss – Perry Aggression Questionnaire (BPAQ) was developed by Buss and Perry (1992). It contains 29 items and a response format 5 point Likert Scale, which ranges from “disagree” to “strongly agree”. It consists of four subscales: physical aggression, verbal aggression, hostility and anger. Though the scale measures four components of aggression but it also provides a single score for whole scale. There is no time limit for the test to complete yet it generally takes about 12 minutes. The test-retest reliability coefficient of .80 was obtained for total scale by authors. BPAQ is brief, simple, easy to complete, and its application in research settings as a screening tool for aggression is well documented (Andrew & Colin, 2010; Festus; Tajudeen & Owoidoho, 2011)). In the present study composite aggression score is taken for analysis.

b) Family Environment Scale: Family environment scale (FES) is developed by Moos and Moos (1986). It contains 90 items with 'Yes' or 'No' response format. The scale assesses three underlying sets of dimensions: relationship dimensions, personal growth (or goal orientation) dimensions, and system maintenance dimensions. The relationship and system maintenance dimensions primarily reflect internal family functioning, whereas the personal growth dimensions primarily reflect the linkages between the family and the larger social context. The test-retest reliability (2-months interval) for all subscales in an acceptable range, vary from a low of .68 for independence to a high of .86 for cohesion. As for as validity concerned the authors established construct and discriminate validity for FES indices.

c) NEO - Five Factor Inventory: The NEO - Five Factor Inventory (NEO- FFI) was developed as a short form of NEO-PI (McCrae and Costa, 1989). It consists 60 items which measures five major dimensions of Personality. The NEO- FFI is well analyzed scale for the Neuroticism (N), Extraversion (E), and Openness (O), Agreeableness (A) and Conscientiousness (C). The coefficient alphas (data from spouse ratings) for the five factors were .90, .78, .76, .86 and .90 for the N, E, O, A and C scales respectively. The correlations between Form R NEO-FFI scales and self reports on the full domain scale ranged from .24 to .67, suggesting cross observer validity for these observer rating scales.

PROCEDURE

The subjects were contacted personally in their respective institutions for data collection. After receiving their voluntary willingness, the subjects were tested in small group of ten to fifteen subjects on the tests. They received detailed instructions about how to perform on these tests. The tests were administered following the instructions specified in the respective test manual. The general testing conditions were satisfactory and the procedure was uniform all through. The tests were scored as per the procedure described in respective test manual.

RESULTS AND DISCUSSION

Since, the difference between male and female groups is not found significant on aggression. Hence data is pooled together to find out the relationship among study variables. A careful inspection of Table – 1 reveals that aggression correlates positively with neuroticism ($r = .24, p < .001$). The significant and positive correlation between these measures suggests that subjects scoring high on neuroticism tend to show high aggressive behaviour. Neurotic individuals are ineffective in their attempts to cope with stress and prone to engage in aggressive behaviour. The obtained relationship between these measures is similar as found in some earlier research (Costa, McCrae, & Dembroski, 1989; Gleason et al., 2004; Miller et al., 2003).

Table- 1 Correlation Coefficient of Aggression with Personality and Family Environment Measures

Personality Measures	Aggression	Family Environment Measures	Aggression
Neuroticism	.24**	Cohesion	-.13*
Extraversion	-.01	Expressiveness	-.05
Openness	-.03	Conflict	.21**
Agreeableness	-.26**	Independence	.01
Conscientiousness	-.16*	Achievement Orientation	-.01
		Intellectual-Cultural Orientation	-.07
		Active-Recreational Orientation	.11
		Moral – Religious Emphasis	-.11
		Organization	-.08
		Control	-.01

* $p < .05$, ** $p < .01$

Family Environment and Personality

Agreeableness and conscientiousness dimensions of personality correlate negatively with aggression. Agreeableness has yielded a negative correlation coefficient of $-.26$ with aggression; it is significant at $.01$ probability level. It suggests that subjects high on trust, straightforwardness, altruism, compliance, modesty, and tender-mindedness tend to show low level of aggression. But the opposite pole of agreeableness is antagonism. According to Costa et al. (1989), antagonistic people tend to be hostile and irritable (Gleason et al., 2004). In the present data, conscientiousness correlate negatively with aggression to the degree of $-.16$ ($p < .05$), indicating thereby the subjects scoring high on conscientiousness tend to be low on aggression too. It shows that subjects having control on their impulses and are self disciplined express less aggression. The negative relationship between conscientiousness and aggression is also reported by Pursell, Laursen, Rubin, Booth-LaForce and Rose-Krasnor (2008).

Aggression further correlates positively with conflict ($r = .21$, $p < .01$), a measure of family environment. It suggests that higher the conflict in family higher the risk to engage in aggressive behaviour. The finding points to the fact that people high on conflict tend to have higher tendency for aggression. Aggression found to be correlated negatively with cohesion ($r = -.13$, $p < .05$). It may be interpreted as subjects high on cohesion have tendency to be less aggressive. Lack of cooperation among family members may lead to aggressive behaviour whereas better family relations decrease the level of aggression. This observation is in the direction of some earlier researches (Esfandyari, Baharudin & Nowzari, 2009; Hennig, Reuter, Netter, Burk, & Landt, 2005).

In order to ascertain the extent to which weighted combination of personality and family environment account individual differences in aggression, stepwise multiple regression was also worked out. The stepwise analysis was preferred over standard one to find a subset of those independent variables which are useful in predicting the dependent variable, by eliminating those which do not contribute additional to that already predicted by the variables in the equation. The stepwise regression was conducted with parameter, p of F-to-enter is $.05$ and p of F-to-remove is $.10$.

Table - 2 Summary of Stepwise Regression Analysis, Dependent Variable:

Variables	R	R2	df	f
Agreeableness	.259	.067	1/248	17.88**
Conflict	.303	.092	2/247	12.52**
Active-Recreational Orientation	.334	.112	3/246	10.30**
Neuroticism	.358	.128	4/245	9.03**

Aggression

** $p < .01$

Table-2 shows the results of stepwise regression analysis while aggression was taken as dependent variable. Results indicated that four significant predictors of aggression emerged with an overall multiple R of .358 which is significant at .001 probability level. Agreeableness being most potent predictor of aggression, it entered the equation at step one. The multiple R for this variable equals to .259, R^2 being .067, agreeableness accounts for approximately 7% of the variance. The F being 17.88, ($df = 1/248$) is highly significant ($p < .001$). It indicates that agreeableness is a strong predictor of aggression in the selected sample. Family environment dimension conflict appears to be another potent predictor which took entry at step two. Multiple R increased to .303 with the entry of conflict in the equation after agreeableness. The F being 12.52 ($df = 2/247$) is significant at .001 probability level. R^2 being .092, agreeableness and conflict jointly account for approximately 9% of the variance in aggression. Further, active-recreational orientation, measure of family environment took entry at step third; the multiple R increased to .334 and R^2 to .112, indicating that these three variables accounted 11% variance in aggression. The F being 10.30 ($df = 3/246$) is significant at .001 probability level. The last variable that took entry into the regression equation is neuroticism. With the entry of this variable the multiple R increased to .358, R^2 being .128, indicating that these four variables accounted 13% variance in aggression. The F ratio at this step equals to 9.03, the degrees of freedom being 4/245, it is significant at .001 probability level. The personality predictors of the present study are consistent with earlier work of Sharp and Desai (2004).

The results of stepwise regression analysis revealed that the linear combination of agreeableness, conflict, active-recreational orientation and neuroticism account significant proportion of variance (i.e. 12.8%) in aggression among youth. The selected personality and family environmental dimensions are useful marker variables of aggressive behaviour; more research needs to be conducted to establish the role of these variables alongwith other variables such as gender, age and ethno culture groups on aggression.

REFERENCES

- Andreas, J. B. & Watson, M. W. (2009). Moderating effects of family environment on the association between children's aggressive beliefs and their aggression tranjectories from childhood to adolescence. *Development and Psychopathology*, 21, 189–205.

Family Environment and Personality

- Andrew, M. & Colin, M. (2010) "A contemporary review of the alcohol/aggression relationship and the Buss-Perry Aggression Questionnaire for use in an alcohol dependent population", *Journal of Aggression, Conflict and Peace Research*, 2, 45 – 56.
- Anderson, C. A., & Bushman, B. J. (2002). Human aggression. *Annual Review of Psychology*, 53, 27–51.
- Baron, R.A. & Richardson, D. (1994). *Human Aggression*. New York: Plenum.
- Bjorkqvist, K. (1994). Sex differences in physical verbal and indirect aggression: a review of recent research. *Sex Roles: Journal of Research*, available on line <http://findarticales.com>.
- Buss, A. H., & Perry, M. (1992). The Aggression Questionnaire. *Journal of Personality and social psychology*, 63, 452-459.
- Cairns, R.B., Cairns, B.D., Neckerman, H.J., Fergusen, L.L., and Gariepy, J.L. (1989). Growth and aggression: Children to early adolescence. *Developmental Psychology*, 25, 320-330.
- Costa, P. T., McCrae, R. R., & Dombroski, T. M. (1989). Agreeableness versus antagonism: Explication of a potential risk factor for CHD. In A. W. Siegman & T. M. Dombroski (Eds.), *In search of coronary prone behavior* (pp. 41–63). Hillsdale, NJ: Erlbaum.
- Costa, P.T. & McCrae, R.R. (1992). *Professional Manual: NEO-Five Factor Inventory*. Odessa, Florida: Psychological Assessment Resources, Inc.
- Esfandyari, B., Baharudin, R. & Nowzari, L. (2009). The relationship between inter-parental conflicts and extranormalizing behaviour problems among adolescents. *European Journal of Social Sciences*, 12, 117 – 122.
- Festus, A.; Tajudeen, A. & Owoidoho, U. (2011). A comparative study of aggression amongst Nigerian University students in Niger Delta region. *Psychology, Health and Medicine*, 16, 86 - 93.
- Gleason, K. A., Jensen-Campbell, L. A., & Richardson, D. S. (2004). Agreeableness as a predictor of aggression in adolescence. *Aggressive Behavior*, 30, 43–61.
- Graziano, W. G., Jensen-Campbell, L. A., & Hair, E. C. (1996). Perceiving interpersonal conflict and reacting to it: The case for Agreeableness. *Journal of Personality and Social Psychology*, 70, 820–835.
- Hennig, J., Reuter, M., Netter, P., Burk, C. & Landt, O. (2005). Two types of aggression are differently related to Serotonergic and activity and the A779C TPH Polymorphism. *Behavioral Neuroscience*, 119, 16 – 25.
- Iqbal, N., Ahmad, H. Shukla, S. R. & Akhtar, A. (1993). A study of family system in relation to anger among male and female students. *Indian Journal of Clinical Psychology*, 20, 73 – 77.

- Kanekar, S., Dhir, V. L., Fransco, B., Sindhakar, A. R., Vaz, L., Nazareth, A. M. (1993). Causality, blame and punishment. *Irish Journal of Psychology*, 14, 596–604.
- Masten, A. S., & Shaffer, A. (2006). How families matter in child development: Reflections from research on risk and resilience. In A. Clarke-Stewart & J. Dunn (Eds.), *Families count: Effects on child and adolescent development* (pp. 5–25). New York: Cambridge University Press.
- Miller, J. D., Lynam, D., & Leukefeld, C. (2003). Examining antisocial behavior through the five-factor model of personality. *Aggressive Behavior*, 29, 497–514.
- Moos, R., & Moos, B. (1986). *Family Environment Scale Manual* (2nd ed) Palo Alto, CA Consulting psychologists press.
- Nizamuddin, S. and Banu, K. S. (1995). Child rearing practices by parents of aggressive and non-aggressive pre-school children. *Indian Journal of Applied Psychology* 32, 20-24.
- Potegal, M., Ferris, C.F., Herbert, M., Meyerhoff, J., And Skaredoff, L. (1996). Attack priming in female Syrian golden hamsters is associated with a c-fos-coupled process with in the cortimedial Amygdala. *Neuroscience*, 75, 869-880.
- Pursell, G. R., Laursen, B., Rubin, K. H., Booth-LaForce, C. and Rose-Krasnor, L. (2008). Gender differences in patterns of association between pro-social behaviour, personality and externalizing problems. *Journal of Research in Personality*, 42, 472–481.
- Singh, R. (2010). Aggression in relation to Type A and Type B behavioural patterns. *Indian Journal of Psychology and Mental Health*, 4, 44–50.
- Salmivalli, C. and Helteenvuori, T. (2007). Reactive but not proactive aggression predicts victimization among boys. *Journal of Aggressive Behaviour*, 33, 1-9.
- Sharp, J. P. & Desai, S. (2001). The revised NEO Personality Inventory and the MMPI-2 psychopathology five in the prediction of aggression. *Personality and Individual Differences*, 31, 505–518.
- Suls, J., Martin, R., & David, J. P. (1998). Person-environment fit and its limits: Agreeableness, neuroticism, and emotional reactivity to interpersonal conflict. *Personality and Social Psychology Bulletin*, 24, 88–98.
- Valles, N-L., & Knutson, J. F. (2008) Contingent Responses of Mothers and Peers to Indirect and Direct Aggression in Preschool and School-Aged Children. *Aggressive Behavior*, 34, 497-510.
- World Health Organization (2002). *World report on violence and health*. Geneva: World Health Organization.

Yu, Jeong Jin; Gamble, Wendy C. (2008). Familial Correlates of Overt and Relational Aggression between Young Adolescent Siblings. *Journal of Youth and Adolescence*, 37, 655-673.

★★★★

Received = 20 August, 2011

Corrected = 23 September, 2011

Corrected = 07 September, 2011

Accepted = 06 October, 2011

Assistant Professor, Department of Psychology, Kurukshetra University, Kurukshetra.