

International Journal of Technical Research & Science

# PARENTAL DISCIPLINE AND HARSH PUNISHMENT AS A PREDICTOR OF DELINQUENT TENDENCIES AMONG ADOLESCENTS IN PAKISTAN

Shahida Sadiq<sup>1</sup>, Aneeza Bashir<sup>2</sup>
E-Mail Id: <sup>1</sup>Shahidasadiq22@gmail.com, <sup>2</sup>Aneezabashir16@gmail.com

<sup>1</sup> Lecturer in Dept. of Psychology, Govt. Postgraduate College (W) Mandibahaudin

<sup>2</sup>Lecturer in Dept. of Psychology, University of Sargodha, Sargodha, Pakistan

Abstract-Purpose of the present study was to investigate the predicting role of parental discipline and harsh punishment of delinquent tendencies among adolescents, a pilot study was conducted conveniently drawn sample of (N = 100, girls = 50) and boys = 50); to pretest instrument, find reliability, psychometric properties of scale (parental discipline and harsh punishment) translated for this study and trends of data. The second phase of this study was comprised of the main study to achieve main objectives of study sample of (N = 430, boys = 213) and girls = 216) from schools of three cities Sargodha, Kharian, and Bhalwal. Parental discipline and harsh punishment were measured by using Parental Discipline and Harsh Punishment Scale [1] and delinquent tendencies were measured using Self Reported Delinquency Scale [2]. The results indicate Parental discipline and harsh punishment are predictors of delinquent tendencies.

**Key Words:** parental discipline, harsh punishment, delinquent tendencies.

## 1. INTRODUCTION

Every society sets some norms and standards, people live their lives according to that principle. Parental discipline teaches the values and actions to children that are acceptable within limitations of one's family and society [3]. The use of power to develop or control behavior which causes pain and have a wide variety of negative developmental outcome is harsh punishment [4]. If people's behavior violates those standards it is considered as deviant behavior and delinquent tendency in a sociological framework is described as tendencies of actions or behaviors that disobey cultural norms including properly enacted rules such as crime and casual violations of social norms [5].

A number of studies have found that corporal punishment is related to antisocial tendencies [6]. According to Gershoff [7], a meta-analysis of 88 studies revealed the relationship of punishment with various unenthusiastic effects. It included 40 tests the hypothesis that punishment is associated with an increased probability delinquent behavior in children. [7] Found that punishment is leading factor in developing antisocial behavior [8]. An influential study by Straus, Sugarman, and Giles-Sims [9] provided the first evidence those 14 longitudinal studies that investigated physical punishment predicted subsequent antisocial behavior. Punishment has been associated with higher levels of bodily violence and conduct problems [10]. Criminologists describe the association between parenting and delinquency; during the 1990s as a field of criminology initiate; in this research risk factor for antisocial behavior are such as insensitive parental control, administration, and organization of behavior [11].

The Hoeve et al, [12] study found a significant link between parental disciplines that account up to 11% of the variance in delinquency. Too strict parental control and harsh punishment appear to be linked to high levels of delinquent and antisocial behavior [13]. Given that parenting linked to delinquency [14]. Some studies, including time-intervals of at least 10 years suggest that parental control and punishment influences delinquent behavior in youngsters [15][16]. Finding concerning the significance of the link between harsh punishment and delinquency is in line with studies that found support for the effectiveness of parent management training programs in reducing delinquency and antisocial behavior [17]. Parental discipline is parents' way/guidance of children's ethics how they treat their children also have a great effect on individual and it is considered a risk factor for the deviant behavior [18]. Children who were physically punished and strictly disciplined by their parents during childhood or adolescence are more punitive [19]. Negative parenting appears to serve as risk factors for both males and females [20].

Steffensmeier and Allan [21] suggested that delinquent behavior is strongly correlated with gender; same criminogenic situation differently affects males and females. Wilson and Herrnstein [22] study report that in proceeding year of survey males have a higher percentage than females. Moffitt, Caspi, Rutter, and Silva [23] in large-scale longitudinal surveys documented that girls offend rarely and boys offend frequently. Crime rates can be explained by the fact that males have more risk factors, such as recklessness or poor parental control than females



## International Journal of Technical Research & Science

[24]. Razzak's [25] research indicate that there are some differences between the men and the women with reference to parental discipline and harsh punishment, as the unsympathetic discipline implemented on females tends to be generally verbal while that implemented on the men tends to be in cooperation verbal and physical, the implementation of the verbal discipline for both groups. Pinderhughes [25] found that cruel control, in general, is more recurrently used with boys than with girls, the harsh physical discipline implemented on the boys is frequently done more than girls [26]. Harper, Brown, Arias, and Brody [27] the study found that males expected significantly higher levels of punishment as compared to females. Bender, Allen, McElhaney, Antonishak, Moore, Kelly, and Davis [28] in another study found that boys adolescent were more expected than girls to experience harsh control. Males experience harsher physical discipline than females [29]. Giles-Sims, Straus, and Sugarman [30] suggest that males experience a high percentage of punishment than females thus raising the possibility of negative outcomes. Several studies have found that boys experience a higher level of punishment than girl's experience [28]. According to Moffitt et al. [23] males have a greater risk factor of association between an exact hazard aspect and antisocial behavior than females. Harsh discipline is a brilliant entrant risk factor in gender study and sex difference in delinquent behavior as findings indicate that boys are more harshly disciplined than females and harsh discipline [7]. Moffitt, et al. [23] revealed that delinquency was greater for boys and males engage in more disruptive behavior than females. Males mostly engage in harmful behavior, with few exceptions [31].

In Pakistan, though many types of research have been conducted on these factors not particularly in this way. So, this study is special in this way that it was intended to documents the predicting role of parental discipline and harsh punishment of delinquent tendencies among adolescents. If strictly discipline method of rearing child and frequent use harsh punishment has negative effects on child behavioral patterns which lead to them delinquent behaviors. The aim of this study was to investigate the effect of parental discipline and harsh punishment on delinquent tendencies among adolescents in Pakistan scenario and to find out gender difference in delinquency, parental discipline, and harsh punishment.

## 1.1 Hypotheses

- There will likely to be a significant positive relationship between parental discipline, harsh punishment and delinquent tendencies among adolescents.
- > There will likely to be a significantly high level of delinquent tendencies, parental discipline and harsh punishment boys than girls among adolescents.

## 2. METHOD

## 2.1 Sample

A sample (N = 430) consisted of girls (n = 216) and boys (n = 214). Adolescence of age range 12 years to 17.5 (M = 14.41, SD = 1.61) years drawn from urban and rural areas of district Sargodha and Kharian through purposive sampling. The following inclusion criteria were used in the research sample: age (ranged: 12-17.5 years), gender (boys and girls), education ( $6^{th}$  grade to F.A), family system (nuclear and joint), area (rural and urban) from government and private sectors institutions.

#### 2.2 Instruments

# 2.2.1. Parental Discipline and Harsh Punishment Scale

Parental discipline and harsh punishment scale were developed by Van-Leeuwen and Vermulst [1]. The questionnaire consists of 10 items and comprises of two subscales Parental discipline scale and harsh punishment scale. Children rate the frequency of their parent's behavior towards them. The questionnaire is a 5-point rating scale. Response option ranges from 1 (never), 2 (rarely), 3 (sometimes), 4 (often), 5 (always). Parental discipline is measured by item numbers (1, 2, 3, 4, 5, and 6). The possible score range is from 6-30. Harsh punishment is measured by item numbers (7, 8, 9, and 10). The score range is from 4-20. High scores indicate high parental discipline and harsh punishment and vice versa. Reliability of parental discipline scale .67 and harsh punishment .62 were computed during pilot study analysis.

## 2.2.2 Self Reported Delinquency Scale

Self Reported Delinquency Scale developed by Naqvi and Kamal [2]. Self Reported Delinquency Scale was used to differentiate between boys having high SRD and boys having less SRD. Numerically high scorers were considered to having high delinquent tendencies and low scorers were considered as boys having less SRD. This is a five-point linker scale with 27 items which are all positively stated. Scoring criteria is 0 (never), 1 (once in life), 2 (2-4 times life), 3 (5-10 times in life) and 4 (10 or more times in life). The possible score range is from 0-108 in which minimum score is 0 and maximum score can be 108. The reliability coefficient of the scale was .85 estimated in the pilot study analysis.

pg. 824

www.ijtrs.com www.ijtrs.org



## International Journal of Technical Research & Science

## 2.3 Research Design

In order to determine the relationship between parental discipline, harsh punishment, and delinquent tendencies corelational research design was used. The Indexes of variables parental discipline, harsh punishment, and delinquent tendencies of the study were used for this survey research to collect data. This study consisted of two phase

#### 2.3.1 Phase 1: Pilot Study

The present phase was carried out to measure the psychometric properties of the scales translated and used in the present study. The alpha reliabilities, item-total correlations, and the correlation between the study variables were computed to have an initial glance into the variables.

#### 2.3.2 Translation Procedure

For the purpose of the study parental discipline and harsh punishment (Parental discipline and harsh punishment scale; Van-Leeuwen & Vermulst, 2004) was used and the scale was translated into Urdu by using the standard backtranslation method. Urdu translation of the scales was done by 3 bilingual experts who had command on Urdu and English languages and also knew psychological terminologies. The experts were asked not to go for word to word translation but the comprehensive translation that should convey the same connotation as in original items. Once the translation was done into Urdu, the committee approach method was used to select the best Urdu translated items. Committee selected the best items of Urdu translation from different translated versions. Once the scale was completed in Urdu; it was then submitted for translation in English. Three bilingual experts (other than those who translated the scale in Urdu) who have command on the two languages and also have the understanding of psychological terminologies again translated these Urdu items back to English. And the items of translation that closely related with the original item were selected for study purpose after going through a tryout.

## **2.3.3 Phase II**

Phase II was comprised of the main study. The main study was carried out on a large sample (N = 430). The data gleaned through the psychometrically sound instruments were subjected to correlation matrix and simple regression analysis in order to test the proposed hypotheses of the study.

#### 2.4 Procedure

The sample was approached directly by the researcher after having (verbal and written) consent for participation. All the participants in the study were volunteer participants. The researcher ensured the participant that all the information would be only used for research purposes. The participants were informed about the purpose of the study. They were asked to fill out their particulars on the separate devised information sheet. Proper instructions were given to the participants about filling the scales and responding to questions. They were requested to give the genuine responses which reflect their feelings truly. After that, they were handed over the booklets containing Self Reported Delinquency Scale, Parental Discipline, and Harsh Punishment Scale. Most participants took 30 to 40 minutes to fill the scales. The questionnaire was administered in a classroom setting. In the end, participants were thanked for giving their valuable time and cooperation and the obtained data were analyzed and discussed.

# 3. RESULTS

The present study was aimed at to explore the relationship of delinquent tendencies to parental discipline and harsh punishment. After completion of data collection different statistical analysis was used to analyze this data and finding results. Reliability coefficient, Pearson correlation, and t-test were used for statistical analysis.

Table- 3.1 Mean, Standard Deviation, Alpha Reliabilities and Correlation between Self Report Delinquency,

Scales	SRDS	PDS	HPS
SRDS	-	.23**	.18**
PDS		_	.54**
HPS			_
M	8.62	13.74	11.09
SD	11.42	4,39	3.79
α	.90	.67	.62



## International Journal of Technical Research & Science

Note. SRDS = Self-Reported Delinquency Scale; PDS = Parental Discipline Scale and HPS = Harsh Punishment Scale.

\*\*p < .01

The findings of table 3.1 indicate that self-report delinquency is significantly correlated with parental discipline and harsh punishment. Result is significant and positively correlated at 0.01 level (\*\*p < .01).

Table- 3.2 Multiple Regression for PD and HP as a Predictor of Delinquent Tendencies among Adolescents (N = 430)

Predictor variable	В	$\mathbb{R}^2$	$\Delta R^2$	F (Model)		
PDS	.601***	.054***	.051***	24.22***(1, 429)		
HPS	.529***	.03***	.03***	13.60***(1, 429)		

Note. Please read PDS = Parental Discipline Scale and HPS = Harsh Punishment Scale. \*\*\*P < .001

Table 3.2 Results demonstrate the analysis of multiple regressions for PD and HP as a predictor of delinquent tendencies among adolescents. Results indicate that PD significant predictor of delinquent tendencies among adolescents and table also demonstrated and 5.4% variance in delinquent tendencies that could be attributed PD ( $R^2 = .055$ ). Results also indicated that HP significant predictor of delinquent tendencies among adolescents and table also demonstrated and 5.1% variance in delinquent tendencies that could be attributed HP ( $R^2 = .055$ ).

Table- 3.3 Mean, Standard Deviation, & t-values of Boys and Girls on Self Report Delinquency, Parental Discipline and Harsh Punishment (N = 430)

	Boys (n = 213)		Girls (n = 216)			95 % CI		Cohen's	
Variable	M	SD	M	SD	t(427)	р	LL	UL	d
SRDS	11.31	13.91	5.98	7.43	4.96	.000	3.22	7.44	.48
PDS	14.49	4.26	12.99	4.39	3.61	.000	.69	2.33	.48
HPS	11.96	3.54	10.14	3.83	5.11	.000	1.12	2.52	.49

Note. SRDS = Self Report Delinquency Scale; PDS = Parental Discipline and HPS=Harsh Punishment Scale.

Table 3 shows the mean, standard deviation and t-values of boys and girls on self-reported delinquency, parental discipline, and harsh punishment. The result shows that there is a significant difference between boys and girls on self-report delinquency parental discipline and harsh punishment at p < .001. It indicates boys have a high level of delinquent tendencies, parental discipline, and harsh punishment.

## 4. DISCUSSION

The present study was aimed at studying the relationship of parental discipline and harsh punishment with delinquent tendencies among adolescents. Other aspects of the study were to find out gender differences in delinquent tendencies among adolescents.

The primary hypothesis of the study was to discover the relationship of delinquent tendencies, parental discipline, and harsh punishment. To achieve this objective, the relational hypothesis was formulated. Pearson correlation was used and the result was satisfactory. It shows that the first hypothesis of this study was accepted and variables of study are significantly correlated with each other (see table 3.1). In a previous research conducted on delinquent tendencies, parental discipline and harsh punishment show that parental discipline predicts delinquency. In a follow-up study of children found that physical punishment at age 7 and 11 years predicted later convictions [32]. Seattle social development project (poor regulation, incompatible policy, ruthless control) investigated that violence experienced in adolescence predicts violence in young adulthood [33]. Farrington [34] in the Cambridge study demonstrated that strict discipline of parents is the most significant cause of conviction for violent behavior. Theses researches support our findings that delinquent tendencies are significantly correlated with parental discipline and harsh punishment (see table 3.1).

The second hypothesis of the current study was that there are gender differences in delinquent tendencies among adolescents. The hypothesis of the study was that delinquent tendencies level would be higher in male than female. The result indicated that males have a high delinquent tendency as compare females (see table 3.3). A previous research by Simons, Miller, and Aigner, [35] researcher found that exposure to delinquent tendencies is significantly different among males and females. Males were to a large extent more to be expected than females to have acquaintances who were encouraging of antisocial activities. Johnson [36] suggested the effect of delinquent peers on the felony was significantly stronger among males than females. These previous research findings also support our finding that ratio of delinquent tendencies is higher in male than female (see table 3.3).



## International Journal of Technical Research & Science

The third hypothesis was formulated to measure gender differences in parental discipline and harsh punishment as a parental discipline and harsh punishment would be higher in males than females. Finding indicates significant gender difference in parental discipline and harsh punishment. Results indicate that our hypothesis was accepted (see table 3). Previous studies support our findings Pinderhughes [25] found that cruel control, in general, is more recurrently used with boys than with girls. Messer, Goodman, Rowe, Meltzer and Maughan [37] findings suggest that sex discrepancy was 3.5 % and the ratio was greater in males as compared females as males may receive more harsh punishment and discipline than females and others studies also revealed that the relation is greater for boys [38] (see table 3.3).

## 4.1Limitations and Suggestions of Study

Certain issues that cannot be controlled can weaken the results of the study. Data were collected through self-report inventories and other methods are not used in the study. It may be that the adolescents show social desirability and response bias which may harm the results of the study and next time other methods of data collection like interview should be used along self-report inventory and as comparative study should be conducted taking both parents and children as participants. Personality trait can be a factor that was not controlled and explored during this research it can because of the extraneous variable of study so next time research can conduct on personality trait taking a variable. Little research had done on delinquent tendencies among females so they mostly show a socially desirable response. In Pakistan society's attitude toward female delinquency is more rigid than male, so they didn't cooperate well to response on delinquency scale. Next research can be conducted on juvenile criminals as their response will minimize the risk of social desirability. All these factors were not controlled in the study, hence it can be expected that the results of the study are somewhat deteriorated.

## ACKNOWLEDGMENTS

This research used data from my Masters in Psychology thesis. Degree completed from University of Sargodha, Sargodha (Pakistan), under the supervision of lecturer Aneeza Bashir.

## **REFERENCE**

- [1] Van-Leeuwen, K. G., & Vermulst, A. A. Some psychometric properties of the Ghent parental behavior scale. European Journal of Psychological Assessment, 20, 283-298, 2004.
- [2] Naqvi, I., & Kamal, A. Development of self-reported and informant reported delinquency scales for laborer adolescents. FWU Journal of Social Sciences, 2 (1), 51-71, 2008.
- [3] Holden, G. W. Perspectives on the effects of corporal punishment: Comment on Gershoff (2002). Psychological Bulletin, 128, 590-595, 2002.
- [4] Straus, M. A., & Stewart, J. H. Corporal punishment by American parents: National data on prevalence, chronicity, severity, and duration, in relation to child and family characteristics. Clinical Child & Family Psychology Review, 2(2), 55–70, 1999.
- [5] Dinitz, S., Dynes, R. R., & Clarke, A. C. Deviance: Studies in definition, management, and treatment, 1969.
- [6] Gamez, G. M., & Straus, M. A. (2008). Childhood and adolescent victimization and sexual coercion and assault by male and female university students. Durham, NH: Family Research Laboratory, University of New Hampshire.
- [7] Gershoff, E. T. Corporal punishment by parents and associated child behaviors and experiences: A meta-analytic and theoretical review. Psychological Bulletin, 128, 539-579, 2002.
- [8] Straus, M. A. (2001). Beating the devil out of them: Corporal punishment in American families and its effects on children. New Brunswick, NJ, US: Transaction Publishers.
- [9] Straus, M. A., Sugarman, D. B., & Giles-Sims, J. Spanking by parents and subsequent antisocial behavior of children. Archives of Pediatrics and Adolescent Medicine, 151, 761-767, 1997.
- [10] Swinford, S. P., DeMaris, A., Cernkovich, S. A., & Giordano, P. C. Harsh parental discipline in childhood and violence in later romantic involvements: The mediating role of problem behaviors. Journal of Marriage and the Family, 62, 508-519, 2000.
- [11] Bergman, L. R., & Magnusson, D. A person-oriented approach in research on developmental psychopathology. Development and Psychopathology, 9(2), 291–319, 1997.
- [12] Hoeve, M., Dubas, J. S., Eichelsheim, V. I. van der Laan, P. H. Smeenk, W., & Gerris J. R. M. The relationship between parenting and delinquency: A meta-analysis. Journal of Abnormal Child Psychology, 37(6), 749-775, 2009.
- [13] Farrington, D. P., Loeber, R., & Stouthamer-Loeber, M. How can the relationship between race and violence be explained? In D. F. Hawkins (Ed.), Violent crimes: Assessing race and ethnic differences (pp. 213–237, 2003). New York: Cambridge University Press.



## International Journal of Technical Research & Science

- [14] Loeber, R., Farrington, D. P., Stouthamer-Loeber, M., & White, H. R. (2008). Violence and serious theft: Development and prediction from childhood to adulthood. Mahwah, NJ: Erlbaum.
- [15] Hoeve, M., Blokland, A., Dubas, J. S., Loeber, R., Gerris, J. R. M., & Van der Laan, P. H. Trajectories of delinquency and parenting styles. Journal of Abnormal Child Psychology, 36(2), 223–235, 2008.
- [16] Hoeve, M., Smeenk, W. H., Loeber, R., Stouthamer-Loeber, M., Van der Laan, P. H., Gerris, J. R. M., et al. Long-term effects of parenting and family characteristics on the delinquency of male young adults. European Journal of Criminology, 4(2), 116–194, 2007.
- [17] McCart, M. R., Priester, P. E., Davies, W., & Azen, R. Differential effectiveness of behavioral parent-training and cognitive-behavioral therapy for antisocial youth: A meta-analysis. Journal of Abnormal Child Psychology, 34(4), 527–543, 2006.
- [18] Mulford, C. F., & Redding, R. E. Training the parents of juvenile offenders: State of the art and recommendations for service delivery. Journal of Child and Family Studies, 17(5), 629–648, 2008.
- [19] Kemme, S., Hanslmaier, M., & Pfeiffer, C. Experience of parental corporal punishment in childhood and adolescence and its effect on punitiveness. Journal of Family Violence, 29(2), pp 129-142, 2014.
- [20] Berkout, O. V., Young, J. N. & Gross, A. M. Mean girls and boys: Recent research on gender difference in conduct disorder. Aggression and Violent Behavior, 16(6), Pages 503–511, 2011.
- [21] Steffensmeier, D. J., & Allan, E. Criminal Behavior: Gender and Age. Criminology: A Contemporary Handbook (2<sup>nd</sup> Ed.). F. Joseph, & B. Sheley, (Eds.), Pages 83-113, 1995. CA: Wadsworth.
- [22] Wilson, J. Q., & Herrnstein, W. (1985). Crime and Human Nature. New York: Simon & Schuster.
- [23] Moffitt, T. E., Caspi, A., Rutter, M., & Silva, P. A. (2001). Sex Differences in Antisocial Behavior, Cambridge: Cambridge University Press.
- [24] Lanctot, N., & Le-Blanc, M. Explaining deviance by adolescent females. In M. Tonry (Ed.), Crime and Justice, 29, 113-202, 2002. Chicago: University of Chicago Press.
- [25] Razzak, N. A. Gender differences or not? harsh discipline in childhood and its impact on Bahraini teacher candidates, perceptions and classroom practices. International Journal of Humanities and Social Science, 2(1), 233-243, 2012.
- [26] Pinderhughes, E. Discipline Responses: influences of parents" socioeconomic status, ethnicity and beliefs about parenting, stress, and cognitive-emotional processes. Journal of Family Psychology, 14, 380-400, 2000.
- [27] McKee, L., Roland, E., Coffelt, N., Olson, A. L., Forehand, R., Massari, C., Jones, D., Gaffney, C. A., & Zens, M. S. Harsh parental discipline and child problem behaviors: The roles of positive parenting and gender. Journal of Family Violence, 22, 187-196, 2007.
- [28] Harper, F. W. K., Brown, A. M., Arias, I., & Brody, G. Corporal punishment and kids: How do parent support and gender influence child adjustment? Journal of Family Violence, 21, 197-207, 2006.
- [29] Bender, H. L., Allen, J. P., McElhaney, K. B., Antonishak, J., Moore, C. M., Kelly, H. O., & Davis, S. M. Use of harsh physical discipline and developmental outcomes in adolescence. Developmental Psychopathology, 19, 227-242, 2007.
- [30] Grogan, K. A., & Otis, M. D. The predictors of parental use of corporal punishment. Family Relations, 56, 80-92, 2007.
- [31] Giles-Sims, J., Straus, M. A., & Sugarman, D. B. Child, maternal, and family characteristics associated with spanking. Family Relations, 44, 170-177, 1995.
- [32] Robins, L. N. Conduct disorder. Journal of Child Psychology and Psychiatry, and Allied Disciplines, 32, 193–209, 1991.
- [33] Haapasalo, J., & Pokela, E. Child-rearing and child abuse antecedents of criminality. Aggression and Violent Behavior, 1, 107-127, 1999.
- [34] Herrenkohl, T. I., Marguin, E., Hill, K. G., Hawkins, J. D., Abbott, R. D., & Catalano, R. F. Development risk factors for youth violence. Journal of Adolescent Health, 26, 176-186, 2000.
- [35] Farrington, D. P. Childhood, adolescent and adult features of violent males. In L. R. Huesmann (Eds), Aggression Behavior: Current perspective, pp. 215-240, 1994. New York: Plenum.
- [36] Simons, R. L., Miller, M. G., & Aigner, S. M. Contemporary theories of deviance and female delinquency: An empirical test. Journal of Research in Crime and Delinquency, 17, 42-53, 1980.
- [37] Johnson, R. (1979). Juvenile delinquency and its origins. Cambridge: Cambridge University Press.
- [38] Messer, J., Goodman, R., Rowe, R., Meltzer, H., & Maughan, B. Preadolescent conduct problems in girls and boys. Journal of the American Academy of Child and Adolescent Psychiatry, 45, 184–191, 2006.
- [39] Leve, L. D., Kim, H. K., & Pears, K. C. Childhood temperament and family environment as predictors of internalizing and externalizing trajectories from ages 5 to 17. Journal of Abnormal Child Psychology, 33, 505–520, 2005.