

Treating Detained Juveniles: Measuring Mental Health Traits and Gender Differences

Todd L. Grande¹, Janelle M. Hallman², Lee A. Underwood³, Kellie M. Warren⁴ & Mark Rehfuss⁵

¹ College of Social and Behavioral Sciences, Wilmington University, New Castle, DE, USA

² Counselor Education and Supervision, Regent University, Virginia Beach, VA, USA

³ School of Counseling and Psychology, Regent University, Virginia Beach, VA, USA

⁴ Florence Crittenton, Phoenix, AZ, USA

⁵ Old Dominion University, Norfolk, VA, USA

Correspondence: Lee A. Underwood, School of Counseling and Psychology, Regent University, 1000 Regent University Drive, Virginia Beach, VA, USA. Tel: 1-757-630-4442. E-mail: leeunde@regent.edu

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Abstract

An understanding of gender-specific differences between detained male and female youth and how these differences relate to mental health is fundamental to understanding, assessing, and treating this population. This study examined the prevalence of mental health symptoms among a sample of 4,015 incarcerated juveniles who were assessed at intake using the BASC-2, MAYSI-2, and Trauma Symptom Checklist for Children. Significant differences were found between males and females on many of the instruments' clinical scales, the effect size, however, was small. The prevalence of mental health symptoms varied greatly based on the instrument used (12% and 70% for males; 18% and 72% for females). Interpretations of these results and how they can be used to enhance understanding and treatment of the mental health needs of this population, specifically the females, are discussed.

Keywords: incarcerated adolescents, females, juvenile offenders, delinquency, prevalence, mental disorders

1. Introduction

Incarcerated juveniles exhibit high occurrences of a variety of mental health needs (Garland, Hough, & McCabe, 2001; Trupin, Turner, Stewart, & Wood, 2004; Wasserman, McReynolds, Lucas, Fisher, & Santos, 2002). It is therefore important that juvenile correction facilities have knowledge of the common mental health symptoms and deploy procedures and appropriate tools to screen for these symptoms, especially at intake (Krezmien, Mulcahy, & Leone, 2008). Additionally, screening procedures must take into account the reported differences between male and female psychopathology and prevalence rates of psychopathology amongst incarcerated adolescents (McReynolds et al., 2008; Nordness et al., 2002; Teplin, Abram, McClelland, Dulcan, & Mericle, 2002; Wasserman, McReynolds, Ko, Katz, & Carpenter, 2005). There are also differences between adolescent males and females in risk factors and etiology of juvenile delinquency (Funk, 1999; Lenssen, Doreleijers, van Dijk, & Hartman, 2000). These differences dictate the need for intake procedures, incarceration protocols, assessments, intervention strategies, treatment planning, and prevention to reflect gender specificity (Funk, 1999; Gavazzi, Yarcheck, & Chesney-Lind, 2006).

Within the population of incarcerated youth, studies have found that 40-82% have at least one mental disorder (Colins et al., 2010; Lyons, Baerger, Quigley, Erlich, & Griffin, 2001; Teplin et al., 2002; Timmons-Mitchell et al., 1997; Trupin et al., 2004; Wasserman et al., 2002). This is in stark contrast to the 33% as reported on community samples of adolescents (Lewinsohn, Hops, Roberts, Seeley, & Andrews, 1993), and the finding that community samples are significantly less impaired and require significantly less mental health care than those youth involved with the juvenile justice system (Lyons et al., 2001). Diagnoses of PTSD are also more common among incarcerated youth, ranging from 11-32% (Abram et al., 2004; Robertson, Dill, Husain, & Undesser, 2004; Steiner, Garcia, & Matthews, 1997), than in community youth samples, which range from 2-8% (Cuffe et al., 1998; Giaconia et al., 1995).

Even though overall prevalence rates of mental health issues in incarcerated youth appear to be higher than in community samples, many of these findings are limited due to inadequate sample size, non-generalizability

across gender, lack of standardized measures, unclear diagnostic categories, and variability in the populations studied in terms of engagement within the juvenile justice system. There is therefore, a clear need to continue to study this population and to specifically undertake comparative studies between males and females.

A variety of assessments have been used to examine the character and frequency of mental health symptoms in this population. Recent studies relying on the Diagnostic Interview Schedule for Children (DISC) found that 45% of 250 incarcerated youth (Izquierdo, Healy, Rinderle, & Matthews, 2005), 50% of 991 youth referred to probation authorities (Wasserman et al., 2005), and approximately 60% of male and 66% of female detainees (Teplin et al., 2002) had at least one *DSM-IV-TR* diagnosis. Domalanta, Risser, Roberts, & Risser (2003) assessed 1,024 incarcerated youth using the Patient Health Questionnaire and found that 60% had at least one disorder, including substance abuse. Further research found 71-82% of 482 incarcerated adolescents met the criteria for at least one *DSM-IV-TR* Axis I disorder based on the Adolescent Psychopathology Scales (Robertson et al., 2004) and, according to Nordness et al. (2002), at least 68% of juvenile detainees scored above the "Caution" or "Warning" cut-off on one or more of the MAYSI-2 scales indicating that there are clinically significant mental health needs.

Multiple studies have indicated that female delinquents are at higher risk to suffer from mental health symptoms and are different than their male counterparts in their specific mental health needs (McCabe, Lansing, Garland, & Hough, 2002; McReynolds et al., 2008; Wasserman et al., 2005). After assessing 169 incarcerated youth, Timmons-Mitchell et al. (1997) estimated 84% of females suffered from mental health disorders in contrast to 27% of males. Finding a smaller difference with a sample of 1,829 detained juveniles, Teplin et al. (2002) reported that 74% of females and 66% of males fulfilled the criteria for at least one mental disorder. Nordness et al. (2002) reported that the mean scores of female juveniles on all MAYSI-2 scales were higher than male juveniles, findings consistent with Grisso, Barnum, Fletcher, Cauffman, and Peuschold (2001), and that comorbidity on the MAYSI-2 scales was significantly higher for females (59%) than males (41%). Also using the MAYSI-2, Stewart and Trupin (2003) reported nearly 50% of all female offenders were in the highest range of mental health symptoms versus only 22% of males.

Female offenders reported suicide ideation at a significantly higher rate than males (Wasserman et al., 2004; Nordness et al., 2002), were twice as likely to suffer from PTSD as their male counterparts (Cauffman, Feldman, Waterman, & Steiner, 1998; Robertson et al., 2004), were significantly more likely to have moderate to severe depression than males (McCabe et al., 2002; McReynolds et al., 2008; Robertson et al., 2004; Teplin et al., 2002), and had significantly higher rates of internalized disorders. Due to a relatively low number of female offenders being studied up to this point, the variability of measurements used, and the variability of juvenile populations studied, additional research is needed to further understand their unique mental health needs. Also significant is the research that indicates female delinquency is increasing.

The National Center for Juvenile Justice 2006-2007 Juvenile Court Statistics show an increasing number of females entering the juvenile justice system and committing more serious crimes (Puzzachera, Adams, & Zickmund, 2010; Zahn et al., 2008). From 1985-2007, the total number of delinquency cases involving females increased 101% while the total increase for males was 30% (Puzzachera et al., 2010). From 1997-2006, simple assault arrests declined 4% for boys but increased by 19% for females (Zahn et al., 2010). The rise in female delinquency, especially in light of the high occurrences of mental health needs of female offenders, has clearly added to the existing burden on the juvenile justice system.

Many have noted that females who engage in antisocial or delinquent juvenile behavior are more likely to have histories of abuse and victimization within the family environment than males (Dembo, Williams, & Schmeidler, 1993; Funk, 1999; Gavazzi et al., 2006; McCabe et al., 2002). Studies have shown that between 52-67% of female offenders are the victims of physical or sexual abuse (Corrado, Odgers, & Cohen, 2000; Dembo et al., 1993) and 70% the victim or witness of violence, assault, or life threatening danger (Cauffman, et al., 1998). Additionally, females may have greater sensitivity to the effects of trauma, abuse, and family dysfunction than males (Zahn et al., 2010), creating additional challenges to the juvenile justice system.

In light of the differences between male and female mental health symptoms and prevalence rates, as well as the differences pertaining to causal factors related to delinquency and mental health needs, it is imperative to continue to study this population, especially by exploring the effect of gender on these specific factors. The purpose of this study is to determine how incarcerated male and female juveniles differ in the prevalence rates of mental health symptoms. It was hypothesized that females will show greater prevalence rates than males. This study builds upon the findings of Timmons-Mitchell et al. (1997) and will add to the current body of literature on

the prevalence and nature of mental health symptoms in juvenile offenders so that gender-specific identification, assessment, and treatment measures might be designed and implemented.

2. Method

2.1 Participants

As previously reported in Grande et al. (2012) and Grande, Hallman, Caldwell, and Underwood (2011), the participants were 4,015 adjudicated youth, 87% male ($n = 3,496$) and 13% female ($n = 519$), secured in a southwestern state juvenile care facility from 2005-2010. The ethnic composition was recorded as 29.76% Caucasian ($n = 1,195$), 11.41% African-American ($n = 458$), 49.07% Hispanic ($n = 1,970$), 5.18% Native American ($n = 208$), 3.74% Mexican-National ($n = 150$), .45% Asian ($n = 18$), 0.35% Other ($n = 14$), and 0.05% Unknown ($n = 2$). Mean age of participants was 16.3 years ($SD = .88$).

2.2 Procedure

Each youth completed a structured intake assessment upon entering the facility. Assessments included the Behavior Assessment System for Children, Second Edition (BASC-2) and the Massachusetts Youth Screening Instrument, Version 2 (MAYSI-2). The Trauma Symptom Checklist for Children (TSCC) was also completed by all females. Only the males with significant trauma histories completed the TSCC. The agency policy to not use the TSCC to assess all the males entering the facility, limited the generalizations that could be made using the scores of the TSCC. The SASSI-A and Suicide Probability Scale were completed and psychosocial information pertaining to family and other demographic information was obtained. Each youth completed the instruments within 21 days of admission to aid in identifying psychiatric symptoms and substance abuse issues. Data gathered from the administration of the SASSI-A and Suicide Probability Scale were not used in this study. The assessment data for the BASC-2 and TSCC was coded by T-scores and electronically archived from 2005-2010.

Of the participants that were assessed, varying numbers completed each of the measures. A total of 3,298 completed the BASC-2: males ($n = 2,981$), females ($n = 317$). Two incomplete records contained in the BASC-2 data were discarded. A total of 4,010 completed the MAYSI-2. Similar to the BASC-2 data, many more male ($n = 3,492$) than female ($n = 518$) assessments were available. 430 complete records for the TSCC were retained for further analysis and two incomplete records were immediately discarded. Upon examining the TSCC data, it was evident the majority of the females ($n = 364$) were assessed, while only a few males were represented ($n = 66$). Only TSCC data for females was included in this research to offer a perspective for female trauma symptomatology. No validity determinations were included with the BASC-2 or MAYSI-2 data sets. For the purpose of analysis, all administrations of both assessments were therefore assumed to be valid. For sample sizes related to each of the three measurements, please refer to Figure 1.

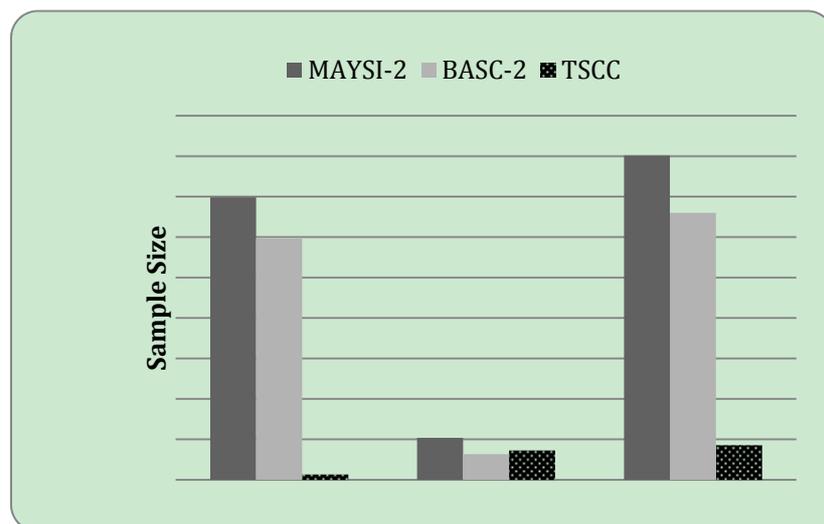


Figure 1. Sample sizes by gender and measurement

Description: Sample sizes and gender for the MAYSI-2, BASC-2, and the TSCC.

2.3 Measures

The MAYSI-2 is a 52-item instrument developed to screen adolescents from 12 to 17 years who are entering the juvenile justice system “on recent or current problems and is suitable for youths who read at the fifth-grade level” (Lexcen, Vincent, & Grisso, 2004, p. 73). According to Ford, Chapman, Pearson, Borum, & Wolpaw (2008), the MAYSI-2 was designed to identify issues that require immediate care, such as suicidality. Participants answer “yes” or “no” to the items on the instrument, which contains seven scales: (a) Alcohol/ Drug Use; (b) Angry-Irritable; (c) Depressed-Anxious; (d) Somatic Complaints; (e) Suicide Ideation; (f) Thought Disturbance; and (g) Traumatic Experiences (Ford et al., 2008, p. 89). Even though the MAYSI-2 was designed as a screening assessment and not as a diagnostic tool, it has been found to be proficient in identifying general mental health characteristics (Grisso et al., 2001; Hayes, McReynolds & Wasserman, 2005).

The BASC-2 is a multidimensional instrument for individuals from 2 to 25 years designed to aid in identifying behavioral and emotional issues (Reynolds & Kamphaus, 2004). Information is gathered regarding three dimensions: (a) self-report of individual; (b) observations of parents and teachers; and (c) background information. According to Titus, Kanive, Sanders, & Blackburn (2008), “Internalizing psychopathology is assessed with the following scales: Anxiety, Depression, and Somatization” (p. 895). “Hyperactivity, Aggression, and, on the child and adolescent levels, Conduct Problems” (Titus et al., 2008, p. 895) are the scales used to assess externalizing psychopathology.

The TSCC is a 54-item questionnaire designed to assess posttraumatic symptomatology related to such events as physical and sexual abuse. It has been normed for youth between the ages of 8 and 16 and includes normative adjustments for 17 year-olds (Briere, 1996). The TSCC clinical scales are Anxiety, Depression, Posttraumatic Stress, Sexual Concerns, Dissociation, and Anger. The assessment also contains two validity scales (Underresponse and Hyperresponse). The reliability of the TSCC scales is unknown (Briere, 1996).

2.4 Analysis

This study’s method was causal-comparative and a replication of Timmons-Mitchell et al. (1997); however, this study relied on a larger sample and used different assessments.

For the purpose of analysis, the BASC-2 and TSCC results were transformed into T-scores. The raw scores of the MAYSI-2 data set were used. This study defined a mental health trait as a T-score of 70 or above on the BASC-2 or TSCC scales and a score that fell in the “Caution” or “Warning” range on any MAYSI-2 scales. The scores recorded in the MAYSI-2 data were converted from ordinal (e.g. 6 - W) to interval (e.g. 6) in order for a MANOVA to be used.

A MANOVA was conducted on the data from both the BASC-2 and the MAYSI-2, followed by univariate analyses of the individual scales. A Box’s test of equality of covariance was used to dictate the usage of Wilks’s Lambda or Pillai’s Trace. The frequency distribution of dichotomous variables, namely the gender of the participants, was tested with a chi-square test. All the statistical calculations were made using PASW Statistics 18.

3. Results

A MANOVA was conducted to determine if there were significant differences between genders on the six BASC-2 pathology scales (Somatization, Social Stress, Anxiety, Clinical Maladjustment Composite, Depression, and Sense of Inadequacy). Twenty-one cases with missing values in at least one field were excluded. The data was not transformed to eliminate outliers, as the population being studied (incarcerated juveniles) was expected to have a higher prevalence of pathology than a community population. As a result, Box’s test of equality of covariance was significant ($p < .001$), and therefore Pillai’s Trace was utilized in interpreting the MANOVA results. The MANOVA [Pillai’s Trace = .034, $F(1, 3270) = 19.061$, $p < .001$, $\eta_p^2 = .034$] indicated that gender significantly affected the combined dependent variable of all six scales, however, multivariate effect sizes were not sizable (Grande et al., 2012). Follow up univariate ANOVA tests were conducted to determine in which scales gender led to a significant difference. To control for type-I error, the significance of these ANOVAs was examined at the $p < .008$ level. The ANOVA results indicated that the Somatization [$F(1, 3270) = 62.118$, $p < .001$, $\eta_p^2 = .019$], Anxiety [$F(1, 3270) = 38.796$, $p < .001$, $\eta_p^2 = .012$], and Clinical Maladjustment Composite [$F(1, 3270) = 9.240$, $p = .002$, $\eta_p^2 = .003$] scales had significantly different results based upon gender, with females presenting a higher mean score on each of these scales than males. However, the effect sizes of .019, .012, and .003 reveal that gender accounted for a small amount of the variance in the scores (1.9%, 1.2%, and .3%, respectively), indicating that other unknown factors account for the majority of the variance. Though female’s mean scores on the Social Stress [$F(1, 3270) = 2.051$, $p = .15$, $\eta_p^2 = .001$], Depression [$F(1, 3270) =$

4.675, $p = .03$, $\eta_p^2 = .001$], and Sense of Inadequacy [$F(1, 3270) = .013$, $p = .91$, $\eta_p^2 < .001$] scales were higher, a significant difference in the scores on these scales was not found. The males did not score higher than the females on any of the BASC-2 sub-scales included in the MANOVA. As previously presented in Grande, Hallman, Caldwell, and Underwood (2011), Table 1 sets forth the group means and standard deviations for each BASC-2 scale by gender.

Table 1. Means and standard deviations for BASC-2 subscales by gender

| | Gender | Mean | Std. Deviation | N |
|----------------------------------|--------|-------|----------------|------|
| Somatization | Male | 45.77 | 7.756 | 2960 |
| | Female | 49.51 | 10.268 | 317 |
| | Total | 46.13 | 8.108 | 3277 |
| Social Stress | Male | 48.71 | 9.422 | 2960 |
| | Female | 49.51 | 10.235 | 317 |
| | Total | 48.78 | 9.505 | 3277 |
| Anxiety | Male | 47.69 | 9.722 | 2960 |
| | Female | 51.34 | 11.588 | 317 |
| | Total | 48.04 | 9.974 | 3277 |
| Clinical Maladjustment Composite | Male | 48.82 | 9.332 | 2960 |
| | Female | 50.52 | 11.046 | 317 |
| | Total | 48.98 | 9.523 | 3277 |
| Depression | Male | 50.46 | 9.368 | 2960 |
| | Female | 51.68 | 10.437 | 317 |
| | Total | 50.58 | 9.482 | 3277 |
| Sense Of Inadequacy | Male | 51.84 | 10.332 | 2960 |
| | Female | 51.91 | 11.513 | 317 |
| | Total | 51.84 | 10.450 | 3277 |

Description: Means and standard deviations for six of the subscales for the BASC-2. Results are displayed by gender with totals for each subscale.

A chi-square analysis examining the frequency symptoms in both genders, as recorded by the BASC-2, returned a result of $\chi^2(1, N = 3,277) = 29.37$, $p < .001$ on the Anxiety scale, $\chi^2(1, N = 3,277) = 19.83$, $p < .001$ on the Somatization scale, and $\chi^2(1, N = 3,277) = 7.42$, $p = .006$ on the Clinical Maladjustment Composite scale. Using a T-score equal to or above 70 as the definition of a mental health trait, the prevalence of a trait on any scale of the BASC-2 was 12% for males and 18% for females. Therefore, the results of the chi-square analysis of the BASC-2 scores did not show a large gender-specific difference in mental health traits.

A second MANOVA was conducted to determine if there were significant differences between genders on the six MAYSI-2 scales related to pathology (Alcohol/Drugs, Angry-Irritable, Depressed-Anxious, Somatic Complaints, Suicide Ideation, and Traumatic Experiences; Grande et al., 2012). Eleven cases with missing values in at least one field were excluded. As with the BASC-2, the data was not transformed to eliminate outliers, since the population being studied was expected to have a higher prevalence of pathology than a community population. As a result, Box's test of equality of covariance was significant ($p < .001$), and therefore Pillai's Trace was utilized in interpreting the MANOVA results. The MANOVA [Pillai's Trace = .032, $F(1, 3992) = 21.883$, $p < .001$, $\eta_p^2 = .032$] indicated that gender significantly affected the combined dependent variable of the six scales (Grande et al., 2012). Again, the multivariate effect sizes were small. Follow up univariate ANOVA tests were conducted to determine in which scales gender led to a significant difference. To control for type-I error, the significance of these ANOVAs was examined at the $p < .008$ level. The ANOVA results indicated that the Depressed/Anxious [$F(1, 3997) = 35.893$, $p < .001$, $\eta_p^2 = .009$], Somatic Complaints [$F(1, 3997) = 48.380$, $p < .001$, $\eta_p^2 = .012$], Suicide Ideation [$F(1, 3997) = 45.465$, $p < .001$, $\eta_p^2 = .011$], and

Traumatic Experiences [$F(1, 3997) = 60.072, p < .001, \eta_p^2 = .015$] scales had significantly different results based upon gender, with females presenting a higher mean score on each of these scales than males. However, the effect sizes of .009, .012, .011, and .015 reveal that gender accounted for a small amount of the variance in the scores (0.9%, 1.2%, 1.1%, and 1.5%, respectively). As in the BASC-2 analysis, gender explained a small percentage of variance in the assessment scores, indicating that other factors account for the residual variance (Grande et al., 2012). Though female's mean scores on the Alcohol/Drugs [$F(1, 3997) = .019, p = .891, \eta_p^2 < .001$] and Angry/Irritable [$F(1, 3997) = 1.678, p = .195, \eta_p^2 < .001$] scales was higher, a significant difference in the scores on these scales was not found. The females scored higher than the males on each of the six MAYSI-2 scales analyzed in the MANOVA. Table 2 presents the group means and standard deviations for each MAYSI-2 scale by gender.

Table 2. Means and standard deviations for MAYSI subscales by gender

| | Gender | Mean | Std. Deviation | N |
|-----------------------|--------|------|----------------|------|
| Alcohol/Drugs | Male | 3.51 | 2.594 | 3482 |
| | Female | 3.53 | 2.622 | 517 |
| | Total | 3.51 | 2.597 | 3999 |
| Angry/Irritable | Male | 2.65 | 2.554 | 3482 |
| | Female | 2.81 | 2.747 | 517 |
| | Total | 2.67 | 2.580 | 3999 |
| Depressed/Anxious | Male | 1.26 | 1.518 | 3482 |
| | Female | 1.70 | 1.817 | 517 |
| | Total | 1.32 | 1.567 | 3999 |
| Somatic Complaints | Male | 1.77 | 1.767 | 3482 |
| | Female | 2.36 | 2.014 | 517 |
| | Total | 1.85 | 1.812 | 3999 |
| Suicide Ideation | Male | .27 | .833 | 3482 |
| | Female | .55 | 1.259 | 517 |
| | Total | .30 | .905 | 3999 |
| Traumatic Experiences | Male | 1.69 | 1.484 | 3482 |
| | Female | 2.25 | 1.799 | 517 |
| | Total | 1.77 | 1.539 | 3999 |

Description: Means and standard deviations for six of the subscales for the MAYSI-2. Results are displayed by gender with totals for each subscale.

4. Discussion and Implications

This study found that 72% of females and 70% of males who completed the MAYSI-2 met the criteria for having at least one mental health disorder. These findings are comparable with previous mental health prevalence studies on incarcerated youth. Overall prevalence rates for females meeting the criteria for at least one mental health disorder have ranged from 69-84% and for males 27-66% (McCabe et al., 2002; Nordness et al., 2002; Teplin et al., 2002; Teplin, Abram, McClelland, Washburn, & Pikus, 2005; Timmons-Mitchell et al., 1997). The overall prevalence rates of mental health traits as reported by the BASC-2 data in this study (18% female and 12% male) are low. One explanation of this finding may be related to this study's definition of a mental health trait (T-score equal to or above 70) which captured all scores falling within the "clinically significant" range of the BASC-2 but did not include any "at-risk" scores which are defined by the BASC-2 as a T-score of 60-69. These lower prevalence rates might also be explained by our assumption that all records within the BASC-2 data set were valid thereby limiting the accuracy of this finding. Likewise, the low prevalence of trauma symptoms reported by the TSCC may be explained by the fact that the instrument's cut-off T-score was 65, but for purposes of our study, a cut-off of 70 was applied.

Accurately assessing and effectively treating the mental health needs of incarcerated or detained juveniles is a complex yet salient issue in light of the high prevalence of mental health disorders within this population. A review of current research suggests that the lack of standardized measurements and inconsistent screening and assessment procedures for evaluating the mental health needs of incarcerated youth contribute to inconsistent outcomes and to the lack of the establishment of a best practices model of treatment (Wasserman et al., 2002). These inconsistencies have led many to appropriately call for a universal mental health screening process (McReynolds et al., 2008; Wasserman et al., 2004) with immediate assessment at intake. This process should include screening for traumatic experiences, distressing memories, and substance use, all of which are predictors for suicidality in juvenile offenders (Chapman & Ford, 2008; Wasserman et al., 2003).

Since risk factors differ for male versus female delinquency and because the mental health needs of female offenders are profound and significantly different than male offenders, gender differences should be a decisive factor in further developing all three standard components of mental health care provided to juveniles: screening and assessment, treatment planning, and treatment strategies (Stewart & Trupin, 2003). According to this study and others, female juveniles present with a higher prevalence of internalized issues such as anxiety, depression, PTSD, and suicide ideation, requiring immediate attention and clinical intervention at intake (McCabe et al., 2002; Robertson et al., 2004; Teplin et al., 2002). Many screening and assessment tools and treatment protocols presently used by the juvenile justice system were originally developed for males and may not accurately assess or meet the needs of female juveniles (Grisso & Underwood, 2004). Gender specific and standardized measurements which detail a female's immediate risk are necessary to assure the safety and health of females at this stage of their detention (Nordness et al., 2002). Males on the other hand, present with increased levels of externalized disorders at intake, such as hostile attitudinal dispositions. They may not as a whole require such an immediate response at intake but would benefit from thorough assessment using other gender-normed diagnostic measures.

Considering the higher incidence of traumatic experiences in the lives of female juveniles (Abram et al., 2004; Cauffman et al., 1998; Corrado et al., 2000), ongoing programming for females should focus on physical and sexual abuse, assault, trauma, and disorganized and dysfunctional family systems (McCabe et al., 2002). Historic methods of juvenile justice management such as seclusion and restraint may not be recommended for females since such methods can further exacerbate the feelings associated with victimization (Skowrya & Coccozza, 2007).

5. Directions for Future Research

Further research exploring how incarcerated juvenile females react and potentially benefit differently from mental health treatment is warranted. The more knowledge regarding the specifics and distinctiveness of the mental health needs of male versus female delinquents, the greater the effectiveness of future program development for the mental health care of these two populations. When interpreting the results of this study and when planning future research of this population, limitations should be considered. First, random selection was not used since the data was derived from youth detained in a single Southwestern secure facility. This resulted in an ethnic majority of Hispanics which limits the generalizability of these findings to other populations of incarcerated youth. The observed differences in scores across the measurements may be related to the cultural uniqueness of this sample. Second, the data were assumed to be gathered at intake into incarceration, thereby limiting the generalizability to non-adjudicated juvenile offenders. Third, the assumption that all assessment data was reliable and valid may possibly skew or limit the accuracy of this study's findings. And finally, the results of the MAYSI-2 and the TSCC cannot be interpreted as diagnostic conclusions since they are only designed to screen for mental health symptoms

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