Family Structure and Internalizing Features in Adolescents Who Engage in Illegal Sexual Behavior

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Abstract

Incarcerated adolescents are more likely to be diagnosed with a psychiatric disorder than their non-offending peers, with depression and anxiety being the two most common. Disrupted caregiving has been a key factor in the high psychiatric disorders observed in many juvenile detention settings. This study aimed to examine family functioning and reports of internalizing features of clinical disorders in a sample of adolescents adjudicated for illegal sexual behavior (AISB). Data were collected as part of a pre-treatment evaluation for youth in the Accountability Based Sex Offense Prevention Program (ABSOPP) located at a residential facility in the Southeast United States (n=966). Results indicated those coming from dual-parent homes with maternal involvement reported significantly higher rates of anxious feelings and lower rates of family discord, as reported by the Millon Adolescent Clinical Inventory (MACI). While cross-sectional in nature and therefore not causal, this research could provide insight into factors contributing to the development of depression and anxiety in incarcerated youths.

Key Words: adjudicated youth, sex offenses, family, depression, anxiety

Introduction

Sex offending continues to be a topic of high demand within the criminal justice system and clinical therapeutic practice. Reports of rape make up over 11% of all known violent crimes, and this may represent only 25% of actual incidences of rape occurring annually, making evident the need for appropriate treatment of sexual offending behavior (FBI 2019; Morgan & Oudekerk, 2019). Adolescents adjudicated for illegal sexual behavior (AISB) form a unique subpopulation of offenders. These adolescents differ from non-sexual offending delinquents in levels of social competence, psychopathology, history of childhood sexual abuse, levels of childhood attachment, and even risk for future offending (Seto & Lalumiere, 2010; Terry, 2013). AISB can have as high as 15% and as low as 4% rearrest rate for later sexual offenses and a significantly higher rearrest rate for later non-sexual offenses when compared to adolescents adjudicated for general delinquent behavior (AGDB) (Caldwell, 2002; Everhart-Newman et al. 2019; Zimring, 2004). Furthermore, re-offending rates are even higher for AISB with more antisocial behavioral patterns (Waite et al., 2005). However, the goal of the juvenile justice system is not to provide retribution for crimes but rather to rehabilitate youth. For AISB, in particular, mental health treatment does work specifically to decrease the number of sexual re-offenses (Caldwell, 2007; Reitzel & Joyce, 2006).

Delinquency and Mental Illness

When developing effective treatment programs for delinquent youth, there are many different areas to consider, such as underlying or comorbid psychopathology (Chaffin, 2008). Compared to those not adjudicated, youth in correctional facilities have a significantly higher prevalence of psychopathologies, such as depression, anxiety, and ADHD (Fazel et al., 2008). Diving further, AISB often presents features for multiple disorders, specifically depression, anxiety, and personality disorders, at significantly higher rates than any adjudicated youth subpopulation (Seto & Lalumiere, 2010). This is a critical factor to consider when developing treatment programs because untreated mental health problems are a risk factor for later re-offending (Singer et al., 2013). Further investigations, leading to a better understanding of the psychopathological features of AISB, may also provide insight into how to improve the effectiveness of current treatment programs for this population.

It can be challenging to disentangle the etiology of mental illness and delinquency, as the two often develop together. A recent longitudinal study sought to determine which came first in a sample of 806 people from the time they were in fifth grade until the age of 33: the onset of depression, substance use, or delinquent behavior (Kim et al., 2019). Participants

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were followed every 3 years since 1985. Results indicated that for the sample followed, engaging in a criminal act typically preceded the onset of depression or a substance use disorder (Kim et al., 2019). This is in line with other research indicating depression and anxiety as outcomes of offending behaviors rather than precursors (Jolliffe et al., 2019). While there are many pathways to the development of mental disorders such as depression and anxiety, these studies provide valuable insight into the effects adjudication and incarceration may have on developing youth. Regardless of etiology, understanding the mental health portrait of adolescent offenders, particularly AISB, may contribute to defeating the myth that problematic sexual behavior patterns in adolescents are unable to be "cured" and demonstrate that investing in psychological resources for adjudicated youth can reduce the risk of reoffending (Chaffin, 2008; Terry, 2013).

Family Structure, Mental Illness, and Delinquency

Adjudication in childhood can be an emotionally and mentally taxing experience for a fledging adolescent. They all at once have to adjust to living in a residential facility, separating from peers, and battling societal judgments because of their sentence. When examining influences on a child's behavioral and psychological development, it is important to include the role of the family. In addition to the stress of adjudication, youth leave their home environment upon entry and thus possibly leave their parents or guardians for the first time. This forced parental-child separation may cause additional psychological stress. The term "caregiver disruption" is used to describe insufficient attention from caregivers, often resulting in the physical and/or emotional needs of the child not being met (Sitney & Kaufman, 2020; Worley et al., 2011). This term has been used to explain increases in depressive behaviors, anxious symptoms, delinquent behaviors, and other mental health-related repercussions of parent-child separation in other life situations such as parental divorce or parental relocation (Strohschein, 2005; Apel & Kaukinen, 2008). Upon entering a residential facility, youth are being separated from families in a way not unlike divorce or other forms of family separation (Burkhart & Cook, 2010). In the context of adolescent offenders, it is important to consider the effects disrupted caregiving can have on mental health.

This phenomenon may only partially account for the high prevalence of mental illness in juvenile facilities as adjudicated youth are a very diverse population who come from multiple different home settings outside of the traditional family. For example, many come from foster homes or may even be living somewhat independently with family and friends. The present study utilizes the term family structure to encompass all possible forms of adult guardianship or parental figures which modern families may have. Differences and changes in family structure in an adolescent's life have been linked to delinquent behaviors. For example, children from separated families have a greater risk of delinquency when compared to children from non-separated homes (Price & Kunz, 2003). However, resiliency must always be considered, and in today's modern society, families come in many forms (e.g., single-parent households, same-sex parents, adoptive parents, etc.), with resiliency demonstrated in all types. Furthermore, changes in the presence of parental figures have been linked with the mental well-being of children. For example, following a divorce, if the paternal figure relocates, the child is more likely to express symptoms of depression and anxiety and partake in more rebellious behaviors as opposed to maternal relocation (Stevenson et al., 2018). To summarize, research has clearly shown that a child's family structure, delinquency, and psychopathology are all deeply intertwined.

Family Structure and AISB

When compared to a non-delinquent adolescent population, AISB has family structures and experiences that are vastly different. Thus, the family structure may impact the psychopathology of AISB more than the average child or even the average delinquent child. This is not surprising given the higher rates of sexual abuse, often with intra-familial offending patterns, seen among this population (Grant et al., 2017). Furthermore, compared to a non-delinquent adolescent population, AISB were more likely to have parents who exhibited externalizing behavior problems such as drug or alcohol abuse disorders (Duanne et al., 2003). This is critical because this type of family environment can negatively affect developing youth. AISB tends to have a significantly lower quality of parental relationships and attachment than other adjudicated adolescents including violent offenders (Sitney & Kaufman, 2020; Seto & Lalumiere, 2010; Worley et al., 2011). Furthermore, Sitney and Kaufman (2020) found that AISB tends to have lower quality relationships with their biological father than with their biological mother, among the lowest scores for any group of incarcerated youth. In terms of basic family structure, AISB are more likely to come from single-family households and are more likely to experience parental instability, such as being placed in out-of-home care or even homelessness, than AGDB (Margari et al., 2015; Felizzi, 2015). This is important when examining the etiology of sexual offenses because all these factors have been found to have a negative influence on children and adolescents. This also helps provide evidence of how family structure and quality of attachment and relationships as a result of that structure influence development in this population in a myriad of ways.

The purpose of the current study was to examine the relationship between family structure, mental illness, and delinquency in a sample of AISB. Specifically, the present study investigates whether differences in family structure pre-adjudication are associated with different levels of mental health difficulties post-adjudication. Understanding the relationship between these variables may help clinicians

better predict treatment adjustment and effectiveness. Internalizing features of psychopathology, such as depression and anxiety, were chosen as outcome variables given the prevalence among children from separated households (Strohschein, 2005).

Methods

Participants

The sample consisted of 966 male AISB at a residential correctional facility in the Southeastern regions of the United States. The average age was 15.82 years, with a 9th grade modal level for the overall sample. More than half the sample identified as Caucasian (56%), with another 41% identifying as African American, and 3% identifying as bi-racial, other, or mixed race. Regarding the family environment, 37% of the sample indicated having a history of Department of Human Resources-involvement, with 52% reporting witnessing domestic violence. Of those who had experienced domestic violence, 20% involved physical violence (n=165), and 4% of incidents involved using a weapon (n=34). Additionally, 21% reported a history of sexual abuse, 32% a history of physical abuse, and 16% a history of neglect. The majority of committing offenses were hands-on sex offenses such as Sexual Abuse (28.8%), Sodomy (19%), Sexual Assault (3.2%), and 1st Degree Rape/Attempted Rape (10.4%), and 2nd Degree Rape (7.2%). Another 18.1% had non-contact committing offenses such as Sexual Misconduct, Indecent Exposure, and/or some type of Probation Violation. Participants were enrolled in a court-mandated sex offender specific treatment program called the Accountability Based Sex Offense Prevention Program (ABSOPP). The current sample size was derived from archival data collected from youth residing at the facility between 2000 and 2016.

Procedure

AISB entering the facility were given an expansive pre-treatment assessment which serves as a basis for developing an individualized service plan. AISB are also assessed after completing the treatment program to track treatment progress. However, those data were not a focus of the current analysis. Assessments were conducted by doctoral-level graduate students on practicum rotation at the facility. Data and research conducted with this program have been approved by an official university institutional review board. At the start of each intake, AISB were read aloud the informed consent process and asked if they would like to allow their records to be used for the review.

Measures

Family structure was assessed through a series of clinical interviews upon entry to the facility. Participants were asked a series of questions regarding guardianship in the home before adjudication and incarceration by a graduate-level clinician who then coded the family environment accordingly after consulting file information for corroborating details. Of the 966 participants surveyed in the current sample, the response to this variable broke down in the following way: biological mother only (n=307), biological father only (n=63), both biological parents (n=103), biological mother and stepfather (n=175), biological father and stepmother (n=78), adoptive parents (n=44), grandparents (n=109), other biological relatives (n=49), other non-relatives (n=13), or other non-listed (n=25). The subtle difference in coding between the last two categories typically dealt with whether or not the custodial caregiver was known to the adolescent. For example, the "other non-relatives" categories were coded as custodial situations involving close family friends or other arrangements made by the courts to reflect some degree of familiarity or prior attachment for the adolescent. The non-listed category typically reflected temporary custodial situations such as foster care or group home living situations.

The Millon Adolescent Clinical Inventory (MACI; Millon, 1993) was used to assess various dimensions of depression and anxiety using scales focusing on internalizing behaviors. The MACI is a self-report, 160-items questionnaire with items featuring a true-false response format useful in analyzing psychopathology in youth (Murrie et al., 2000). It is designed to assess a broad range of psychological problems experienced by adolescents ages 13 to 19. It includes a reliability scale, three validity scales, and three content domain scales (i.e., Personality Patterns, Clinical Syndromes, and Expressed Concerns). Null reports that resulted from spikes in reliability or validity scores were not used in the present study. Those scales pertinent to measuring internalizing features were used in the current analysis. This included two personality pattern scales measuring avoidant personality features of anxiety and dolefulness features associated with depression (Inhibited/Avoidant and Doleful/Depressive); two clinical syndromes scales measuring Anxious Feelings and Depressive Affect; and two expressed concerns scales regarding Self-Devaluation and Sexual Discomfort. The MACI demonstrates moderate to strong internal consistency (.73 - .91) and test-retest reliability (.57 - .92; Davis, Woodward, Goncalves, Meagher, & Millon, 1999; Millon & Davis, 1993), and modest structural validity (see Newman et al., 2015).

Results

A series of one-way ANOVAs were used to test for group differences in the 10 categories defining family structure and the six internalizing scales of the MACI. In regards to the MACI personality patterns, there were no significant mean differences between family structure categories for either the Inhibited/Avoidant scale (F (9, 965) = 1.54, p=.13) or the Doleful/Depressive scale (F (9, 965 =1.01, p=.43). Regarding the expressed concerns scales, there were no significant mean differences between family structure categories for the Self-Devaluation scale (F (9, 965) = 1.11, p=.35). However, there were significant mean differences for the Family Discord

scale (F (9, 965) = 6.47, p=.00) with both of the other non-relative and other non-listed categories displaying the highest mean scores and dual parent homes with a biological mother present scoring the lowest. Regarding clinical syndrome scales, there were no significant mean differences for the Depressive Affect scale (F (9, 965) = 1.16, p=.32). There were, however, significant mean differences on the Anxious Feelings scale (F (9, 964) = 2.69, p=.00). Interestingly, those coming from dual parent homes with maternal involvement scored the highest. In contrast, those from the "other" custodial categories scored the lowest on anxiety. See Table 1 for means and standard deviations, and post-hoc comparisons.

Discussion

The results from this study provided multiple insights regarding the clinical presentation of this population. Scores from various scales of internalizing features of psychopathology were examined based on family structure type. The only scales found to have significant differences between group differences were the Anxious Feelings scale and the Family Discord scale. When analyzed together, these two scales provide very valuable insight into what may be an explanation for this population's overall high psychopathology rates. Those coming from dual-parent homes with maternal involvement had the lowest family discord but the highest reported anxiety levels. Youth in our sample coming from homes involving a stepparent displayed higher anxiety levels when the biological mother remained, and a stepfather was involved. Whereas those from stepparent homes where the biological father remained and stepmother was introduced displayed higher family discord. This could be particularly relevant for a male sample such as this.

When examining household differences, if some households had significantly higher rates of anxiety or depression, one could expect those households to contain a distressing environment to explain the differences. We found those individuals coming from multiparent homes with only one biological parent (i.e., step-parenting) to have some of the highest anxiety scores along with those in multiparent homes involving both biological parents. This was interesting given the assumption that parent separation or absence is a major source of family conflict for children. It may be the case that those individuals from homes where both biological parents are present, but remain in high conflict rather than separating, are feeling the effects of this sustained conflict. For these individuals, the conflict that remains in the marriage is the source of the anxiety rather than the possible separation.

When measuring family discord, results of the current analysis found those with the lowest scores came from homes with maternal involvement. This included single-parent homes headed by the biological mother as well as homes involving the new marriage of the mother. Despite the stress and potential conflict family structure change may bring, the presence of the maternal figure seems to have a stabilizing force in the expressed internalizing features of these young men. Naturally, the highest reported family discord was among those AISB coming from living situations with little to no familial attachment, such as those from the foster care system. Interestingly though, this group also reported the lowest anxious feelings indicating the possible presence of some sort of emotional numbing to deal with the stressors of these kinds of home environments.

The current best explanation for these differences in outcomes may be the concept of "disrupted caregiving." Recall that disrupted caregiving is used to describe when a child's needs are not being met by a parent (Worley et al., 2011). For this sample, this analysis comes from when the adolescents have already entered the correctional facility; those who have come from households with parental figures known for closer attachments are now living without their biological parents for the first time (Sitney et al., 2020). Whereas those who come from households without one or both biological parents are not experiencing additional distress because they did not have the same attachment experience, to begin with. Aligning these findings with previous research that has examined the entangled relationship of mental illness and delinquency, results from this study indicate that family structure pre-adjudication may predict post-adjudication mental health struggles of anxiety in AISBs. This falls in line with findings from the previously conducted longitudinal study by Kim et al. that criminal behavior presets depressive and anxiety disorders and adds in the role of family structure to the understanding of adolescent development (2019).

Limitations and Future Directions

The largest limitation of this study is that it is an association test, it is not able to provide details for any causal mechanisms. There are, likewise, additional variables that were not included in this study that could help rule out alternative explanations for the results. First, we did not have access to many family history variables. Hence, we were unable to rule out if a family history of similar psychological disorders could have played a role. Additionally, the only family variables included in this study pertained to the family structure, which leaves various familial characteristics, such as actual living arrangements, trauma, conflict level, and divorce history, among others, unspecified in this study. Analyses of family structure differences using other family environment measures could provide a more in-depth insight into the overall familial influences on these adolescents adjudicated for sexual offenses. Finally, the family grouping variable included an "other" category that may be accounted for a decent amount of variability in living environments. Creating additional categories to fit the needs of this sample could provide further information.

One area that ought to be investigated is the addition of variables that could provide or eliminate alternative explanations for these high prevalence rates. Additionally, we did not expect to have family groupings with a stepfather to score so similarly to families with both biological parents, and thus, examining the role of the step-father in the life of these adjudicated youth could be very illuminating. Another possible route could entail investigating the role that family structure may have in the offense itself. Specifically exploring if there is a pattern between family structure, offense types, and internalizing disorders. Lastly, comparing these results to a replication of this study for the general adolescent population could also highlight key population differences and explanations.

Conclusions

This study provides a wide range of evidence for how influential the family can be in the lives of those adjudicated for sexual offenses. Due to the results of this study, treatment providers may want to explore possible family causes of distress if an adolescent begins to portray anxious or depressed behaviors. Additionally, this study is evidence to support the notion that because family is so influential on developing adolescents, their families ought to be included in the treatment process, if and when possible. Results also add to the growing understanding of disrupted caregiving, especially among those who have entered a correctional facility away from their families. The practical significance of this study is that it provides insight into this population and a possible explanation for their rates of psychopathology compared to their peers.

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References

Apel, R. & Kaukinen, C. (2008). On the relationship between family structure and antisocial behavior: Parental cohabitation and blended households. *Criminology, 46(1),* 35-70.

Burkhart B.R., Cook P.K. (2010) Adolescent Sexual Offending. In: Thomas J.C., Hersen M. (eds) Handbook of Clinical Psychology Competencies (1541-1562). Springer, New York, NY.

Bowlby, J. (1969). *Attachment and Loss, 1(2).* London: Hogarth Press.

Caldwell, M. F. (2002). What we do not know about juvenile sexual re-offense risk. *Child Maltreatment: Journal of the American Professional Society on the Abuse of Children, 7,* 291-302.

Caldwell, M. F. (2007). Sexual offense adjudication and sexual recidivism among juvenile offenders. *Sex Abuse, 19,* 107-113.

Chaffin, M. (2008). Our minds are made up—Don't confuse us with the facts: Commentary on policies concerning children with sexual behavior problems and juvenile sex offenders. *Child maltreatment*, *13*(2), 110-121.

Copen, C. E., Daniels, K., Vespa, J., & Mosher, W. D. (2012). First marriages in the United States: Data from the 2006-2010 National Survey of Family Growth. National Health Statistics Report, 49, Hyattsville, MD: National Center for Health Statistics.

Davis, R. D., Woodward, M., Goncalves, A., Meagher, S. E., & Millon, T. (1999). Studying outcomes in adolescents: The Millon Adolescent Clinical Inventory and the Millon Adolescent Personality Inventory. *The Use of Psychological Testing for Treatment Planning and Outcomes Assessment, 2, 381-397.* Mahwah, NJ, US: Lawerance Erlbaum Associates Publishers.

Eisenberg, N., Cumberland, A., & Spinrad, T. (1998). Parental socialization of emotion. *Psychol Inq., 9(4),* 241-273.

Everhart-Newman J.L., Larsen J.L., Thompson K., Cyperski M., & Burkhart, B.R. (2019). Heterogeneity in male adolescents with illegal sexual behavior: A latent profile approach to classification. *Sex Abuse, 31(7),* 789-811.

Fazel, S., Doll, H., & Langstrom, N. (2008). Mental disorders among juvenile detention and correctional facilities: A systematic review and meta-regression analysis of 25 surveys. *Journal of the American Academy of Child and Adolescent Psychiatry, 47(9),* 1010- 1019.

Grant, J., Indermaur, D., Thornton, J., Stevens, G., Chamarette, C., & Halse, A. (2017). Intrafamilial adolescent sex offenders: Psychological profile and treatment. *Trends & Issues in Crime and Criminal Justice, 375,* 1-6.

Hajal, N. J. & Paley, B. (2020). Parental emotion and emotion regulation: A critical target of study for research and intervention to promote child emotion socialization. *Developmental Psychology, 56(3),* 403-417.

Jolliffe, D., Farrington, D. P., Brunton-Smith, I., Loeber, R., Ahonen, L., & Palacios, A. P. (2019). Depression, anxiety, and delinquency: Results from the Pittsburgh Youth Study. *Journal of Criminal Justice, 62,* 42-49.

Kim, B. K. E., Gilman, A. B., Kosterman, R., & Hill, K. G. (2019). Longitudinal associations among depression, substance abuse, and crime: A testing of competing hypotheses for driving mechanisms. *Journal of Criminal Justice, 62,* 50-57.

Lindblom, J., Vanaska, M., Flykt, M., Titinen, A., Tolvanen, A., Tulppala, M., & Punamaki, R. (2017). *Journal of Family Psychology, 31(3),* 316-326.

Millon, T. (1993). *Millon adolescent clinical inventory*. Minneapolis, MN: National Computer Systems.

Morgan, R., & Oudekerk, B. (2019). *Criminal victimization*, 2018 (NCJ 253043). U.S. Department of Justice, Bureau of Justice Statistics.

Murrie, D. C. & Cornell, D. (2000). The Millon Adolescent Clinical Inventory and Psychopathy. *Journal of Personality Assessment, 75(1),* 110-125.

Newman, J. L. E., Larsen, J. L., Cunningham, K. B., & Burkhart, B. R. (2015). An examination of the factor structure of the Millon Adolescent Clinical Inventory in a sample of detained adolescent boys. *Psychological assessment*, *27(3),* 1022.

Price, C. & Kunz, J. (2003). Rethinking the paradigm of juvenile delinquency as related to divorce. *Journal of Divorce & Remarriage, 39(1),* 109-133.

Reitzel, L. R. & Carbonell, J. L. (2006) The effectiveness of sexual offender treatment for juveniles as measured by recidivism: A meta-analysis. *Sex Abuse, 18,* 401-421.

Seto, M. C. & Lalumiere, M. L. (2010). What is so special about male adolescent sexual offending? A review and test of explanations through meta-analysis. *Psychological Bulletin, 136(4),* 526-575.

Singer, J. K., Maguire, M., & Hurtz, G. M. (2013). The prevalence of mental illness in California sex offenders on parole: A comparison of those who recidivated with a new sex crime versus those who did not. *Victims & Offenders, 8(3),* 253-277.

Sitney, M. H. & Kaufman, K. L. (2020). The impact of disrupted caregiving for juvenile sexual offenders. *Journal of Sexual Aggression, 26(2),* 274-287.

Stevenson, M. M., Fabricius, W. V., Braver, S. L., & Cookston, J. T. (2018). Associations between parental relocation following separation in childhood and maladjustment in adolescence and young adulthood. *Psychology, Public Policy, and Law, 24(3),* 365-378.

Strohschein, L. (2005). Parental divorce and child mental health trajectories. *Journal of Marriage and Family, 67,* 1286-1300.

Terry, K. J. (2013). *Sexual Offenses and Offenders: Theory, Practice, and Policy, 2nd Edition.* Belmont, CA: Cengage Learning.

Videon, T. M. (2002). The effects of parent-adolescent relationships and parental separation on adolescent well-being. *Journal of Marriage and Family, 64(2),* 489-503.

Waite, D., Keller, A., McGarvey, E. L., Wieckowski, E., Pinkerton, R., & Brown, G. L. (2005). Juvenile sex offender re-arrest rates for sexual, violent nonsexual and property crimes: a 10-year follow-up. *Sex Abuse*. *17(3):*313-331.

Worley, K. B., Church, J. K., & Clemmons, J. C. (2011). Parents of adolescents who have committed sexual offenses: Characteristics, challenges, and interventions. *Clinical Child Psychology and Psychiatry, 17(3),* 433-448.

Zimring, F. (2004). *An American travesty: Legal responses to adolescent sexual offending*. Chicago: University of Chicago Press.

Authors Biography

Kylie Seaton is a recent 2021 Auburn University alumna; she graduated with Summa Cum honors with her Bachelor of Arts in Psychology and Sociology, with a minor in Spanish. Kylie completed this project during her senior year at Auburn, where she was a member of Dr. Thompson's Juvenile Delinquency Lab. Kylie went on to work as the Lab Manager for the Juvenile Delinquency Lab before attending graduate school.

Kelli R. Thompson is the Director of Research for the Juvenile Delinquency Lab in the Psychology Department. Her lab highlights some of the excellent undergraduate research at Auburn University. This spring semester alone, more than a dozen original student research projects were presented and published at regional conferences and in peer-reviewed journals.

Table 1. MACI Scale Score Means and Standard Deviations by Family Structure Category.

	Anxious Feelings	Depressive Affect	Inhibited/ Avoidant	Doleful/ Depressive	Self-Devaluation	Family Discord
Family Structure	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)
Bio-Mom	67.40 (21.30) $_{a}$	59.52 (26.69)	51.23 (19.89)	52.14 (23.61)	40.47 (21.88)	57.07 (18.67) $_{a\text{-}f}$
Bio-Dad	67.83 (21.08)	67.49 (23.98)	59.14 (20.71)	55.92 (23.43)	48.10 (21.57)	58.48 (23.73) $_{g\text{-}i}$
Both Bio	72.08 (24.02) $_{b\text{-}d}$	61.66 (28.87)	55.00 (20.63)	47.61 (24.56)	42.41 (22.78)	52.13 (20.40) $_{a, g, j\text{-}o}$
Mom/Step	72.18 (22.02) $_{a, eg}$	64.34 (38.44)	55.32 (21.01)	51.72 (23.17)	44.34 (24.59)	55.12 (20.50) $_{p\text{-}u}$
Dad/Step	62.41 (22.87) $_{b, e}$	64.00 (25.87)	52.26 (23.64)	54.21 (23.24)	44.40 (129.81)	65.88 (22.22) $_{b, g, j, p}$
Adopted	68.00 (22.55)	61.30 (29.54)	58.91 (22.03)	50.34 (25.40)	50.16 (24.35)	62.14 (19.10) $_{k, q}$
Grandparents	63.16 (23.15) $_{c, f}$	61.88 (25.38)	53.43 (22.48)	52.56 (23.55)	45.19 (20.26)	65.69 (19.53) $_{c, h, l, r}$
Bio-Relative	67.12 (21.86)	65.49 (24.95)	53.53 (19.13)	54.29 (20.15)	43.18 (20.89)	64.16 (17.66) $_{d, m, s}$
Non-Relative	63.92 (12.45)	50.62 (26.42)	56.85 (19.38)	51.85 (26.29)	53.85 (19.77)	70.08 (19.59) $_{e, n, t}$
Other-Non	59.60 (20.33) $_{d, g}$	59.04 (26.87)	50.72 (23.08)	59.44 (25.94)	44.96 (24.22)	68.80 (16.07) $_{f, i, o, u}$

Note: Post-hoc comparisons using least significant differences (LSD) are indicated above with matching subscripts.