PARENT PROFILES OF JUVENILE OFFENDER SELF-REPORT OF PERSONALITY DERIVED CLUSTERS

by

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(Under the Direction of Brian A. Glaser)

ABSTRACT

As adolescents become involved in the juvenile justice system their parents are often entangled, as well. Recently, efforts to incorporate family based treatments has shown positive outcomes among populations of juvenile offenders, however, further research is warranted to better understand the needs and characteristics of parents of juvenile offenders. The aims of this study are to construct distinct clusters based on juvenile self-report data from a measure of personality assessment (Behavior Assessment System for Children) then examine the self-reported data of parents (Juvenile Offender Parent Questionnaire) of individuals within each cluster. These findings could potentially allow clinicians to better understand the parental factors associated with distinct personality profile types of juvenile offenders and allow them better anticipate and address their needs. Within this sample (n=70), two distinct clusters emerged, a "Well-Adapted" group and an "Elevated Symptoms" cluster. Upon analyzing parent data of the individuals within these clusters, no significant results were found, though one factor, Exposure to Violence, did approach significance and was found to have a small to moderate effect size (p=.058, d=.47). Consistent with previous cluster analyses with forensic samples a cohort of "normal" or "well-adapted" individuals exists within populations of juvenile offenders as well as a group which tends to report greater experiences of psychological symptoms. The findings further underscore the complex nature of the parent-child relationship for individuals within the

juvenile justice system and suggest further research is needed in order to better understand the needs and implications of continued incorporation of parents and family members in the rehabilitative efforts and services provided to adjudicated youth.

INDEX WORDS: juvenile offenders, assessment, personality assessment, parent factors, adjudicated youth, behavior assessment system for children, BASC, juvenile offender parent questionnaire, JOPQ

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CHAPTER 1

INTRODUCTION

Though reports suggest juvenile arrest rates and delinquency may be decreasing in the past decade, juveniles still account for around twelve percent of the total arrests made in the United States each year, and account for fourteen percent of all arrests on violent crime and twenty-two percent of all arrests for property crime (Juvenile Offenders and Victims: 2014 National Report, 2014). In order to better inform public policy, justice system reformation, community supervision practices, and the development and implementation of clinical interventions, researching juvenile offenders in a manner that is sensitive to their complex personal, social, and familial factors is crucial. If a central goal of the juvenile justice system is rehabilitation and intervention for delinquent youth then the assessment and evaluative stages of their involvement in the system should strive to provide a comprehensive view of the co-occurring risk and protective factors for juvenile offenders within the context they live in. Given the established relationships between delinquency and parent-adolescent relations and the emerging trends for incorporating families and parents into a juveniles involvement with the justice system (Vidal & Woolard, 2016), further research of the relationship between juvenile offenders and their parents or guardians is warranted.

Throughout adolescence the relationship between parents and children is already marked by many changes, and the stress and potential negative influence of offending may also have significant impact on the quality and nature of this relationship over time (Cavanagh & Cauffman, 2017). The importance of the impact of this parent-child relationship has been well-

documented, however, current assessment trends may tend to overemphasize child factors and fail to investigate parent factors and its impact on the child; as a result the existing research may not adequately capture the complexity of this relationship (Glaser, Calhoun, & Puder, 2005; Paik, 2017).

Statement of the Problem

Assessment and classification of juvenile offenders and their needs will always be an important component of developing informed treatments and policies that can better serve this population and interrupt the potential for prolonged involvement in the justice system from adolescence to adulthood. Interest in recent years has increased in the involvement of families and parents within the justice system and this may indicate a shift to new perspectives regarding the impact of parenting on delinquency. Early juvenile justice system practices tended to place blame for delinquency to parents of offending youth and often take a punitive approach towards parents regarding their parenting capabilities or practices while also mandating their involvement in their child's involvement with the system; this can understandably place a significant strain on an already tenuous relationship between parents and children during adolescence. The discussion has recently shifted to a more nuanced approach to understanding the complicated intersection of the justice system, parent-child relations, parents' perception of the justice system, and mental health (Walker, Bishop, Pullmann, & Bauer, 2015). As parent-child relationships can have a significant impact on juvenile offender outcomes, further investigation of parental factors and identifying experiences, traits, and profiles common among parents of offending youth is a necessary aspect, especially if the juvenile justice system hopes to continue to collaborate with parents as a support and resource for the continued development of their child following involvement with the justice system.

Purpose of the Study

The purpose of this study is to investigate and identify parent profiles that correspond with distinct groups of juvenile offenders based on self-report and parent self-report data within a forensic sample. Though this study will serve as a clinical exploration of parent factors, results will hopefully serve to provide more information regarding the delicate parent-child relationship in the context of the juvenile justice system and continue to fill in gaps in the literature regarding parent factors including, but not limited to: parental perceptions of the child, the justice system, and their own parenting competence. The results may also provide insight into the bidirectional impact of juvenile offending and the parent-child relationship. By investigating parent profiles as a function of adolescent self-report of personality, clinicians will be better informed and perhaps more prepared to anticipate and address parental factors with regard to developing and implementing appropriate interventions for juvenile offenders. In order for the juvenile justice system to be more effective and competent in developing and providing interventions sensitive to the individual needs of offending youth with whom it comes into contact with, psychologists, counselors, probation officers, judges, and other stakeholders will need to be able have a clearer picture of the parent-child relationship and discern the parental factors which may serve to protect or place a juvenile at-risk, and determine the extent to which parental involvement in rehabilitative or supervision efforts is likely to be effective.

Research Hypotheses/Questions

Question 1: Are there distinct groups of juvenile offenders based on the self-report data collected on the BASC-2?

Hypothesis 1: A two-to-five cluster solution of BASC- 2 profiles will emerge within this sample of juvenile offenders.

Question 2: What parent constructs or profiles as measured by the JOPQ are associated with these clusters?

Hypothesis 2: Significant differences in respondents' results on the JOPQ will emerge across cluster membership determined by juvenile self-reported symptomology.

CHAPTER 2

LITERATURE REVIEW

Each year nearly 1.5 million juveniles are arrested in the United States and many of these are juveniles who have recidivated (Leverso, Bielby, Hoelter, 2015), or committed new crimes; ranging in severity from status offenses (violating condition of probation or parole) to violent crimes against persons or property. Additionally, as of 2008, nearly one in eight violent crimes was committed by a juvenile (Punzancherra, 2009) and research points to the dangerous pattern of early juvenile crimes become a predictor for more serious offenses as they progress through adolescence and into adulthood (Leverso et al., 2015). As of 2008, juveniles made up 16% of arrests for violent crimes and 26% of arrests for property crime (Kalist, Lee, & Spurr, 2015). Furthermore, as of 2010 an estimated 71,000 juvenile offenders were incarcerated in both public and private facilities according to the National Center for Juvenile Justice National Report (2014). Kalist et al. argue for a greater focus of research and resources in addressing juvenile recidivism rather than adult recidivism as adolescents may be more easily directed or diverted into pro-social behaviors, rather than continuing into life as a career criminal (2015). Difficulties identifying potential predictors for continued delinquency and failure to provide appropriate interventions have contributed to the staggering likelihood of recidivism. Within a large sample of juvenile offenders, as many as 49.8% of male juveniles and 31.7% of female juveniles went on to commit a second offense (Kalist et al. 2015). Another study, which conducted a meta-analysis of 17 studies of juvenile recidivism observed an overall mean recidivism rate of 48% (Cottle, Lee, & Heilbrun, 2001) and the Office of Juvenile Justice and Delinquency Prevention

National Report (2006) reports that the probability of receiving a second referral for juveniles is 59%, with an average time between first and second offense of only 1.34 years for males and 1.32 years for females. Further investigation of the needs of this population as well as the development of appropriate interventions is warranted if efforts are to be made to reduce juvenile involvement in the justice system.

Personality Assessment among Juvenile Offenders

Investigation of the relationship between criminality and personality have confirmed associations between trait and behavior factors, with some evidence suggesting higher scores on personality disorder traits for juveniles when compared to adult samples (Krischer, Sevecke, Lehmkuhl, & Pukrop, 2007). This suggests a potential critical period in which instrumentation may be particularly valuable and sensitive to identifying existing pathology within offending populations. In fact, it has been demonstrated that personality pathology can be particularly salient in adolescent populations as traits may peak during this period with relatively slow decline towards more stable traits in adulthood for most individuals (Cohen, Crawford, Johnson, Kasen, 2005). When examining the links between personality and behavior some results may fall short of strong evidence of causal relationships as it is difficult to control for all confounding variables, however, overwhelming evidence supports the theory of psychopathology and the associated behaviors, both externalizing and internalizing, among juvenile offender populations as a manifestation of personality disorders (Krischer et al., 2007).

Elevated symptoms of pathology emerging through personality assessments during adolescence is associated with negative implications and outcomes over the course of adolescence and into adulthood (Cohen et al., 2005) and affirms the importance of utilizing these

assessments in order to identify concerns and provide early intervention when necessary. Within the juvenile justice system clinicians frequently use assessments in order to evaluate juvenile offenders for a number of reasons. Clinicians may be utilizing information gathered from assessments in order to evaluate needs, plan treatment, and often at the request of the court to determine risk. The data collected from assessments may be reviewed by the court and may inform many decisions regarding the youth's sentencing, transfer to adult court, level of supervision, competence, custodial commitment, diversion, sex offender registration, or potential treatment opportunities (Viljoen, McLachlan, & Vincent, 2010). Ultimately, assessment interpretation often contributes to decisions made on behalf of an offending youth and the allocation of resources within the juvenile justice system. Given the overall rehabilitative goal of juvenile justice, correctly identifying the mental health needs of juvenile offenders is an important step in providing adequate treatment.

Baum, Archer, Forbey, and Handel conducted a review of the extant literature regarding two prominent assessments with juvenile justice samples (2009). Their review focused on two of the most widely used personality self-report measures, the Minnesota Multiphasic Personality Inventory- Adolescent (MMPI-A) and the Millon Adolescent Clinical Inventory (MACI, and discussed their appropriateness and clinical utility for use with juvenile offending populations (Baum, Archer, Forbey, & Handel, 2009). These assessments have been used to identify differences between offending and non-offending youth, identify differences between types of offenders, and construct offender profiles (Baum et al., 2009). This can provide valuable insight to clinicians in identifying specific mental health concerns, however, the assessment and its sensitivity to various factors may also contribute to the findings. In a sample of juvenile offenders who were administered the MACI, the following were the most frequently reported

problems: family discord, depression, dolefulness, peer insecurity, and self-devaluation. However, when compared to other self-report measures the MACI did not adequately represent stress experienced within academic environments or strain with teachers; additionally when compared to parent reports a different diagnostic picture emerged which expressed concern regarding conduct, aggression, and attention and hyperactivity concerns (Salekin, Larrea, & Ziegler, 2002). Personality profiles within juvenile offender populations have also been evaluated using the MMPI-A; most frequently the emphasis lies in score differences on the Pd scale, which measures psychopathic deviance, between delinquent and non-delinquent adolescents. While the MMPI-A provides a great deal of data regarding adolescent personality characteristics, a major drawback is the lack of appropriate normative data (Toyer & Weed, 1998); the use of clinical populations to gather normative data in instrument development is not uncommon, however, it can narrow an assessments ability to only identify pathology without generating a comprehensive picture of risk, protective, and adaptive skills or behavioral traits.

Behavior Assessment System for Children (BASC)

With the hopes of drawing upon existing strengths, relationships, and available resources for juvenile offenders it is imperative to utilize assessments that can be sensitive to both risk and protective factors. While the aforementioned assessments have a focus on pathology and tend to reveal a deficit-based conceptualization of offending populations, the BASC provides one alternative that allows for a broader picture. The identification and classification of behavioral and emotional concerns is an integral part of providing any therapeutic intervention, however, many previous efforts in diagnosis provide evidence of either the presence or the absence of a disorder. As a result, clinicians have little information regarding the severity or actual day-to-day manifestation of these concerns (Dever, Gallagher, Hochbein, Loukas, & Dai, 2017).

The BASC is described as an instrument that is sensitive in its measurement of behavior and personality, from a multidimensional approach, encompassing both adaptive and clinical dimensions (Reynolds & Kamphaus, 2004). This approach grants some advantages to the BASC over other measures of personality; since emotional and behavioral problems are multifaceted and complex, utilizing an assessment which is able to identify both adaptive and maladaptive patterns of behavior is valuable in understanding juvenile offenders, a group which is often characterized solely in terms of their behavioral problems. The present study relies on the Behavior Assessment System for Children- Second Edition- Self Report of Personality (BASC-2 SRP).

The BASC-2 SRP is a personality inventory that gathers information from respondents regarding their experiences and self-perceptions in true/false items as well as four-point scale items ranging from "never" to "almost always". In order to ensure its validity, the BASC-2 SRP contains three indices to detect potentially invalid results. The F index is designed to detect the possibility of a respondent reporting in an overly negative fashion; elevations on the F index indicate the respondent endorsed items that are normatively infrequently endorsed, or respondent failed to endorse positive items that are frequently endorsed. The L index is designed to detect susceptibility to social desirability or "faking good"; elevations on the L scale may indicate low insight, a high degree of defensiveness, inability to comprehend items, or an overly positive view of the self. The V index is designed to detect carelessness or lack of cooperation with the assessment; elevations on the V index indicate the respondent failed to appropriately interpret and respond to nonsensical items.

The BASC-2 SRP generates clinical, adaptive, as well as composite scores. The clinical scales measure deficits in school, home, interpersonal, or community functioning; scores in the

60-69 range are considered in the "At-Risk" range, and scores of 70 or greater are considered "Clinically Significant". The clinical scales include:

1. Anxiety: generalized fears, irrational poorly defined worries, nervousness.
2. Attention Problems: inability to maintain attention, easily distracted.
3. Attitude to School: general opinion of the utility of school, comfort with school-related matters.
4. Attitude to Teachers: perception of teachers as uncaring, unfair, or unhelpful.
5. Atypicality: unusual thoughts or perceptions.
6. Depression: symptoms of the disorder, loneliness, sadness, anhedonia, hopelessness.
7. Hyperactivity: restlessness, talking while others talk, and noisiness.
8. Locus of Control: perception of control over external events.
9. Sensation Seeking: need for new and varied sensations or experiences and willingness to take physical or social risks in order to achieve sensation.
10. Sense of Inadequacy: perceptions of low achievement expectations, perception of being unsuccessful.
11. Social Stress: stress experienced in interactions with peers and others.
12. Somatization: physical problems as an expression of psychological difficulties.

Adaptive scales are designed to measure positive adjustment; scores in the 30-39 range are considered "At-Risk" and scores below 30 are considered Clinically Significant. The adaptive scales include:

1. Interpersonal Relations: success in relating with others and enjoyment in interaction with others.

2. Relation with Parents: status of parent-child relationship, degree of parental trust, and perception of importance within family.
3. Self-Esteem: self-satisfaction, including global and physical characteristics.
4. Self-Reliance: assurance in ability to make decisions and self-confidence.

The composite scores act as summary scores for the BASC-2 SRP; scores in the 60-69 range are considered in the "At-Risk" range, and scores of 70 or greater are considered "Clinically Significant", however, for the Personal Adjustment composite scores in the 30-40 range are considered "At-Risk" while scores of 30 or below are considered "Clinically Significant". The composite scales include:

1. School Problems: adaptation to school; derived from clinical scale scores of Attitude to School, Attitude to Teachers, and Sensation Seeking.
2. Internalizing Problems: inwardly directed distress; derived from clinical scale scores of Atypicality, Locus of Control, Social Stress, Anxiety, Depression, and Sense of Inadequacy.
3. Inattention/Hyperactivity: derived from clinical scale scores of Attention Problems and Hyperactivity.
4. Personal Adjustment: low scores indicate low levels of adjustment; derived from adaptive scale scores of Interpersonal Relations, Relations with Parents, Self-Esteem, and Self-Reliance.
5. Emotional Symptom Index: global indicator of serious emotional symptomology; derived from clinical scores of Social Stress, Anxiety, Depression, Sense of Inadequacy and two adaptive scale scores from Self-Esteem and Self-Reliance.

(Information adapted from the Behavior Assessment System for Children- Second Edition Manual, Reynolds & Kamphaus, 2004)

The BASC-2 is widely used in educational settings but has also demonstrated validity in use with juvenile offender populations. Peiper (2009) described the BASC-2 SRP-A as a valuable screening and assessment tool and provided evidence of factor validity and the stability of clinical scale and composite scores when used with offending populations. The result of this study detailing the reliability and validity of these scales suggests its appropriateness and its generalizability to other populations of juvenile offenders (Peiper, 2009).

Previous research conducted on the BASC and BASC-2 has suggested cluster solutions with a wide range from two to seven clusters (Dever et al, 2017; DiStefano & Kamphaus, 2006). Much of the cluster research conducted with the BASC has been in attempts to better identify and classify behavioral profile types within the school setting and utilizes a combination of data to do so including teacher rating forms DiStefano & Kamphaus, 2006). At this time, little research exists particularly related to the BASC-2 SRP types or clusters that clinicians can expect to encounter when working with juvenile offenders.

A 2004 study did, however, develop a five-cluster solution using a sample of detained juvenile offenders based on the BASC- SRP (Scarborough, Glaser, Calhoun, Stefurak, & Petrocelli, 2004). Conducting a hierarchical cluster analysis of the ten clinical and four adaptive scales distinct clusters emerged and the five-cluster solution was considered the most appropriate fit; the following cluster overview is derived from the Scarborough et al. (2004) publication in the Journal of Offender Rehabilitation:

1. Normal: characterized by scores in the average range across clinical and adaptive scales, with slight depressions on the Attitude to Teacher, Attitude to School, and Depression clinical scales. This cluster is described as experiencing few behavioral, social, or emotional problems within the school or home environment and their problems are likely average within the adolescent experience.
2. Well-Adapted: characterized by scores in the average range for all scales with some elevations on the adaptive scales. Internalizing scale scores were extremely low in the areas of Social Stress and Anxiety, while adaptive scale scores in the area of Self-Esteem was elevated. This cluster is described as having positive relationships with parents and peers and is moderately self-reliant.
3. Moderate Behavior Problems: characterized by scores in the average range for all scales with elevations in the clinical scales Attitude to School, Attitude to Teacher, Sensation Seeking, Depression, and Sense of Inadequacy. Adaptive scales in the average range with a slight depression in Self-Reliance. This cluster is described as being potentially hostile or dissatisfied with the school environment, and may have a tendency to act out in school; additionally, this cluster may be unhappy or perceive themselves as being unsuccessful in school and a lack of confidence in their abilities.
4. Low Self-Reliance: characterized by an adaptive scale score in Self-Reliance in the "At-Risk" range. Additional relative depressions in scores on clinical scales of Anxiety and Relations with Parents. This cluster is described as being lacking in self-confidence, potentially viewing their parents as having little concern or trust for them, and a tendency to repress any unpleasant thoughts or feelings.

5. High Internalizers: characterized by elevations on scores of Atypicality, Locus of Control, Social Stress, Depression, and Sense of Inadequacy; with depressions on adaptive scale scores of Relations with Parents (clinically significant), Interpersonal Relations, and Self-Reliance. This cluster is described as lacking confidence, difficulty relating to others, severe family problems, poor social skills, experience high degrees of stress, tension, bizarre thoughts, little perceived control in their lives, and experience little success in school and other environments.

The findings of this study illustrate some of the factors which may be specific to populations of juvenile offenders in comparison to non-offending youth and suggest the importance of continued evaluation with updated measures and among samples of offending youth in order to develop more knowledge regarding the self-perception of juvenile offenders experiences, behavior, personality, and adaptive characteristics.

Role of Parent-Child Relationship among Juvenile Offenders

The alarming rates of arrest and incarceration suggest that the needs of juvenile offenders are not being met once they have entered into the juvenile justice system. The need for continued assessment of needs and improvement of culturally and contextually appropriate treatment for juvenile offenders still looms, however, efforts already being made in this field present the extant guidelines for best practices with this population and contributed to the rationale for the present study. In order to address the unique needs of the juvenile offender population, it is imperative to also consider the context that they exist in, one such contextual factor is the relationship to their parent(s). At this time, not much is known regarding the bidirectional impact of criminality on parent-child relationships over time. While criminality places stress on the parent-child

relationship, parents may serve as a protective factor; however, persistent criminality is likely to be detrimental to a relationship which may already be experiencing transitions as the child moves through adolescence (Cavanagh & Cauffman, 2017). Considerable evidence exists regarding the relation between parents and research across cultures indicates that more positive or warm parenting yields greater adjustment during childhood, while abusive or detached parenting styles can contribute to maladjustment and greater incidence of anti-social behaviors (Smith, Knoble, Zerr, Dishion, & Stormshak, 2014). Insight into the relationship between offenders and their parents may be a critical element in providing a deeper understanding of the needs of this population.

Decades of research have identified familial factors which are associated with juvenile delinquency including parental monitoring, single parenting, family criminal history, marital conflict, socioeconomic status, family violence, poor family management techniques, parental mental health, and exposure to violence within the home (Rose et al., 2004). Similar findings have been consistent over time, with particular emphasis on parental supervision, involvement, and criminality within the family as strong risk factors among profiles of juvenile offenders Ortega-Campos, García-García, Gil-Fenoy, & Zaldívar-Basurto, 2016). The link between parenting and delinquency has been established since the late 1980's, and in the 1990's the research began to shift towards the investigation of specific parenting practices and its impact on trajectories of delinquency (Hoeve, Blokland, Dubas, Loeber, Gerris, & van der Laan, 2008).

Research regarding the predictive nature of parental factors for adolescent delinquency has demonstrated considerable overlap with associated characteristics, specifically: lack of parental supervision, parental rejection; as well as environmental factors including parental neglect, variance in parenting style, and the presence of violence or abuse in the home (Snyder,

Glaser, & Calhoun, 2015). Snyder et al. (2015) found an association between parental perception of the child and the parent-child relationship and the child's readiness to change, indicating that parental factors not only impact the development of delinquency but may also contribute to the likelihood of a child being open to and positively impacted by interventions offered by the court. Parental and environmental factors may significantly impact the way the youth interprets their delinquency and whether they consider it to be a problem, as a result these parental factors may have a significant factor on the likelihood of the court to be able to implement interventions successfully. This also further underscores the complexity of this relationship and the need for further investigation in order to obtain a more comprehensive understanding of factors unique to juvenile offenders and their parents.

In a 2015 study, which investigated the impact of parental supervision on juvenile delinquency, specific attention was placed on parental practices and their potential to yield valuable information for clinicians (Williams & Smalls 2015). Given the widespread use of community supervision programs utilized with juvenile delinquents as an alternative to incarceration, understanding the environment that a juvenile will be operating in is a crucial component to developing supervision strategies which can yield positive outcomes. Exploring parental practices can provide crucial information to practitioners, as well as legislators and those involved in policy-making in order to identify practices which serve as protective or risk factors for adjudicated youth living in the community as findings have suggested up to 73 percent of risk factors leading to delinquency were mediated by parental supervision and discipline and rejection, hostility, ineffective supervision, and poor communication were significantly associated as risk factors for delinquency (Williams & Smalls, 2015). Results from this sample of delinquents in the southeastern United States indicated a link between higher

scores from parents on measures of inconsistent discipline and poor parental monitoring and juvenile delinquency.

Understanding the relationship that exists between parents and juvenile offenders also may provide the opportunity to incorporate the parents within treatment. Meta-analyses of family based treatments have shown to have positive effects when working with mental health problems in general, and can reduce the likelihood of externalizing behaviors and anti-social behavior among youths (Dopp, Borduin, White, & Kuppins, 2017). Dopp et al. meta-analysis examining 324 separate effect sizes published regarding family based treatments for serious youth offenders found modest effect sizes, however, the effects were more durable over time in comparison to the usual services. The authors caution against some existing treatments for juvenile offenders that may attempt to take too narrow a focus, and as a result ignore the context which juvenile's exist in and fail to adequately address the many dimensions that could be contributing to criminality. In contrast, incorporating family may allow for greater impact as it is often implemented within the community, and may produce greater effects over time (Dopp et al., 2017). In order to do this effectively, it is imperative to increase the existing knowledge of the problems clinicians can expect encounter in working with parents of juvenile offenders.

Incorporating parents into any intervention or rehabilitative efforts requires their cooperation; it is necessary for the child and parent to have a relationship that is amenable to this kind of involvement as well as cooperation of the parent/guardian with the expectations required by the court. Unfortunately, a parents' ability to provide parental supervision and create boundaries for a child, as well as their likelihood of being a willing participant in their child's involvement with the court may be hindered by a fear of the child. Particularly in cases in which the parent or another household member may have been a victim, as research has demonstrated

that offending youth who have assaulted their parents are significantly more likely to be involved with high-risk peers (Snyder et al., 2015). In circumstances in which youth have become violent within the home, a parents' fear of their child may be exacerbated while faced with the dilemma of feeling helpless to resolve the situation without the aid of law enforcement and acknowledging the strain this involvement would likely cause should the child return to the home following their arrest. This also raises the question of the degree to which parents and youth perceptions of the justice system may impact their involvement and ultimately outcomes within the juvenile justice system. A parent's perception of the legal system will likely inform that of the child and poor initial perceptions of the legal system are associated with a lower perception of the legitimacy of the court experience for youth. Additionally, youth who feel as though they have received unfair treatment within the justice system are more likely to recidivate in the future (Sprott & Greene, 2010; Piquero, Gomez-Smith, & Langton, 2004). This further demonstrates the immense impact parental perceptions may have in determining outcomes for juvenile offenders and requires acknowledgment of factors which may only be identified if specific attention is placed on the parent(s)/guardian(s) of juvenile offenders

Juvenile Offender Parent Questionnaire (JOPQ)

Parental factors have long been understood as an important component in the course of the development of delinquent behavior (Rose, Glaser, & Calhoun, 2004). In order to better understand juvenile offenders and gather information without the potential limitations of self-report measures, parents are often administered instruments which evaluate their perception of the child's behavior, emotional state, executive functioning, and psychological well-being. While using assessments is important component in the classification and diagnosis of behavioral or relational problems, too often the focus becomes narrowed in on child factors without

adequate emphasis on the role the relationship between the child and parents plays (Glaser., 2005). In order to address this potential gap between the established importance of parent-child relations and existing parent report measures, the Juvenile Offender Parent Questionnaire (JOPQ) was developed as a way to identify and classify specific parental needs.

The items on the JOPQ measure across six factors, as well as one additional validity scale. Parent(s)/ guardians(s) of the youth are asked to respond to the items on a four-point scale ranging from "Completely False" to "Completely True". The items describe thoughts or feelings the parent or guardian may have toward their child now or at any time within the previous year. The scales include:

1. Exasperation with Regard to the Child: measures parent's hopelessness, frustration, resignation, readiness to give up on their child, perception of the child's future and their ability to positively influence the child.
2. Mistrust of the Juvenile Justice System: items are focused on court, probation officers, police, the judge, and justice system as a whole to measure trust or lack of trust a parent may have concerning their child's involvement with the system; measures concern that system may be inappropriately punitive without providing appropriate support for the child.
3. Fear of the Child: items to measure the parent's fear of being a victim of physical violence at the hands of their child.
4. Shame over Parenting Self-Efficacy: items measure feelings of shame, humiliation, embarrassment, or discouragement in regard to a parent's perceived ability to raise their children; high scores on this particular scale may be indicative of parents who are critical of themselves or may be enabling or even reinforcing their child's antisocial behaviors.

5. Parents Perception of the Child's Exposure to Violence: items measure the parent's perception of the amount and type of violence a child may have been exposed to at home or within the community.
6. Parental Monitoring: items measure the parent's level of monitoring of the child's behavior at home, school, and community.
7. Lie: meant to detect invalid or careless response patterns; items measure whether the respondent endorses responses that should be infrequently endorsed.

The JOPQ has demonstrated that it can be a valuable tool in better understanding the factors which impact the complex relationship between a parent and an offending youth and when utilized within the justice system in order to provide specific remediation for parents and allow for closer examination of potential barriers to rehabilitative efforts by the courts, which could impact the likelihood of further involvement within the justice system (Rose et al., 2004). Research related to the JOPQ has established certain profiles regarding the impact of parent perceptions and child antisocial behaviors; parents of children who were frequent reoffenders reported greater degrees of hopelessness, difficulty monitoring their children, fear of harm from the child, low self-efficacy as a parent, and a higher degree of mistrust of law enforcement and the justice system. Additionally, children with status violations, or minor violations while on probation, had parents who reported higher degrees of parental exasperation and lower scores in parental monitoring (Glaser et al., 2005). These findings regarding the utility of the JOPQ were consistent with previous research that emphasizes the importance of the parent and child relationship and the impact that a child's environment and parental factors have in the behavior of the child, from the onset of delinquency to the likelihood of recidivism.

CHAPTER 3

METHODS

Participants

Data was collected from adjudicated youth and their parent(s)/guardian(s) referred for counseling services through the Department of Juvenile Justice in northeast Georgia. The valid profiles included in the sample consisted of 70 individuals with a mean age of 15.04 years (SD: 1.16). The majority of participants identified as female (52.9%) while the remaining participants all identified as male (47.1%). The self-identified racial composition of the sample included African American (71.4%), Caucasian (18.6%), Latino/a (5.7%), and Multiracial (4.3%). The referred youth completed the BASC-2 SRP and parent(s)/ guardian(s) completed the JOPQ as part of a battery of instruments administered during their clinical intake.

Instruments

Behavior Assessment System for Children- 2nd Edition- Self-Report of Personality (BASC-2 SRP)

The Self-Report of Personality (SRP) is a 176-item personality inventory that is designed to evaluate personality, affect, and self-perception of children and young adults (Reynolds & Kamphaus, 2004). Respondents to the questionnaire are presented with items which ask them to answer with either “true” or “ false”, as well as items on a four-point scale including “Never”, “Sometimes”, “Often”, and “Almost Always”. Reliabilities for the composite scores range from the middle to upper .80s up to the middle .90s. Individual scales have demonstrated high reliability, generally with median values near .80 and four types of evidence support the validity

of the instrument (Reynolds & Kamphaus, 2004). Assessments for which the response pattern produced scores found outside of the "Acceptable" range on any validity indices were excluded from the data set. For the purpose of this study, the clinical scales will be used to determine cluster membership.

Juvenile Offender Parent Questionnaire (JOPQ)

The JOPQ is a 67-item questionnaire designed to provide a profile for parents of juvenile offenders across six factors. Items for all six subscales are presented on a four-point scale including "Completely False", "Mostly False", "Mostly True", and "Completely True". Reported reliabilities across the subscales range from the good to very good ranges as follows: Exasperation in Regard to the Child (.92), Mistrust of the Juvenile Justice System (.82), Shame over Parenting Self-Efficacy (.71), Parental Monitoring (.83), Fear of the Child (.92), and Parent's Perception of the Child's Exposure to Violence (.82). The JOPQ also includes a Lie/ Infrequency scale (.31), which is meant to measure infrequently endorsed responses and detect invalid response patterns (Rose et al., 2004). Validity research has demonstrated an adequate fit for the six-factor model and evidence of its construct validity (Snyder, Glaser, & Calhoun, 2013).

Statistical Analyses

Individuals with valid BASC-2 profiles as well as a valid JOPQ completed by their parent(s)/guardian(s) were subjected to a cluster analysis on the basis of their scores across clinical scales of the BASC-2 SRP. A cluster analysis is a way of classifying individuals into homogenous groups within a data set. The purpose of using the cluster analysis with this population is to create smaller subgroups of juvenile offenders who are similar to members within their cluster and distinct from the members of other clusters (Kamphaus, Distefano, &

Lease, 2003). Previous research on other BASC measures suggests the use of multiple clustering processes in order to ensure the most accurate results. Kamphaus et al. recommend using Ward's hierarchical clusters as a starting point in order to create clusters with minimal within-group variance, then in order to address the potential for error within cluster assignment use the final Ward's solution to begin a *k*-means iterative clustering procedure (2003; Milligan & Cooper, 1987). Using multiple methods of clustering analyses can ensure the individuals within a data set are assigned to the most appropriate cluster. All statistical analyses were conducted using SPSS statistical software. Given the size of this sample utilizing the *k*-means iterative clustering procedure was more appropriate to establish a starting point, then Ward's hierarchical linkages were used to validate any decisions regarding cluster membership as well as in establishing the most valid cluster solution by identifying the overlap of cluster membership between the *k*-means iterative results and Ward's linkages. Following the identification of distinct clusters on the BASC-2, the JOPQs completed by the parents of members of each cluster were examined in order to construct a JOPQ parent profile associated with the BASC-2 clusters.

Limitations

All participants from this study were referred through the Department of Juvenile Justice in Georgia, in addition, in order to be included in the study participants needed valid results from all instruments included in the scope of this study and as a result the sample size is relatively small. Though the study is exploratory in nature in order to identify possible avenues for better assessing the interaction of parent/child relations and self-reported symptomology, it is important to note that as a result of the geographic restrictions of the sample as well as the limited sample size that it may be difficult to generalize these results to other samples of juvenile offenders. Additionally, due to the small sample size and limited data collected from participants on the

JOPQ regarding the relationship between the juvenile and the JOPQ informant, further limitations exist in the present study in evaluating potential differences between unique guardian or parent and child dyads.

Research Questions

Question 1: Are there distinct groups of juvenile offenders based on the self-report data collected on the BASC-2?

Hypothesis 1: A two-to-five cluster solution of BASC- 2 profiles will emerge within this sample of juvenile offenders.

Question 2: What parent constructs or profiles as measured by the JOPQ account for a significant amount of variance in cluster assignment?

Hypothesis 2: Significant differences in respondents' results on the JOPQ will emerge across cluster membership determined by juvenile self-reported symptomology.

CHAPTER 4

Results

The present study examined self-report personality assessment data collected from juvenile offenders in order to construct distinct clusters. After establishing clusters, data from parents/guardians of the individuals within clusters would then be examined across six factors measured by the JOPQ to investigate the characteristics of parents of juvenile offenders across clusters as well as to investigate salient factors within parent and child relationships among populations of juvenile offenders. Descriptive statistics of the clinical scale variables examined on the BASC-SRP and JOPQ factors within the sample are presented in Table 2 and Table 3.

Cluster Analyses

Question 1: Are there distinct groups of juvenile offenders based on the self-report data collected on the BASC-2?

Hypothesis 1: A two-to-five cluster solution of BASC- 2 profiles will emerge within this sample of juvenile offenders.

Previous research suggests that in establishing cluster membership based on personality assessment among juvenile offenders a two to five cluster solution would exist among this sample (Dever et al, 2017; DiStefano & Kamphaus, 2006; Scarborough, Glaser, Calhoun, Stefurak, & Petrocelli, 2004). This study ultimately investigated two, three, and four cluster solutions and used *k*-means iterative clusters to initially examine the data and attempt to establish

a cluster solution which represented the best fit of the sample, then used a Ward's hierarchical linkage in order to validate decisions regarding final cluster solutions.

Using the BASC-SRP data collected from the sample of juvenile offenders, a *k*-means iterative clustering analysis was run to evaluate two, three, and four cluster solutions. The initial two-cluster solution partitioned the sample into cluster 1 including 29 individuals, while cluster 2 included the remaining 41 individuals.

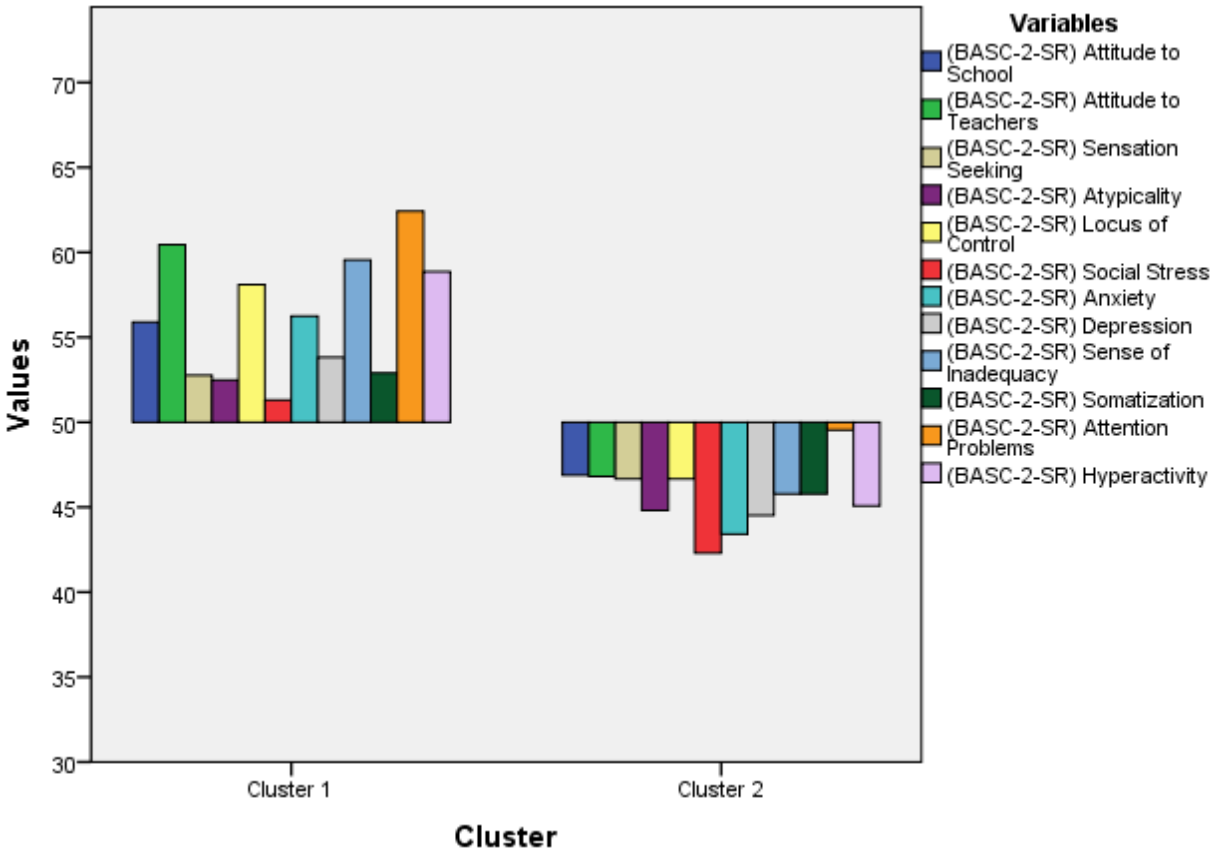

Figure 1. Two-Cluster Solution

Since the objective of a *k*-means iterative approach is to create distinct clusters and maximize differences among the cases within these clusters, statistically significant differences between groups should exist. Results of an ANOVA analysis indicated statistically significant

differences across all variables included in the cluster analysis. More detailed information of the two-cluster solution is available in Tables 5-7.

The three-cluster solution partitioned the sample into three distinct clusters with cluster 1, 2, and 3 consisting of 11, 25, and 34 individuals, respectively. This solution also achieved statistical significance across all variables when put through an ANOVA analysis.

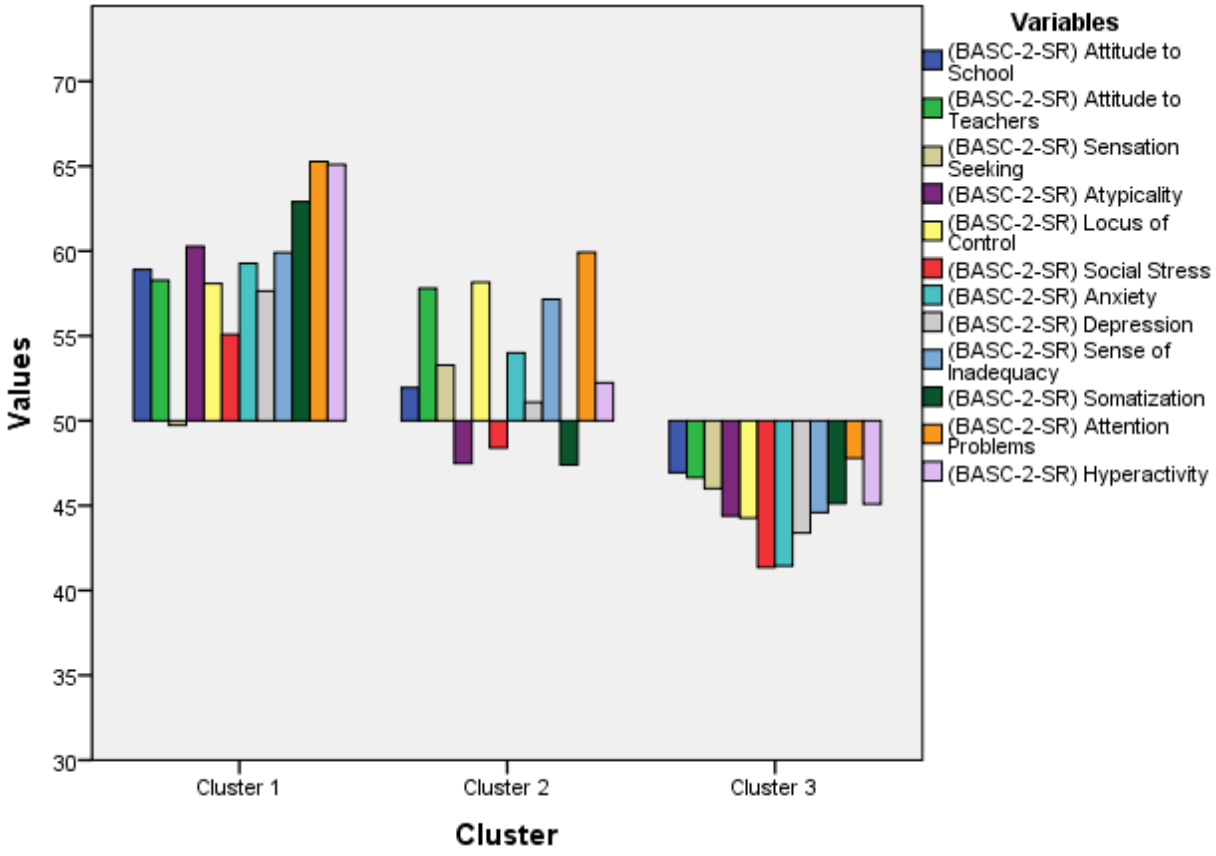

Figure 2. Three-Cluster Solution

The three-cluster solution resulted in greater variance in cluster size, as one group, which endorsed higher levels of symptomology in comparison to the others became smaller in relative size, consisting of only 11 individual cases. More detailed information of the three-cluster solution is available in Tables 8-10.

Finally, the four-cluster solution partitioned the sample into four distinct clusters based on the data; the resulting four clusters were made up of 21, 8, 27, and 14 individual cases. Statistically significant differences across all variables were also found between these four clusters following validation with an ANOVA analysis.

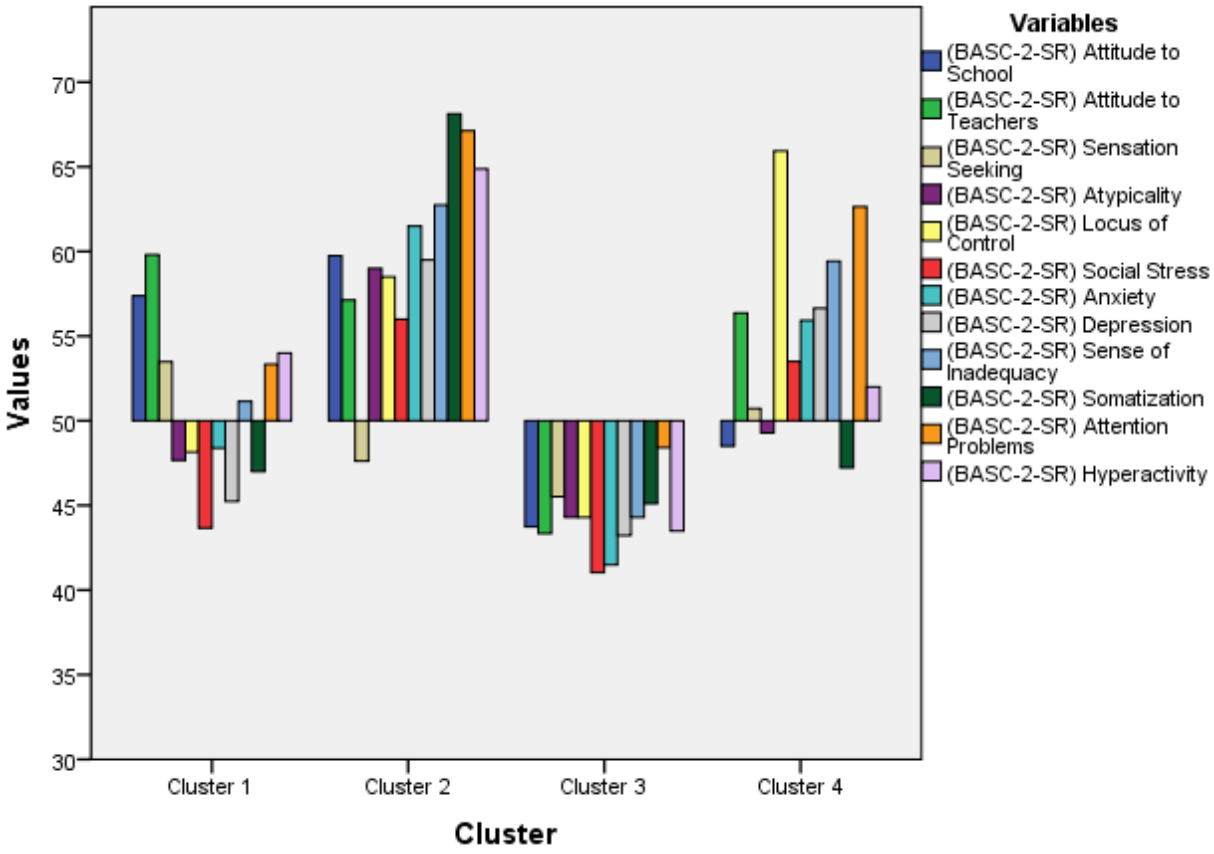

Figure 3. Four-Cluster Solution

Notably, this solution is consistent with other cluster solutions that suggest the existence of a large group of cases that tend to report relatively low symptomology within the overall sample. More detailed information regarding the four-cluster solution is available in Tables 11-13.

Following the *k*-means iterative cluster analysis, a Ward's hierarchical linkage analysis was conducted in order to validate the results of initial clustering (Table 14). When examining the overlap of within cluster case assignments the solution that presented the greatest percentage of overlapping case assignments was deemed the most appropriate solution for the overall sample. The four-cluster solutions yielded 70% overlap of cluster assignments across the *k*-means and Ward's clustering analyses. The three-cluster solution yielded a 61% overlap of cluster assignment across the *k*-means and Ward's clustering analyses. The two-cluster solution yielded an 88% overlap of cluster assignments across the *k*-means and Ward's clustering analyses and indicated that the two-cluster solution provided the most stable case-cluster membership, and therefore was the most appropriate solution within this particular sample.

The two-cluster solution generated by the *k*-means iterative approach provided two distinct clusters; cluster 1 reported elevated symptomology across all of the BASC clinical scales in comparison to cluster 2. This suggests the existence of two types of personality profiles within this sample of juvenile offenders; a cluster marked by elevated experiences of more severe psychological symptomology or maladjustment, as well as the existence of a stable or well-adapted cluster. The "elevated" cluster was comprised of 29 individuals, 12 males (41.4%) and 17 females (58.6%). Within this cluster, 20 individuals (69%) identified as African-American, 6 individuals (20.7%) identified as White, 2 individuals (6.9%) identified as Latino/a, and 1 individual (3.4%) identified as Multiracial. The "well-adapted" cluster was comprised of 41 individuals, 21 male (51.2%) and 20 females (48.8 %). Within this cluster 30 individuals (73.2) identified as African-American, 7 individuals (17.1%) identified as White, 2 individuals (4.9%) identified as Latino/a, and 2 individuals (4.9%4.9%) identified as Multiracial. Demographic

information as well as results from a one-way ANOVA analysis of the final two-cluster solution is available in Tables 15-17.

Examining Within Cluster JOPQ Data

Question 2: What parent constructs or profiles as measured by the JOPQ account for a significant amount of variance in cluster assignment?

Hypothesis 2: Significant differences in respondents' results on the JOPQ will emerge across cluster membership determined by juvenile self-reported symptomology.

The second aspect of this study aimed to find specific constructs measured by the JOPQ that may significantly impact individual cluster membership. The goal of this investigation was to identify these constructs and use the results in order to inform best practices for involving or collaborating with parents in the rehabilitation of juvenile offenders as well as to provide clinicians with parental factors they may expect to encounter or want to address based on juvenile offender personality profiles. Following the validation of and decision to use the two-cluster solution within this sample of juvenile offenders, an independent samples t-test was run to analyze the JOPQ data collected from the parents/guardians of the individuals assigned to the two clusters. The JOPQ variables analyzed were Parental Exasperation, Mistrust of the Justice System, Fear of the Child, Shame of Parenting Self-Efficacy, Exposure to Violence, and Parental Monitoring. In Parental Exasperation, there were no significant differences in the scores for cluster 1 (M=52.30, SD= 8.42) and cluster 2 (M=48.83, SD=9.81); $t(68)=1.55$, $p=.127$.

In Mistrust of the Justice System, there were no significant differences in the scores for cluster 1 (M=47.49, SD=7.43); $t(68)=-.20$, $p=.839$. In Fear of Child, there were no significant differences for cluster 1 (M=52.39, SD=9.60) and cluster 2 (M=48.33); $t(68)=1.83$, $p=.071$. In Shame of

Parenting Self-Efficacy, there were no significant differences for cluster 1 (M=52.87, SD=11.25) and cluster 2 (M=50.90, SD=9.87); $t(68)=.77$, $p=.442$. In Parent Monitoring, there were no significant differences in the scores for cluster 1 (M=46.31, SD=10.70) and cluster 2 (M=48.71, SD= 11.37); $t(68)=-.89$, $p=.376$. Finally, in Exposure to Violence, there were no significant differences in the scores for cluster 1 (M=50.91, SD=8.49) and cluster 2 (M=46.55, SD=9.88); $t(68)=1.93$, $p=.058$. Though overall no significant differences were found in JOPQ scores between cluster 1 and cluster 2, the Exposure to Violence scale did approach statistical significance within this sample (p=.058). These findings also presented in Table 18 and 19.

Since the Exposure to Violence variable approached significance post hoc testing was conducted to evaluate the practical relevance of this particular variable in cluster membership. Within this sample of juvenile offenders (N=70), respondents on the JOPQ Exposure to Violence variable in cluster 1 (M=50.91, SD= 8.49) and cluster 2 (M=46.55, SD=9.88) did not yield significant results in a *t*-test, however, the result approached statistical significance; $t(68)=1.93$, $p=.058$ and Cohen's effect size value ($d=.47$). This effect size suggests between small and moderate practical significance for the Exposure to Violence variable in cluster membership within this particular sample. (Cohen, 1988 & Lakens, 2013).

CHAPTER 5

Discussion

Despite family involvement in the judicial system becoming more common when addressing the needs of juvenile offender populations, extant research likely fails to truly explore the complexity of parent-adolescent relationships and how they evolve throughout a juvenile offender's interactions with the criminal justice system (Paik, 2017). Emerging trends in juvenile justice suggest collaboration or cooperation with family members, specifically parents, is becoming more commonplace, however, in order to effectively cooperate with family members of juvenile offenders it is imperative that research continue to explore the myriad factors which contribute to the context the juvenile offender is existing in (Vidal &Woolard, 2016). Additionally, meta-analyses of family based treatment for adolescents has been shown to reduce externalizing behaviors as well as have positive effects when working with mental health problems (Dopp, Borduin, White, & Kuppins, 2017). Clinicians recognize that this parent-child relationship during adolescence is particularly critical, however, upon entry to the juvenile justice system, current methods of assessment likely tend to focus disproportionately on the issues presented or reported by the child without giving adequate attention to the impact of parental factors operating on the child (Glaser, Calhoun, & Puder, 2005). While trends in juvenile justice are shifting away from a punitive approach towards parents whose children become involved in the system it is important to fortify the extant knowledge of how we can more effectively meet the needs of children and parents simultaneously through better methods of identifying and assessing these needs. Since psychological assessment is often an integral part

of decision-making, allocation of resources, and provision of specific interventions it is imperative that the assessment of juvenile offenders involves assessment of pertinent parent factors, as well.

Summary of the Study

The purpose of this study is to attempt to identify parent profiles and factors which are associated with distinct groups or cluster of juvenile offenders based on self-report and parent self-report data within a forensic sample. Though this study is explorative in nature, hopefully, results will provide a more nuanced conceptualization of the parent-child relationship in the context of the juvenile justice system. The goal of investigating parent factors associated with distinct types of juvenile offenders is to allow clinicians to be more informed and more aware of the parental factors that may be impacting juvenile offenders and be more prepared to develop and implement more appropriate interventions based on this information. Results will hopefully continue to grow the literature with regard to the most effective ways to provide interventions which involve juvenile's parents and aid in the determination of whether parental involvement in rehabilitative or community supervision programs is likely to be effective for individual juvenile offenders.

The study examined a sample of juvenile offenders from the southeastern United States (n=70) who completed measures during a court-ordered psychological evaluation. Self-report data of clinical symptomology was collected on a measure of personality (BASC-2) and was used to establish distinct clusters of juvenile offenders. Inclusion in the study required individual's to have a valid BASC profile as well as a valid measure of parental factors completed by a parent or guardian. Data from the parent measure (JOPQ) was then analyzed to

investigate the impact of parental factors on cluster membership, with the goal of establishing parental profiles that could be expected when working with juveniles whose reported symptomology closely resemble a particular self-report derived cluster. The following research questions were addressed in this study:

Question 1: Are there distinct groups of juvenile offenders based on the self-report data collected on the BASC-2?

Hypothesis 1: A two-to-five cluster solution of BASC- 2 profiles will emerge within this sample of juvenile offenders.

Question 2: What parent constructs or profiles as measured by the JOPQ are associated with these clusters?

Hypothesis 2: Significant differences in respondents' results on the JOPQ will emerge across cluster membership determined by juvenile self-reported symptomology.

Results of a *k*-means iterative cluster, validated by Ward's hierarchical clustering did yield a two-cluster solution within the data set. These two clusters were significantly different across all clinical scales of self-report BASC data and consistent with previous research suggest the existence of a "well-adapted" cluster (n=41) characterized by average to below average endorsement of psychological symptoms, as well as an "elevated symptoms" cluster (n=29) marked by elevations across all clinical scales in comparison to the "well-adapted" cluster. Data from parents/guardians within these clusters was then analyzed to identify which JOPQ factors accounted for significant amounts of the variance in cluster membership. No single factor reached statistical significance, however, the Exposure to Violence factor did approach

significance (p=.058, d=.47) and the effect size suggests small to moderate effects for this particular factor in determining cluster membership.

Discussion of Findings

Though cluster analysis research of self-reported data of a personality measurement within forensic samples is scarce, one previous study did provide a five-cluster solution using BASC data. Scarborough et al. (2004) investigated juvenile offender BASC data from 103 participants and presented the following clusters: Normal, Well-Adapted, Moderate Behavior Problems, Low Self-Reliance, and High Internalizers. The inclusion of adaptive scales in this study as well as the larger sample size likely contributed to a greater number of clusters found to be a solution, however, elevations and depressions in these adaptive scales also appear to have some overlap and may limit the extent to which the clusters can be meaningfully interpreted. The present study provides a two-cluster solution which appears to be consistent with aspects of clusters presented in the larger five-cluster solution. More specifically, the "Well-Adapted" cluster in the present study shares similarities with the "Normal" cluster, marked by generally average scores across all clinical scales; while the " Elevated Symptoms" cluster in the present study is similar to components of both the "Moderate Behavior Problems" and "High Internalizers" clusters presented in Scarborough et al.'s 2004 study.

Though the two-cluster solution is not evidence that the classification of juvenile offenders is truly dichotomous, either reporting elevated clinical symptom or generally average presentation, it is likely representative of two foundational clusters that researchers may expect to encounter in any sample of juvenile offenders.

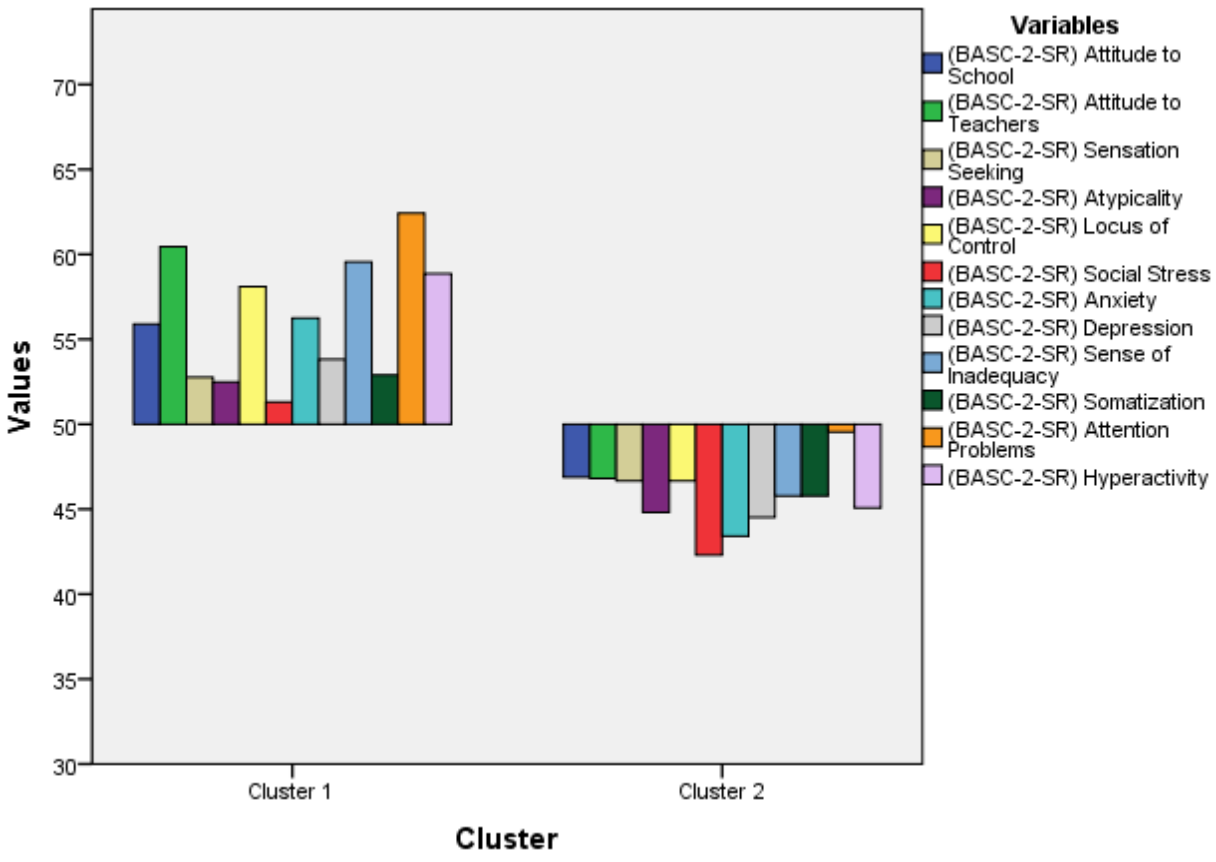

Figure 4. Two-Cluster Solution

Cluster 1, the "Elevated Symptoms" cluster within this sample consisted of 29 individual cases; this cluster was 41.4% male and 58.6% female; 69% of the cluster identified as African American, 20.7% identified as White, 6.9% identified as Latino/a, and 3.4% identified as Multiracial. This cluster endorsed symptoms greater than that of their counterpart cluster across all clinical scales on the BASC. Notably, this cluster likely experiences significant symptoms within the Attention Problems, and Attitude to Teacher scales. This likely manifests as difficulty navigating their academic environment and appropriately managing relationships with adult authority figures. Elevations also appear in their Attitude to School, Locus of Control, Sense of Inadequacy, and Anxiety. These symptoms collectively likely contribute to experiences of distress regarding their ability to navigate academic as well as social environments as well as a

depressed sense of self-efficacy or belief in their ability to improve their life or achieve their goals. Relative to cluster 2 this sample also endorsed elevated symptoms of Sensation Seeking, Atypicality, Social Stress, Depression, and Somatization. This is consistent with previous cluster analysis, which suggests clusters including individuals who experience more internalizing problems relative to their age-matched peers as well as increased likelihood of disturbed thinking and impulsive behavior.

Cluster 2, or the "Well Adapted" cluster consisted of 41 individual cases, this cluster was 51.2% male and 48.8% female; 73.2% of this cluster identified as African-American, 17.1% identified as White, 4.9% identified as Latino/a, and 4.9% identified as Multiracial. This cluster reported less symptomology in all 12 clinical scales in comparison to cluster 1. Their experiences are likely similar to that of their age-matched peers and are characterized by generally positive regard for themselves, their ability to navigate social and academic environments, and average experiences with symptoms of depression, anxiety, attention problems, and hyperactivity. It is important to note that while the juvenile offender personality profile is often assumed to be characterized by conduct disordered or significantly disturbed individuals, a large portion of this particular sample endorsed rather mild symptomology and that even in samples of adjudicated youth it is likely for clinicians to encounter individuals who psychologically may exhibit few risk factors and greater attention is warranted toward their contextual and systemic factors which resulted in their involvement within the criminal justice system.

In the second phase of this study, no significant results were found with regard to parental factors as measured by the JOPQ; however, the Exposure to Violence factor did approach significance and warrants some discussion. The Exposure to Violence scale on the JOPQ is a four-item scale designed to collect a parent's assessment of the amount and type of violence their

child has been exposed to either at home or in their community (Glaser, 2005). Previous research has demonstrated that environmental exposure to violence, whether it is in the home or in the community, can have detrimental effects and has the potential to contribute to delinquency or other conduct problems, however, the link between exposure to violence and actual delinquency is not likely to be direct (Snyder et al., 2015). However, childhood exposure to violence could potentially be traumatic for these individuals and research has demonstrated that early traumatization has a negative effect on the ability to develop sufficient skills in emotional regulation and appropriate expression of anger. Additionally, exposure to violence within ones community is associated with callousness towards violence as well as higher degrees of psychopathy and poorer adult outcomes (Sevecke, Franke, Kosson, & Krischer, 2016). Though this particular factor on the JOPQ did not reach statistical significance within this sample, based on established literature regarding the impact of trauma and exposure to violence on youth it is reasonable to expect that this factor may have some impact with regard to actual self-reported symptomology.

Limitations

Inclusion criteria for this study required juvenile offenders to have both valid self-reported BASC and JOPQ measures completed by a parent or guardian, as a result the sample size was limited by these parameters to only 70 participants. Given the sample size and geographic restrictions of this sample it is difficult to generalize these results to all juvenile offenders. These findings are not indicative of only two personality types among juvenile offenders and it is likely that in a larger sample more meaningful clusters could have emerged for clinical consideration. Additionally, this research depended entirely on self-report data and though only valid profiles were included within the sample, there is no further validation from

other sources in order to substantiate all of the information provided by juveniles and/or their parents/guardians. The cases included in this study did not include information regarding the nature or duration of the relationship between the JOPQ informant and the juvenile; therefore, it is difficult to definitively say that results are truly characteristic of relationships between parents and juvenile offenders.

Implications for Future Research

Though this study did not find statistically significant results with regard to parental factors and their association with types of juvenile self-report profiles, one parental factor did approach significance and two likely foundational clusters consistent with previous research did emerge. This suggests that this research could be effective in identifying and helping clinicians anticipate the types of concerns they are likely to encounter when attempting to provide appropriate interventions for juvenile offenders, particularly when incorporating their families into rehabilitative efforts. Further research would benefit from a greater sample size as well as obtaining information regarding the nature and duration of relationships between juvenile offenders and the parent/guardian completing measures of parental factors. Of particular interest would be to examine relationship dyads in future research including but not limited to: mother/son, mother/daughter, father/son, father/daughter; as well as to potentially use the duration of this relationship in order to inform inclusion criteria in the study. For instance, a family member or other legal guardian who might be available to complete instruments or has temporary custody may not be able to provide the most accurate characterization of a youth in comparison to another significant adult figure.

Conclusion

As psychologists can expect to continue to be involved with the juvenile justice system at both the broader systemic levels and the individual level it is important that best practices in assessment and provision of services continue to be informed by psychological research. In developing strategies to better identify and meet the needs of juvenile offenders and their families psychologists have a critical role in providing adequate care even within an imperfect judicial system. Though the importance of the parent-child relationship is well documented, further research is warranted to understand the complexity of this relationship when a child becomes involved with the juvenile justice system. Continued efforts in researching and refining psychological assessment among forensic samples can serve to better meet the needs of the court as well as the unique needs of families and juvenile offenders. By devoting continued research to the ways assessments are used with this population, and placing an emphasis on identifying risk and utilizing protective factors in concert with services for juvenile offenders at both the individual and family levels, more progress can be made towards reducing recidivism and the stated goal of rehabilitation within the juvenile justice system.

Table 1 & 2. Demographics of Participants (n=70, Age: M=15.04, SD=1.16)

Table 1

Gender

	Frequency	Percent
Male	33	47.1
Female	37	52.9
Total	70	100.0

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Table 2

Race

	Frequency	Percent
African American	50	71.4
White	13	18.6
Latino/a	4	5.7
Multiracial	3	4.3
Total	70	100.0

Table 3.

Descriptive Statistics of Variables within Sample

	M	SD	Skewness		Kurtosis	
BASC Data			Statistic	Std. Error	Statistic	Std. Error
Attitude to School	50.614	11.403	.906	.287	.187	.566
Attitude to Teachers	52.457	11.979	.685	.287	-.139	.566
Sensation Seeking	49.185	9.406	.400	.287	-.035	.566
Atypicality	47.985	7.434	1.444	.287	1.638	.566
Locus of Control	51.400	11.006	.707	.287	-.187	.566
Social Stress	46.029	8.108	.350	.287	-.749	.566
Anxiety	48.729	9.835	.317	.287	-.593	.566
Depression	48.371	8.603	1.347	.287	1.718	.566
Sense of Inadequacy	51.486	10.179	.394	.287	-.568	.566
Somatization	48.729	9.996	1.348	.287	1.451	.566
Attention Problems	54.871	10.673	-.180	.287	-.594	.566
(Hyperactivity	50.786	12.322	.618	.287	-.236	.566
JOPQ Data						
Mistrust of Justice System	47.720	7.762	1.083	.287	.840	.566
Fear of Child	50.016	9.268	1.255	.287	1.253	.566
Shame of Parenting Self-Efficacy	51.717	10.429	.353	.287	-.801	.566
Exposure to Violence	48.359	9.510	.092	.287	-.658	.566
Parent Monitoring	47.720	11.083	-.364	.287	-.459	.566
Lie/Infrequency	50.992	7.455	-1.935	.287	2.530	.566

Table 4.

Descriptive Statistics of Variables by Gender

	N	M	SD	Skewness		Kurtosis	
Male BASC Data				Statistic	Std. Error	Statistic	Std. Error
Attitude to Teachers	33	53.7878	12.381	.929	.409	-.096	.798
Sensation Seeking	33	50.7878	9.562	.274	.409	-.458	.798
Atypicality	33	47.182	5.801	1.372	.409	1.555	.798
Locus of Control	33	51.091	10.330	1.018	.409	.518	.798
Social Stress	33	46.212	8.306	.375	.409	-.591	.798
Anxiety	33	47.606	8.940	.220	.409	-.874	.798
Depression	33	46.546	7.237	1.367	.409	.951	.798
Sense of Inadequacy	33	51.606	9.260	.610	.409	.062	.798
Somatization	33	46.697	9.285	2.152	.409	5.719	.798
Attention Problems	33	54.636	11.274	-.103	.409	-.720	.798
Hyperactivity	33	51.394	12.2340	.466	.409	-.026	.798
Male JOPQ Data							
Mistrust of Justice System	33	46.070	5.946	.666	.409	.363	.798
Fear of Child	33	50.769	10.746	1.324	.409	.936	.798
Shame of Parenting Self-Efficacy	33	50.900	10.769	.703	.409	-.285	.798
Exposure to Violence	33	49.504	9.935	.141	.409	-.406	.798
Parent Monitoring	33	46.957	11.499	-.597	.409	-.046	.798
Lie/Infrequency	33	51.197	7.626	-2.083	.409	3.096	.798
Female BASC data							

Attitude to School	37	50.784	12.097	.946	.388	.135	.759
Attitude to Teachers	37	51.270	11.649	.440	.388	-.346	.759
Sensation Seeking	37	47.757	9.157	.535	.388	.724	.759
Atypicality	37	48.703	8.653	1.292	.388	.874	.759
Locus of Control	37	51.676	11.712	.522	.388	-.498	.759
Social Stress	37	45.865	8.039	.337	.388	-.845	.759
Anxiety	37	49.730	10.590	.296	.388	-.600	.759
Depression	37	50.000	9.460	1.227	.388	1.525	.759
Sense of Inadequacy	37	51.378	11.061	.298	.388	-.889	.759
Somatization	37	50.541	10.378	.900	.388	-.032	.759
Attention Problems	37	55.081	10.259	-.265	.388	-.364	.759
Hyperactivity	37	50.243	12.538	.779	.388	-.203	.759
<u>Female JOPQ Data</u>							
Mistrust of Justice System	37	49.191	8.908	.945	.388	.013	.759
Fear of Child	37	49.345	7.810	.840	.388	.417	.759
Shame of Parenting Self-Efficacy	37	52.445	10.208	.036	.388	-1.076	.759
Exposure to Violence	37	47.338	9.129	-.021	.388	-1.057	.759
Parent Monitoring	37	48.401	10.810	-.113	.388	-.994	.759
Lie/Infrequency	37	50.810	7.400	-1.887	.388	2.595	.759

Table 5. Two-Cluster Solution

Iteration History[a]

	Change in Cluster Centers	
Iteration	1	2
1	45.854	35.110
2	1.568	.934
3	1.473	.889
4	1.379	.872
5	1.535	1.036
6	1.163	.824
7	.000	.000

a. Convergence achieved due to no or small change in cluster centers. The maximum absolute coordinate change for any center is .000. The current iteration is 7. The minimum distance between initial centers is 107.680.

Number of Cases Per Cluster

Cluster	
1	29
2	41

Table 6. Two-Cluster Centers

Final Cluster Centers

	Cluster	
Variable	1	2
	55.90	46.88
Attitude to Teachers	60.45	46.80
Sensation Seeking	52.76	46.66
Atypicality	52.48	44.80
Locus of Control	58.10	46.66
Social Stress	51.31	42.29
Anxiety	56.24	43.41
Depression	53.83	44.51
Sense of Inadequacy	59.55	45.78
Somatization	52.90	45.78
Attention Problems	62.41	49.54
Hyperactivity	58.86	45.07

Table 7. Two-Cluster ANOVA

ANOVA Results

	Cluster		Error		F	Sig.
	Mean Square	df	Mean Square	df		
Attitude to School	1381.506	1	111.634	68	12.375	.001
Attitude to Teachers	3161.760	1	99.112	68	31.901	.000
Sensation Seeking	632.056	1	80.478	68	7.854	.007
Atypicality	1001.305	1	41.348	68	24.216	.000
Locus of Control	2224.891	1	90.205	68	24.665	.000
Social Stress	1381.248	1	46.393	68	29.773	.000
Anxiety	2794.581	1	57.048	68	48.987	.000
Depression	1473.961	1	53.417	68	27.593	.000
Sense of Inadequacy	3221.289	1	57.768	68	55.763	.000
Somatization	860.129	1	88.731	68	9.694	.003
Attention Problems	2816.613	1	74.165	68	37.978	.000
Hyperactivity	3229.557	1	106.562	68	30.307	.000

Table 8. Three-Cluster Solution

Iteration History[a]

	Change in Cluster Centers		
Iteration	1	2	3
1	34.571	34.574	30.260
2	4.356	4.073	.727
3	3.649	2.419	.944
4	3.296	1.645	.000
5	3.576	1.548	.000
6	.000	.000	.000

a. Convergence achieved due to no or small change in cluster centers. The maximum absolute coordinate change for any center is .000. The current iteration is 6. The minimum distance between initial centers is 69.714.

Number of Cases per Cluster

Cluster	
1	11
2	25
3	34

Table 9. Three-Cluster Centers

Final Cluster Centers

	Cluster		
Variable	1	2	3
Attitude to School	58.91	51.96	46.94
Attitude to Teachers	58.27	57.80	46.65
Sensation Seeking	49.73	53.28	46.00
Atypicality	60.27	47.48	44.38
Locus of Control	58.09	58.16	44.26
Social Stress	55.09	48.40	41.35
Anxiety	59.27	54.00	41.44
Depression	57.64	51.08	43.38
Sense of Inadequacy	59.91	57.16	44.59
Somatization	62.91	47.40	45.12
Attention Problems	65.27	59.92	47.79
Hyperactivity	65.09	52.24	45.09

Table 10. Three-Cluster ANOVA

ANOVA Results

	Cluster		Error		F	Sig.
	Mean Square	df	Mean Square	df		
Attitude to School	630.417	2	115.101	67	5.477	.006
Attitude to Teachers	1116.712	2	114.447	67	9.757	.000
Sensation Seeking	383.682	2	79.660	67	4.816	.011
Atypicality	1054.267	2	25.440	67	41.442	.000
Locus of Control	1682.957	2	74.521	67	22.584	.000
Social Stress	893.635	2	41.025	67	21.783	.000
Anxiety	1861.639	2	44.038	67	42.273	.000
Depression	986.964	2	46.752	67	21.110	.000
Sense of Inadequacy	1601.491	2	58.903	67	27.189	.000
Somatization	1349.702	2	62.604	67	21.560	.000
Attention Problems	1765.131	2	64.621	67	27.315	.000
Hyperactivity	1703.791	2	105.496	67	16.150	.000

Table 11. Four-Cluster Solution

Iteration History

	Change in Cluster Centers			
Iteration	1	2	3	4
1	28.370	27.521	26.842	31.271
2	2.157	4.017	.000	3.876
3	.000	.000	.000	.000

a. Convergence achieved due to no or small change in cluster centers. The maximum absolute coordinate change for any center is .000. The current iteration is 3. The minimum distance between initial centers is 65.643.

Number of Cases per Cluster

Cluster	
1	21
2	8
3	27
4	14

Table 12. Four-Cluster Centers

Final Cluster Centers

	Cluster			
Variable	1	2	3	4
Attitude to School	57.38	59.75	43.74	48.50
Attitude to Teachers	59.81	57.13	43.33	56.36
Sensation Seeking	53.48	47.63	45.52	50.71
Atypicality	47.67	59.00	44.30	49.29
Locus of Control	48.14	58.50	44.30	65.93
Social Stress	43.67	56.00	41.04	53.50
Anxiety	48.38	61.50	41.48	55.93
Depression	45.24	59.50	43.22	56.64
Sense of Inadequacy	51.14	62.75	44.30	59.43
Somatization	47.00	68.13	45.11	47.21
Attention Problems	53.33	67.13	48.41	62.64
Hyperactivity	54.00	64.88	43.48	52.00

Table 13. Four-Cluster ANOVA

ANOVA Results

	Cluster		Error		F	Sig.
	Mean Square	df	Mean Square	df		
Attitude to School	989.149	3	90.987	66	10.871	.000
Attitude to Teachers	1256.681	3	92.899	66	13.527	.000
Sensation Seeking	267.292	3	80.344	66	3.327	.025
Atypicality	454.611	3	37.108	66	12.251	.000
Locus of Control	1647.890	3	51.744	66	31.847	.000
Social Stress	788.938	3	32.866	66	24.005	.000
Anxiety	1150.407	3	48.828	66	23.561	.000
Depression	956.884	3	33.874	66	28.248	.000
Sense of Inadequacy	1098.785	3	58.381	66	18.821	.000
Somatization	1152.648	3	52.059	66	22.141	.000
Attention Problems	1074.856	3	70.231	66	15.304	.000
Hyperactivity	1088.723	3	109.237	66	9.967	.000

Table 14. Ward Linkage Agglomeration Schedule

Agglomeration Schedule

Stage	Cluster Combined		Coefficients	Stage Cluster First Appears		Next Stage
	Cluster 1	Cluster 2		Cluster 1	Cluster 2	
1	29	35	35.000	0	0	17
2	36	38	103.000	0	0	9
3	12	13	213.500	0	0	40
4	28	30	346.500	0	0	9
5	18	22	493.500	0	0	19
6	25	26	645.500	0	0	27
7	34	40	804.000	0	0	21
8	62	67	993.500	0	0	36
9	28	36	1186.000	4	2	25
10	5	48	1392.500	0	0	41
11	39	41	1612.000	0	0	39
12	32	33	1832.500	0	0	44
13	11	14	2055.500	0	0	29
14	20	55	2284.500	0	0	20
15	53	58	2537.500	0	0	46
16	6	7	2792.500	0	0	28
17	27	29	3052.833	0	1	25
18	61	65	3313.833	0	0	23
19	15	18	3578.167	0	5	22

20	20	54	3873.167	14	0	37
21	34	37	4186.667	7	0	27
22	15	23	4505.083	19	0	32
23	24	61	4832.750	0	18	34
24	3	8	5179.250	0	0	28
25	27	28	5526.417	17	9	44
26	64	66	5892.917	0	0	36
27	25	34	6268.517	6	21	48
28	3	6	6687.267	24	16	42
29	11	19	7125.600	13	0	54
30	2	10	7593.100	0	0	42
31	43	47	8061.600	0	0	52
32	15	16	8541.050	22	0	51
33	50	52	9024.550	0	0	41
34	24	70	9560.383	23	0	50
35	57	59	10103.883	0	0	56
36	62	64	10668.883	8	26	63
37	17	20	11241.883	0	20	49
38	63	69	11815.883	0	0	59
39	31	39	12416.383	0	11	48
40	12	60	13041.217	3	0	54
41	5	50	13669.217	10	33	47
42	2	3	14329.133	30	28	53
43	1	9	15055.633	0	0	58

44	27	32	15783.578	25	12	57
45	42	49	16534.578	0	0	61
46	53	56	17370.911	15	0	49
47	5	46	18209.711	41	0	62
48	25	31	19064.986	27	39	57
49	17	53	19968.367	37	46	56
50	24	68	20873.067	34	0	59
51	15	21	21843.200	32	0	60
52	43	51	22814.034	31	0	55
53	2	4	23810.367	42	0	58
54	11	12	24859.034	29	40	60
55	43	44	26016.950	52	0	65
56	17	57	27195.292	49	35	64
57	25	27	28433.031	48	44	68
58	1	2	29848.753	43	53	65
59	24	63	31359.268	50	38	63
60	11	15	32951.268	54	51	64
61	42	45	34742.934	45	0	62
62	5	42	37072.468	47	61	66
63	24	62	39489.935	59	36	67
64	11	17	42506.380	60	56	67
65	1	43	45970.600	58	55	66
66	1	5	49997.622	65	62	69
67	11	24	55956.679	64	63	68

68	11	25	63833.469	67	57	69
69	1	11	85845.414	66	68	0

Table 15 & 16. Two-Cluster Solution Demographics

Table 15.

Gender

Cluster		Frequency	Percent
1	Male	12	41.4
	Female	17	58.6
2	Male	21	51.2
	Female	20	48.8

Table 16.

Race

Cluster		Frequency	Percent
1	African American	20	69.0
	White	6	20.7
	Latino/a	2	6.9
	Multiracial	1	3.4
2	African American	30	73.2
	White	7	17.1
	Latino/a	2	4.9
	Multiracial	2	4.9

Table 17.

Two-Cluster One-Way ANOVA Results

		Sum of Squares	df	Mean Square	F	Sig.
Attitude to School	Between Groups	1381.506	1	1381.506	12.375	.001
	Within Groups	7591.080	68	111.634		
	Total	8972.586	69			
Attitude to Teachers	Between Groups	3161.760	1	3161.760	31.901	.000
	Within Groups	6739.611	68	99.112		
	Total	9901.371	69			
Sensation Seeking	Between Groups	632.056	1	632.056	7.854	.007
	Within Groups	5472.530	68	80.478		
	Total	6104.586	69			
Atypicality	Between Groups	1001.305	1	1001.305	24.216	.000
	Within Groups	2811.680	68	41.348		
	Total	3812.986	69			
Locus of Control	Between Groups	2224.891	1	2224.891	24.665	.000
	Within Groups	6133.909	68	90.205		
	Total	8358.800	69			
Social Stress	Between Groups	1381.248	1	1381.248	29.773	.000

	Within Groups	3154.695	68	46.393		
	Total	4535.943	69			
Anxiety	Between Groups	2794.581	1	2794.581	48.987	.000
	Within Groups	3879.262	68	57.048		
	Total	6673.843	69			
Depression	Between Groups	1473.961	1	1473.961	27.593	.000
	Within Groups	3632.382	68	53.417		
	Total	5106.343	69			
Sense of Inadequacy	Between Groups	3221.289	1	3221.289	55.763	.000
	Within Groups	3928.197	68	57.768		
	Total	7149.486	69			
Somatization	Between Groups	860.129	1	860.129	9.694	.003
	Within Groups	6033.714	68	88.731		
	Total	6893.843	69			
Attention Problems	Between Groups	2816.613	1	2816.613	37.978	.000
	Within Groups	5043.230	68	74.165		
	Total	7859.843	69			
Hyperactivity	Between Groups	3229.557	1	3229.557	30.307	.000
	Within Groups	7246.229	68	106.562		
	Total	10475.786	69			

Table 18.

JOPQ Data by Cluster

	Cluster Number	N	M	SD	Std. Error Mean
Parent Exasperation	1	29	52.3048	8.41746	1.56308
	2	41	48.8293	9.81453	1.53277
Mistrust of Justice System	1	29	47.4928	7.42520	1.37883
	2	41	47.8805	8.07971	1.26184
Fear of Child	1	29	52.3886	9.60346	1.78332
	2	41	48.3376	8.75456	1.36723
Shame of Parenting Self-Efficacy	1	29	52.8652	11.24583	2.08830
	2	41	50.9041	9.87123	1.54163
Exposure to Violence	1	29	50.9134	8.48673	1.57595
	2	41	46.5522	9.87561	1.54231
Parent Monitoring	1	29	46.3134	10.69846	1.98665
	2	41	48.7146	11.37133	1.77590

Table 19.

Independent Samples t-test Results

		Levene's Test for Equality of Variances		t-test for Equality of Means						
Variable		F	Sig.	t	df	Sig. (2-tail)	Mean Diff.	Std. Error Diff.	95% C.I. Lower	95% C.I. Upper
Parent Exasperation	Equal variances assumed	1.162	.285	1.546	68	.127	3.47556	2.24799	-1.01024	7.96136
	Equal variances not assumed			1.588	65.405	.117	3.47556	2.18921	-.89607	7.84719
Mistrust of Justice System	Equal variances assumed	.008	.928	-.204	68	.839	-.38773	1.89666	-4.17246	3.39700
	Equal variances not assumed			-.207	63.408	.836	-.38773	1.86906	-4.12228	3.34683
Fear of Child	Equal variances assumed	.474	.494	1.832	68	.071	4.05106	2.21132	-.36157	8.46369
	Equal variances not assumed			1.803	56.843	.077	4.05106	2.24712	-.44899	8.55111
Shame of Parenting Self-Efficacy	Equal variances assumed	.708	.403	.773	68	.442	1.96103	2.53778	-3.10304	7.02509
	Equal variances not assumed			.755	55.331	.453	1.96103	2.59569	-3.24015	7.16221
Exposure to Violence	Equal variances assumed	2.927	.092	1.927	68	.058	4.36125	2.26352	-.15552	8.87803
	Equal variances not assumed			1.978	65.354	.052	4.36125	2.20507	-.04212	8.76463

Parent Monitoring	Equal variances assumed	.046	.832	-.892	68	.376	-2.40119	2.69308	-7.77515	2.97278
	Equal variances not assumed			-.901	62.633	.371	-2.40119	2.66470	-7.72678	2.92440

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