Exploring Dimensions of Deviant Behaviour in Adolescent Boys

***Shahnila Mushtaq and Rukhsana Kausar, PhD**
Institute of Applied Psychology, University of the Punjab, Lahore

The present study explored the dimensions of deviant behaviour in adolescent boys through an indigenous developed deviant behaviour scale, based on the Diagnostic and Statistical Manual's (DSM-5; American Psychiatric Association, 2013) classification of behavioural problems. The data was collected from 612 adolescents of grade 9th to 12th, of age range 13-19 years (*M*= 16, *SD*= 1.40) from different government schools and colleges in Lahore. The list of the schools and colleges was taken from District Education Officer (DEO) of city Lahore, Pakistan. A Self constructed Deviant Behaviour Scale (Mushtaq & Kausar, 2012) comprising 76 items was used. Data was analyzed by using Principal component analysis and reliability analysis to examine the psychometric properties of the scale. The analysis identified three factors of deviant behaviour scale (α=.87) naming conduct disorder (CD; α=.96), intermittent explosive disorder (IED; α=.95) and oppositional defiant disorder (ODD; α=.93). The results were compared and discussed in accordance to the Pakistani culture and adolescents behavioural patterns.

Keywords. Deviant behaviour, conduct disorder, intermittent explosive disorder, opposition defiant disorder, adolescents

Deviance is an umbrella term which includes abnormal, unexpected, unusual, non-standard or out of the ordinary behavior (Vadera, Pratt, & Mishra, 2013). It also refers to behavior that separates considerably from norms set for people in social statuses in their respective societies, which violates institutionalized, legitimate, shared, and recognized expectation within a social system (Clinard & Meier, 2011, 2015; Hagan, 2010; Steffgen, 2009). Some of the behaviours are considered unhealthy, or at least socially prohibited, such as reckless driving, smoking, excessive drinking, drug abuse, disobeying rules and regulations and even cheating on assignment (Rodgers & Bard, 2003).

There are multiple causes of deviant behaviour in boys as compared to girls, supported by the research too, including biological (Loke, & Mak,

Correspondence concerning this article should be addressed to Shahnila Tariq, Lecturer, Institute of Applied Psychology, University of the Punjab, Lahore-Pakistan. Email: shahnilatcom@gmail.com
Rukhsana Kausar, PhD, currently working as Dean School of Social Sciences & Humanities, Chairperson Department of Psychology, University of Management and Technology, Lahore-Pakistan. Email: rukhsana.saddul@gmail.com

2013; Luthar & Barkin, 2012; Paus, 2005), sociological (Berns, 2012; Carter, 2010; Evans, & Kim, 2013; Heinzen, Koehler, Smeets, Hoffer, & Huchzermeier, 2011; Parke & Buriel, 2008; Rocheleau & Chavez, 2015) and psychological such as personality (Benning et al., 2003), psychopathology (Cooke, Michie, Hart, & Clark, 2004; Williams et al., 2009) etc. (Antonaccio & Tittle, 2007; Brown, Kasser, Ryan, Linley, & Orzech, 2009; Cherry, 2010; Crossman, 2013; Racz, McMahon, & Luthar, 2011; Simons et al., 2007; Smallbone, 2006). Demographic variables, such as education of the parents (Battin-Pearson, et al., 2000), monthly income of the parents (Brody et al., 2001), number of friends (Adray, 2008; Brody et al., 2001), deviant peers (Claes, 2005; Hobbs, 2006), substance use (Belendiuk, Molina & Donovan, 2010) and family, such as parenting (Chung & Steinberg, 2006), bonding (Claes, 2005) etc. (Loeber, 1990; Molina, Donovan, & Belendiuk, 2010; Prinstein, Boergers, & Spirito, 2001) can also be considered as causes of deviant behaviours.

Deviance is more evident in adolescence because it is a transitional stage of bodily and intellectual human development generally occurring between 10 to 20 years (Kieling et al., 2011; WHO, 2011) or puberty and legal adulthood but largely characterized as beginning and ending with the teenage phase. Puberty has been heavily associated with teenagers and the onset of adolescent growth (Choudhury, Blakemore, & Charman, 2006).

Focusing on the transition in the adolescents' behaviour, Cervone and Pervin (2015) discussed multiple theories of deviant behavior such as psychodynamic theory which emphasizes the early childhood experiences and unmet desire (Freud, 1959), social development theory about developmental stages (Erikson, 1956), social learning theory about role modeling learned through imitation from society (Bandura, 1977), cognitive and moral development theory based on formation of schema and thinking patterns about right and wrong, good and bad (Gilligan, 1982; Kohlberg, 1984; Piaget, 1983), strain theories about the social stressors (Cohen, 1955; Merton, 1938; Messner& Rosenfeld, 1994), theory of differential association which guides to make different types of associations and ability to differentiate between them, labeling theory on self-fulfilling prophecy (Tannenbaum & Becker, 1963), and problem behaviour theory dealing with the behaviour which disturbs the functioning of the society (Cervone & Pervin, 2015; Smetana, & Villalobos, 2009).

There are pre-existing scales to study deviant behavior but they are very old and they focus less on the delinquent and criminal behaviour (Elliott, Huizinga, & Ageton, 1985; Nye, Short, & Olson, 1958). Deviance in Pakistani adolescents is increasing day by day, specifically boys have

been reported to be more prone to antisocial behaviors than girls (McEvoy, & Welker, 2000; Moffitt, & Caspi, 2001). Therefore a scale was required to identify and measure such behaviour in Pakistani context.

Objective

Keeping in view above mentioned theories and their connection with the deviant behaviour, this study was planned to develop an indigenous scale to assess deviant behaviour in adolescents in Pakistani society.

Method

Sample

Cross sectional strategy was adopted to collect data on deviant behaviour scale from (*N*=612) male adolescents only. The age range was from 13 to 19 years (*M*=16, *SD*=1.4) and were between 9th to 12th class. Stratified random sampling technique was used to collect data. The list of schools and colleges was taken from the District Education Officer (DEO) secretariat and from each administrative division of Lahore; at least two schools and colleges were selected from each division. Furthermore, from each school and college, almost 40 students were drawn for participation, who were included in the above given age range and grade in the research.

Table 1
Demographic Characteristics of Adolescent Boys (N=612)

Variable	*f*	*%*	*M*	*SD*
Age (Years)			16.17	1.4
Birth order				
First born	167	27.3		
Middle born	235	38.4		
Last born	190	31.0		
Only child	20	3.3		
Class				
9th	78	12.7		
10th	255	41.7		
11th	102	16.7		
12th	177	28.9		

Table Continued

Table 1
Demographic Characteristics of Adolescent Boys (N=612)

Variable	*f*	*%*	*M*	*SD*
Subject of Study				
Arts/ Commerce	104	16.9		
Computer science	28	4.6		
Science	480	78.4		
Residence Status				
City	516	84.3		
Village	96	15.7		
Is your father alive				
Yes	564	92.2		
No	48	7.80		
Father's education (Years)			14.50	2.25
Father's monthly income (PKR)			30414.22	39932.61
Father works in				
Out of city	60	9.80		
Out of country	22	3.60		
Same city	482	78.80		
Mother alive				
Yes	584	95.40		
No	28	4.60		
Mother's education (Years)			8.50	5.43
Working status of mother				
Working	39	6.37		
House wife	573	93.63		
Mother's monthly income			19806.45	11522.21
Parents live together				
Yes	547	89.4		
No	65	10.6		
Family system				
Nuclear	238	38.9		
Joint	374	61.1		

Table Continued

Table 1
Demographic Characteristics of Adolescent Boys (N=612)

Variable	*f*	*%*	*M*	*SD*
Number of participants work part-time	50	8.2		
Participants' have friends				
Yes	572	93.5		
No	40	6.5		
Number of friends				
1-5	225	36.76		
6-10	127	20.75		
11-15	59	9.64		
16-20	10	1.63		
21 and more	21	3.43		
No reply	170	27.78		
Number of hours per day spent with friends				
1-3	311	50.82		
4-6	115	18.79		
7-9	40	6.54		
10 and more	12	1.96		
No reply	134	21.90		
Categories of activities with friends				
Sports/Game	181	29.6		
Movie/Fun	132	21.6		
Discussion	110	18.0		
Study	67	10.9		
No Reply	122	19.9		
Restriction of timing to stay out of home				
Yes	220	35.9		
No	392	64.1		

Measures

Demographic Information Sheet. It included the information about the participants such as age, education, family system, information about the family members, residence, type of educational institute, etc.

Deviant Behaviour Scale. The scale was developed by the researchers, based on the diagnostic criteria of DSM-5 (American Psychiatric Association, 2013) for behavioural problems, in three different domains in which the adolescent interact, that is, at home, at school and with friends. The standardized steps to develop a scale were followed. Items were generated from the diagnostic criteria of DSM-5 (2013) behavioural problems, under the supervision of supervisor and two practicing clinical psychologists. After pilot study, proper review of the responses given by the participants in pilot study, the questionnaire was revised in the light of the suggestions made by the students and final version of the questionnaire was prepared. This final version was used for collect data and to prepare an indigenous research scale to measure deviant behavior in adolescents. The alpha reliability of the measure was reported as .87. The questionnaire was bilingual, that is, in both English and Urdu language, for the convenience and understanding of the participants. All the steps given by MAPI were used to translate the statements of the questionnaire into Urdu. There were altogether 76 statements in the questionnaire. The response was required on scale ranging from 1= almost never; 2= sometimes; 3= often; 4= almost always. The participants took almost 10 minutes to complete the questionnaire.

Procedure

Ethical approval to conduct the study was taken from Advanced Studies and Research Board (ASRB), University of the Punjab, Lahore Pakistan. An authority letter was taken from the Institute, duly signed by the supervisor and Director of the Institute of Applied Psychology, University of the Punjab, Lahore, to collect data from different public schools and colleges of Lahore. Written permission was taken from the principals of the schools and colleges on the permission letter and time was taken from them to collect the data on the questionnaire from the students. The principal of the respective school was asked to take written permission from the parents too. Only those students were included whose parents gave consent to participate. Written consent was taken from the participants and they were briefed about the purpose of the study. The participants were assured about the privacy and confidentiality of the

information taken from them. Overall, 620 male adolescents fulfilling the inclusion criteria were contacted and asked to fill the questionnaires. Eight of them returned incomplete questionnaires which were discarded. Hence the response rate was 99%. The participants approximately took 10 minutes to fill the questionnaire. At the end researcher thanked the participants on providing data.

Results

Data Screening

The data were screened for missing values, which were replaced by the mean value. The minimum number of data for factor analysis was satisfied, with a final sample size of 612, with the ratio of almost 8 cases per variable, which is considered as very good (Comrey & Lee, 2013; Hogarty, 2005; Mundfrom, Shaw, & Ke, 2005).

Exploratory Factor Analysis

In order to assess the underlying factor structure of the self-constructed scale, measuring deviant behaviour in adolescents, Principal component analysis and reliability analysis were conducted.

The assumptions for Principal component analysis were assessed, that is, the Kaiser-Meyer-Olkin measure of sampling adequacy, the Bartlett's test of Sphericity for significance, the diagonals of the anti-image correlation matrix, the communalities of items and tapering of the scree plot. After fulfilling all the assumptions, principal component analysis was considered to be suitable with all 76 items to identify and compute composite scores for the factors underlying the deviant behaviour scale.

Initially, the factorability of the 76 items was examined. Several well recognized criteria for the factorability of a correlation were used. First, it was observed that all 76 items correlated at least 0.3 with 49 items on more than one other item, suggesting reasonable factorability. Second, the Kaiser-Meyer-Olkin measure of sampling adequacy was .96, above the commonly recommended value of .6, is considered meritorious, and Bartlett's test of Sphericity was significant ($\chi 2$ (36185.93) = 2850, $p < .00$). Third, the diagonals of the anti-image correlation matrix were all above .8, which are above the required minimum value of .5. Finally, the correlations of maximum items were all above .3, further confirming that each item shared some common variance with other items. The Varimax rotation method was used because the component correlation matrix value in the Direct Oblimin method was less than .32, which suggest the use of Varimax Rotation method (Tabachnick & Fidell, 2007).

Initially 13 factors were identified by Principal Component Analysis (PCA), which explained 67.70% of the total variance. The scree

plot solutions for 2, 3 and 4 factors, each factor was examined by using Varimax rotations of the factor loading matrix on the basis of tapering in the scree plot.

By fixing the number of factors to four, the cumulative variance was 52.01% but the loading of items were not equally distributed as well as too much overlapping with the other factors, hence not giving the clear picture. When the number of factors was fixed to two, the cumulative eigen value was 45.51% the items were not giving the clear picture on the basis of meaningfulness, suggesting that these number of factors could not be considered. Both these analysis suggest that the best number of factors to be considered would be three.

The factors were fixed and verified for all the above mentioned number of factors, which clearly suggested the use of three factors solution. The three factor solution, which explained 49.23% of the total variance, was preferred because of: (a) its previous theoretical support, based on DSM-5 (American Psychiatric Association, 2013) diagnostic criteria; (b) the value of eigenvalue-greater-than-one rule (Kaiser, 1960); (c) the 'leveling off' of eigenvalues on the scree plot after two and then three factors (Cattell, 1966); (d) the insufficient number of primary loadings and difficulty of interpreting the fourth and its subsequent factors; and (e) at least two variables will have high loadings on each retained component (Zwick & Velicer, 1986).

Initial Eigen values indicated that the first three factors explained 40.94%, 4.58%, and 3.72%, of the variance respectively. No item was eliminated because all the items contributed to a simple factor structure and met a minimum criterion of having a primary factor loading of .3 or above.

Table 2

Factor Loadings and Item Analysis Based on Principal Components Analysis With Varimax Rotation for 76 items from the Deviant Behaviour Scale (N = 612)

S. #	Items	Components			r_{it}
		1	2	3	
1	I feel angry at home		**.42**	.36	.3
2	I feel angry at school		**.59**		.53
3	I feel angry with friends		**.61**		.52

Table Continued

Table 2

Factor Loadings and Item Analysis Based on Principal Components Analysis With Varimax Rotation for 76 items from the Deviant Behaviour Scale (N = 612)

S. #	Items	Components			r_{it}
		1	2	3	
4	I like to shout at someone at home		.43	**.59**	.65
5	I like to shout at someone at school	.35	**.69**		.68
6	I like to shout at someone with friends		**.58**		.56
7	I have irritable mood at home		.50	**.53**	.53
8	I have irritable mood at school	.34	**.68**		.69
9	I have irritable mood with friends		**.69**		.66
10	I lose temper at home		.44	**.55**	.56
11	I lose temper at school	.34	**.65**		.65
12	I lose temper with friends		**.58**		.59
13	I am resentful/ harsh at home		.42	**.54**	.58
14	I am resentful at school	.40	**.58**		.67
15	I am resentful with friends	.39	**.57**		.66
16	I argue at home		.37	**.63**	.61
17	I argue at school	.34	**.59**		.62
18	I argue with my friends		**.57**		.65
19	I actively refuse to follow rules at home		.35	**.57**	.59
20	I actively refuse to follow rules at school	.31	**.48**		.61
21	I refuse to follow orders from authority at home			**.46**	.49
22	I refuse to follow orders from authority at school		**.44**		.54
23	I intentionally irritate others at home			**.54**	.53

Table Continued

Table 2

Factor Loadings and Item Analysis Based on Principal Components Analysis With Varimax Rotation for 76 items from the Deviant Behaviour Scale (N = 612)

S. #	Items	Components			r_{it}
		1	2	3	
24	I intentionally irritate others at school	.41	**.44**		.64
25	I intentionally irritate others when I am with friends	.30	**.38**		.49
26	I blame others for my mistakes at home	.33		**.58**	.66
27	I blame others for my mistakes at school	**.55**	.47		.73
28	I blame others for my mistakes with friends	**.54**	.45		.70
29	I blame others for my misbehaviour at home	.34		**.61**	.67
30	I blame others for my misbehaviour at school	**.57**	.46		.76
31	I blame others for my misbehaviour with friends	**.52**	.44		.70
32	I am hurtful at home	.42		**.60**	.67
33	I am hurtful at school	**.64**	.38	.35	.78
34	I am hurtful with friends	**.61**	.39		.74
35	I take revenge from others at home	.33		**.64**	.66
36	I take revenge from others at school	**.47**	.40		.64
37	I take revenge from others with friends	**.46**	.34		.61
38	I feel like breaking things at home			**.48**	.48
39	I feel like breaking things at school	**.51**	.43		.67
40	I feel like breaking things with friends	**.46**	.44		.64

Table Continued

Table 2

Factor Loadings and Item Analysis Based on Principal Components Analysis With Varimax Rotation for 76 items from the Deviant Behaviour Scale (N = 612)

S. #	Items	Components			r_{it}
		1	2	3	
41	I get in a bad mood when things don't go my way at home			**.54**	.41
42	I get in bad mood when things don't go my way at school	**.41**	.35	.36	.64
43	I get in a bad mood when things don't go my way with friends	**.34**	.32	.33	.57
44	I quarrel with others at home			**.67**	.61
45	I quarrel with others at school	.46	**.46**		.69
46	I quarrel with friends	.35	**.51**		.62
47	I fight with others at home			**.64**	.59
48	I fight with others at school	**.53**	.46		.70
49	i fight with friends	**.49**	.42		.65
50	I hurt animals at home	.50		**.58**	.63
51	I hurt animals at school	**.72**			.73
52	I hurt animals with friends	**.73**			.68
53	I physically injure others at home	.53		**.57**	.65
54	I physically injure others at school	**.76**			.72
55	I physically injure others with friends	**.69**			.68
56	I threaten/ frighten others at home	.41		**.60**	.64
57	I threaten/ frighten others at school	**.60**	.32		.68
58	I threaten/frighten others with friends	**.58**			.62

Table Continued

Table 2

Factor Loadings and Item Analysis Based on Principal Components Analysis With Varimax Rotation for 76 items from the Deviant Behaviour Scale (N = 612)

S. #	Items	Components			r_{it}
		1	2	3	
59	I like to dominate others at home	.39		**.59**	.57
60	I like to dominate others at school	**.57**			.61
61	I like to dominate others with friends	**.56**			.58
62	I like to bully/harass others at home	.41		**.53**	.54
63	I like to bully/harass others at school	**.63**		.31	.67
64	I like to bully harass others with friends	**.59**			.59
65	I am the one who starts the fight at home	.40		**.66**	.61
66	I am the one who starts the fight at school	**.70**	.32		.73
67	I am the one who starts the fight with friends	**.64**	.30		.68
68	I fight with something that injures/hurts others (bat, brick, stone, rod, bottle etc.) At home	**.40**		.32	.44
69	I fight with something that injures/hurts others (bat, brick, stone, rod, bottle etc.) At school	**.55**			.52
70	i fight with something that injures/hurts others (bat, brick, stone, rod, bottle etc.) with friends	**.48**			.56
71	i feel like fighting with weapon (knife, gun) at home	.44		**.59**	.64

Table Continued

Table 2

Factor Loadings and Item Analysis Based on Principal Components Analysis With Varimax Rotation for 76 items from the Deviant Behaviour Scale (N = 612)

S. #	Items	Components			r_{it}
		1	2	3	
72	i feel like fighting with weapon, knife, gun) at school	**.55**	.34	.35	.71
73	i feel like fighting with weapon (knife, gun) with friends	**.55**	.38		.65
74	i use bad language at home	.39		**.59**	.67
75	i use bad language at school	**.47**	.35	.36	.67
76	i use bad language with friends	.32	**.38**		.53

Note. r_{it}= Item Total Correlation

The factors were named on the basis of their meaningfulness as well as DSM-5 (American Psychiatric Association, 2013) diagnostic criteria, that is, factor 1 Conduct Disorder, factor 2 Intermittent Explosive Disorder and factor 3 Oppositional Defiant Disorder (American Psychiatric Association, 2013).

The number of items loaded on first, second, and third factor were 32, 20 and 24 respectively. There were total 49 items which were cross loaded on two or more than two factors. Seven were cross loaded on factor two and three. Item “I feel angry at home”, “I like to shout at someone at home”, “I have irritable mood at home”, “I lose temper at home”, “I am resentful at home”, I argue at home”, and “I actively refuse to follow rules at home” had cross-factor loading on factor 2 Intermittent Explosive Disorder and factor 3 Oppositional Defiant Disorder. 27 items were cross loaded on factor one and factor two. Item “I like to shout at someone at school”, “ I have irritable mood at school”, “I lose temper at school”, “I am resentful at school”, “I am resentful with friends”, “I argue at school”, “I actively refuse to follow rules at school”, “I intentionally irritate others at school”, “I intentionally irritate others when I am with friends”, “I blame others for my mistakes at school”, “I blame others for my mistakes with friends”, “I blame others for my misbehavior at school”, “I blame others for my misbehavior with friends”, “I am hurtful with friends”, “I take revenge from others at school”, “I take revenge from others with friends”,

"I feel like breaking things at school", "I feel like breaking things with friends", "I quarrel with others at school", I quarrel with friends", "I fight with others at school", "I fight with friends", "I threaten others at school", "I am the one who starts the fight at school", "I am the one who starts the fight with friends", "I feel like fighting with weapons with friends", and "I use bad language with friends" had cross-factor loading on factor 1 Conduct Disorder, and factor 2 Intermittent Explosive Disorder. Similarly, 14 items had cross loading on factor 1 and factor 3. Item "I blame others for my mistakes at home", "I blame others for my misbehavior at home", "I am hurtful at home", "I take revenge from others at home", "I hurt animals at home", "I physically injure others at home", "I threaten others at home", "I like to dominate others at home", "I like to bully others at home", "I like to bully others at school", "I am the one who starts the fight at home", "I fight with something that injures/ hurts others at home", "I feel like fighting with weapon at home", and "I use bad language at home" had cross-factor loading on factor 1 Conduct Disorder, and factor 3 Oppositional Defiant Disorder (ODD). There were five items which were cross loaded on all three factors. Item "I am hurtful at school", "I get in bad mood when things don't go my way at school", "I get in bad mood when things don't go my way with friends", "I feel like fighting with weapon at school", and "I use bad language at school" had cross-factor loading on factor 1 Conduct Disorder, factor 2 Intermittent Explosive Disorder and factor 3 Oppositional Defiant Disorder. The items were retained in the specific factors due to their higher loading as well as their meaningfulness. Internal consistency for each of the composite scale as well as each of the factor was examined using Cronbach's alpha.

Table 3
Descriptive Statistics for Composite and Deviant Behaviour Sub-Scales (N=612)

Variable	*k*	*M*	*SD*	*α*	Range		Skew
					Potential	Actual	
1. Conduct disorder	32	49.45	19.65	.96	32-128	32-108	1.32
2. Intermittent explosive disorder	20	35.39	12.64	.93	20-80	20-80	1.06
3. Opposition defiant disorder	24	36.33	13.80	.95	24-96	24-96	1.69
4. Deviant Behaviour	76	121	42.74	.87	76-304	76-256	1.29

Cronbach's coefficient alpha is a measure of internal consistency of the items for the total scale of the particular sample. In the above table, all the scores are on the higher range of the scale (>.70) suggesting that the items of the total scale and its three factors are measuring the same thing.

Table 4
Inter-correlation between Deviant Behaviour Scale and its Sub-Scales in Adolescents (N=612)

Factor	*2*	*3*	*4*
1. Deviant behavior	.96***	.92***	.89***
2. Conduct disorder		.84***	.77***
3. Intermittent explosive disorder			.72***
4. Opposition defiant disorder			

****p*<.001

The inter-correlation shows that all the subscales are highly correlated with each other.

Discussion

The deviant behaviour scale developed in current study identified the three main factors including conduct disorder (CD), intermittent explosive disorder (IED) and opposition defiant disorder (ODD). The three main factors fitted DSM-5 (American Psychiatric Association, 2013) criteria, which was given for the deviant behaviour and the behavioural problems in adolescents (Dishion, Nelson, & Bullock, 2004; McGue, & Iacono, 2005; Roza et al., 2003). Some age-atypical dysfunctions and

aggression was found on high score in all the three domains of behavioural problems in adolescents (Loeber et al., 2000; Shaw, & Gross, 2008). The reliability of the scales show high internal consistency.

Adolescents with behavioural problem show deviance in all the three domains, specified by DSM-5, that is, at home, in school and with friends. Showing aggression, physical fighting, disobedience to the authority are some of the common behavioural issues of conduct and opposition defiant problems. The research during the past decade, on ODD and CD (Pardini, Frick, & Moffitt, 2010; Rowe et al., 2002) discussed the difficulty involved in recognizing the primary risk factors and developmental pathways to disruptive behavior disorders (DBD). The identification of the relationship between the most significant risk factors from multiple domains is making this issue more important.

Research also provides evidence for the behavioural or deviant problem due to CD (Maughan et al., 2004) and ODD (Coid, 2003; Edwards et al., 2007; Farrington & Coid, 2003; Fergusson, Horwood, & Ridder, 2005; Hutchings, Lane, & Kelly, 2004; Rowe et al., 2002), which later develops into antisocial personality disorder in adolescents (Fergusson, Boden, & Horwood, 2010). These findings support the identified factors of deviant behaviour scale.

The scale can be administered on larger sample to develop its norms. It was only administered on boys, so it is suggested to be used on girls too. However, each of the factor could be strengthened through revision. This is an indigenous scale based on theory so this scale will be helpful for researchers to identify the deviant behaviour of adolescents in Pakistani context.

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