Comparing Social Climate Perceptions of Staff and Juveniles with Sexual Behavior Problems

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COMPARING SOCIAL CLIMATE PERCEPTIONS OF STAFF AND JUVENILES WITH SEXUAL BEHAVIOR PROBLEMS

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Abstract

Increases in research on juvenile sexual behavior problems have created a need for more evidence-based treatment. Furthermore, literature shows that the social climate of a treatment facility is an important variable, yet more empirical data exploring how it impacts juveniles with sexual behavior problems in secure care facilities is needed. This study evaluated the perceived social climate of both staff and juveniles in two secure care facilities; as measured by the Ward Atmosphere Scale (WAS), and was a one-time administration. Subjects were 56 adjudicated male juveniles with sexual behavior problems (n=35) and staff (n=21), respectively. Overall, the staff and juveniles' social climate perceptions were found to be significantly different in the System Maintenance higher order domain of the WAS. Additionally, preliminary data analysis discovered that the two sites were statistically significantly different for the WAS subscales of Order and Organization, Support, Involvement, as well as the higher order domains of System Maintenance and Relationship. Finally, the theoretical and practical implications, strengths and limitations, recommendations for future research and practices for this study are discussed.

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CHAPTER 1

INTRODUCTION

Introduction

The purpose of this study was to determine if a disparity existed between staff and that of juveniles with sexual behavior problems perceptions of social climate in secure care facilities. Within the United States alone, juveniles under the age of 18 are responsible for more than a third of sexual crimes (Fanniff & Kimonis, 2014). Righthand and Welch (2004) call attention to the emotional, social climates, physical, and financial costs incurred by victims, families, and society as a result of these sexual offenses. In order to continue the work of minimizing the ramifications, further research is being conducted towards the identification of commonalities and the conditions of living within juveniles with sexual behavior problems, as well as a more educated approach towards their treatment.

The amount of programs for juveniles with sexual behavior problems has grown in the past 30 years (Walker & McCormick, 2004), and the literature suggests that juveniles with sexual behavior problems who have received treatment have reduced sexual recidivism rates as compared to juveniles who have not (Edwards, Whittaker, Beckett, Bishopp, & Bates, 2012; Karokosta, Underwood, Merino, Williams, Todd, Williams, Fairchild, Dailey, & Crump, 2016; Worling, 1998). While some researchers argue in favor of the positive effects of treatment, there has also been a confluence of research that emphasizes the collateral damage created from the iatrogenic effect of deviancy training created when delinquent peers are placed in confined

spaces (Dishion, McCord, & Poulin, 1999; Dodge, Dishion, & Lansford, 2006; Gifford-Smith, Dodge, Dishion, & McCord, 2005; Van Ryzin & Dishion, 2014).

Awareness of juveniles with sexual behavior problems has dramatically intensified based on greater societal consciousness, increased advocacy on behalf of victims, and juveniles becoming more educated about the judicial system (McCamey, 2010). As of 2007, statistics regarding juveniles with sexual behavior problems show that juveniles committed 22 percent of all sex crimes and 15 percent of forcible rapes (Christiansen & Vincent, 2013). In recent years, more information has been gathered to help build knowledge and awareness towards identifying and understanding these juveniles with greater focus; however, the majority of sex offender data resides within the realm of adult offenders. Juveniles have often remained a subset of the population with which researchers and clinicians have historically experienced difficulty (Christiansen & Vincent, 2013; Whittle, Bailey, & Kurtz, 2006; Pratt, 2013) in formulating a clear conceptualization of the origins, characteristics, or consistent treatment that decreases recidivism of their acting out (Edwards, Whittaker, Beckett, Bishopp, & Bates, 2012).

Due to this increased awareness, and subsequent need for rehabilitation treatment, different levels of programs have been established across the country. Furthermore, literature surrounding a common form of care, as well as progression of correction for juveniles with sexual behavior problems has produced contrasting interpretations of their efficacy in reducing recidivism (Abrams, 2006). Pratt (2013) argued for a placement system that takes into consideration the juvenile's risk assessment of their detrimental impact on the community. Several studies have discovered that juveniles who have entered into residential treatment facilities show a reduction in negative symptoms (e.g., aggression, depression, anxiety, suicidality), a rise in daily functioning, and high rates of school completion within the course of

treatment as well as post-treatment (Ebesutani et al., 2011; Hair, 2005). Conversely, the newfound structure of a treatment program, in relation to the juvenile's previous experience with chaos, abuse and neglect in their families of origin or ecological context of school, neighborhood, and community (Ward, 2004), may create confusion and discomfort for them. Rates of juveniles with sexual behavior problems who have experienced sexual abuse range from 40 to 80%, and the prominence of physical abuse within this population ranges from 25 to 50% (Righthand & Welch, 2004).

While some research produces data that maintains support for the efficacy of home or community based treatment programs for juvenile offenders of all types (Henggeler & Sheidow, 2012; Ryan & Testa, 2005), other research in the field calls attention to the shifting trend of relying more heavily on the juvenile justice system and secure care facilities to provide treatment for juveniles with sexual behavior problems in particular (Underwood, Robinson, Mosholder, & Warren, 2008). For many with mental health disorders, this is their first line of treatment (Underwood, Warren, Talbott, Jackson, & Dailey, 2014). The result has been an increased need for these facilities to be able to provide effective treatment to the juveniles that have been placed with them.

Researchers are in agreement that the social environments, and climate of the juvenile while in treatment programs, possess significant implications for juvenile satisfaction, motivation, as well as treatment outcomes (Beazley & Gudjonsson, 2011; Jörgensen, Römma, & Rundmo, 2009; Schjødt, Middelboe, Mortensen, & Gjerris, 2003; Nicholls, Kidd, Threader, & Hungerford, 2015). Specifically, Beech and Hamilton-Giachritsis (2005) conducted research that discovered a correlation between the correctional facility's social climate and treatment success of adult sexual offenders. As previously mentioned, the iatrogenic effect of deviancy

training often experienced in secure care facilities, has been found to be a contributing factor in the treatment effectiveness of these programs (Van Ryzin, & Dishion, 2014). Ultimately, the research related to the social climates of programs for juveniles with sexual behavior problems in secure care remains scarce, with much of it focused on juveniles with non-sexual offenses, (Van der Helm, Stams, Van Genabeek, & Van der Laan, 2012; Van der Helm, Stams, & Van der Laan, 2011; Van Ryzin & Dishion, 2014) even though secure care is the most likely treatment employed for those with the highest risk for recidivism (Abrams, 2006; Underwood, Robinson, Mosholder, & Warren, 2008).

Hair (2005) posited the inherent difficulty in conducting research necessary to demonstrate the effective variables (e.g., social climate, treatment programs) of secure care is largely due to an inability to conduct controlled laboratory studies. Thus, the importance of gathering data concerning a juveniles experience in a secure facility from valid and reliable assessments tools must not be understated. Jörgensen, Römma, and Rundmo (2009) utilized the Ward Atmosphere Scale and discovered a correlation between the Ward Atmosphere Scale and juvenile satisfaction, while acknowledging more research was necessary. Social climate has been a concept researched in the previous decades (AL-Sagarat, Moxham, Curtis, & Crooke, 2014; Nicholls, Kidd, Threader, and Hungerford, 2015; Smith, Gross, & Roberts, 1996; Sørlie, Parniakov, Rezvy, & Ponomarev, 2010), and focused on the perspective within a hospital inpatient unit as opposed to correctional centers. There are no studies that focus specifically on juveniles with sexual behavior problems and their experience of the social climate within secure care facilities, and its effect on treatment outcomes and symptom reduction.

Broad Themes in the Literature

Juveniles with Sexual Behavior Problems. As previously detailed, research regarding juveniles with sexual behavior problems indicate their involvement in a significant portion of all sex crimes (22%) and forcible rapes (15%) (Christiansen & Vincent, 2013). Furthermore, statistics demonstrate that an adolescent under the age of 18 commit one in five sexual assaults, and juveniles under the age of 18 carried out one-third of sexual assaults perpetrated against children under the age of 12 (Vitacco, Caldwell, Ryba, Malesky, & Kurus, 2009). Studies exploring commonalities among juveniles with sexual behavior problems has yielded little in regards to constructing an overarching homogeneous picture (Whittle, Bailey, & Kurtz, 2006); certain characteristics of juveniles with sexual behavior problems have become more pronounced within the literature. Yet, there have not been enough cohesive research findings to garner concrete assertions.

Until recently, juveniles with sexual behavior problems have often been labeled with the same characteristics as adult sex offenders (Cashwell & Caruso, 1997; Christiansen & Vincent, 2013). The lack of research-supported differentiation between the two sub-groups has contributed to confusion within the field about appropriate identification and effective levels of treatment for juveniles who sexually offend (Abrams, 2006; Hair, 2005; Bettmann & Jasperson, 2009). Although this population is indeed heterogeneous in their makeup (e.g., race, ethnicity, age of first offense, socio-economic status), and further research is imperative, studies have uncovered several burgeoning markers of juveniles with sexual behavior problems.

Adding to the characteristic markers of this population, Miyaguchi and Shirataki (2014) affirmed previous studies, which stated these individuals, have displayed low executive functioning abilities in working memory, sustained attention, and inhibition (Kelly, Richardson,

Hunter, & Knapp, 2002). In contrast, some studies have found little to no statistical significance between juveniles with sexual behavior problems and their counterparts who have been identified with neurological issues (Butler & Seto, 2002; Seto & Lalumière, 2010). Additionally, Stevens, Hutchins, French, and Craissati (2013) declared that juveniles with sexual behavior problems are five times more likely to have been sexually abused than juvenile nonsexual offenders. In fact, at The Pines Residential Treatment Center in Portsmouth, Virginia, Apsche, Evile, and Murphy (2004) discovered that 98 percent of the juveniles reported being victims of prior abuse. Considering the dearth in literature, which informs an incomplete understanding of this population, continued research is required in order to lessen the gap in our knowledge of juveniles with sexual behavior problems.

Another important factor in treatment for juveniles with sexual behavior problems, that has seen a great deal more research, are the cognitive distortions of the adolescents (Underwood, Robinson, Mosholder, & Warren, 2008). Cognitive distortions are the deviant thoughts and beliefs about relationships, love, sex, self and others that are often held by those with sexual behavior problems. Thus, sexually deviant fantasies or interest in juveniles are viewed as risk factors for those who sexually offend (Apsche, Evile, & Murphy 2004; McCamey, 2010; Stevens et al., 2013). Furthermore, they have been a standard focus of treatment for juveniles with sexual behavior problems for the several decades since a published report by Abel, Becker and Cunningham-Rathner (1984) (Karokosta et al., 2016; Ward, Polaschek, & Beech, 2006). However, assessing them accurately, as well as their utilization in treatment has been called into question and debated in recent years (Marshall, Marshall, & Kingston, 2011; Ò Ciardha, & Gannon, 2011).

Underwood, Phillips, von Dresner, and Knight (2006) stress the fact that mental illness within the juvenile offender population is a growing, and overwhelming concern for the justice system. The Coalition for Juvenile Justice (2000) released a statistic stating that between 50 to 75 percent of juveniles entering the judicial system have diagnosable mental health issues. Moreover, studies have shown that juveniles with sexual behavior problems frequently exhibit signs of low self-esteem and elevated experiences of negative emotion, and they also have a lack of coping skills, substance abuse problems, and a deficiency of assertive characteristics (McCamey, 2010).

Researchers contend that emotional disorders that manifest early in an individual's life often have anxiety as a root cause (Ryngala, Shields, & Caruso, 2005). For many juveniles with sexual behavior problems, the root cause of anxiety is the sexual abuse that was perpetrated upon them (Apsche, Evile, & Murphy, 2004; Gerardin & Thibaut, 2004; Righthand & Welch, 2004; Seto & Lalumière, 2010; Stevens, Hutchins, French, & Craissati, 2013). Becker, Kaplan, Tenke, and Tartaglini (1991) conducted a study of depressive symptomatology in juveniles with sexual behavior problems who have experienced previous abuse where they discovered 42% of the participant offenders confirmed significant depressive symptoms, and had significantly higher self-report of depression than a random sample of juveniles. Literature that produced different results, where there was no significant difference between juveniles with sexual behavior problems and juvenile non-sexual offenders, has also contributed to the depth of understanding within this field (Gerardin & Thibaut, 2004). Additionally, a study solely dedicated to juveniles with sexual behavior problems, where their MMPI-A scores were compared to the scores of juvenile non-sex offenders, yielded results which showed sexual offenders gained higher scores

in the clinical scale of depression and validity scale of infrequency type 1 (Mousavi, Gharraee, Ashouri, & Habibi, 2016).

Treatment programs. Several treatment options are available for juveniles who sexually offend and their families: outpatient, community based, residential care, and secure care. The utilization of juvenile treatment facilities showed a marked increase from 81,000 served in 1980, to approximately 250,000 individuals in 2000 (Ebesutani, Ale, Luevve, Viana, & Young, 2011). Emotionally and behaviorally troubled juveniles receive treatment through outpatient services; however, a substantial portion either drop out or attend only a few sessions (Harpaz-Rotem, Leslie, & Rosenheck, 2004). Juveniles often enter into residential treatment facilities if they have not found success with an outpatient model, and are in need of an inpatient facility that specializes in extreme behavioral and psychological disruptions in their lives (Bettmann & Jasperson, 2009). Secure care facilities share many features with their residential care counterparts (e.g., out-of-home, 24-hour care, high security, high structure); however, they tend to be more restrictive and are often licensed as hospitals and secure care prisons (Bettmann & Jasperson, 2009). Furthermore, residential treatment facilities often mandate longer durations of stay, as opposed to secure care facilities (Bettmann & Jasperson, 2009).

Consequently, experts in adolescent rehabilitation are divided concerning the overall benefit of certain treatment facilities (Abrams, 2006; Bettmann & Jasperson, 2009; Hair, 2005; Lyons, Libman-Mintzer, Kisel, & Shallcross, 1998; Van Ryzin, & Dishion, 2014). Although a consensus is unlikely to be reached, treatment of some kind is still necessary in order to maintain boundaries and separation between the risky behavior of juveniles with sexual behavior problems and the community (Underwood, Robinson, Mosholder, & Warren, 2008). It is this concern for the well being of the community, which can trump the needs of the juvenile receiving treatment

and subsequently hinder them from receiving appropriate care (i.e., juvenile mandated to a level of care that does not match their level of risk). Additionally, treatment options may be limited for the juveniles with sexual behavior problems due to the illegal nature of their offense, with the majority of juveniles falling under the purview of the Juvenile Justice System. Therefore, the justice system often bears the responsibility for the type of treatment facility a juvenile is initially placed.

The cost for residential or secure models of care, $130,000 to over $200,000 per youth per year, is another point of consideration and can create a substantial barrier for individuals and families receiving proper treatment (Pratt, 2013). Moreover, a lack of empirical research in their efficacy with juveniles with sexual behavior problems, and the dramatic price, carries with it the possibility that families may find it difficult to locate the most effective treatment facility for their child. The consequences have been felt in the inpatient treatment sector, as juveniles in residential placements decreased 26% to fewer than 81,000 from 2000 to 2008 (OJJDP, 2010). Ongoing research is needed to further understand treatment options that are most valuable for juveniles with sexual behavior problems.

An additional treatment variable when addressing the sexually offensive behavior of juveniles in the correctional facility model (e.g., residential and secure care) is the deviancy training that is often part and parcel in this setting (Dishion, McCourd, & Poulin, 1999; Dodge, Dishion, & Lansford, 2006). Deviancy training is the phenomenon in which the interaction between deviant peers has a negative impact on one another, and the overall behavior of the juveniles deteriorates (Gatti, Tremblay, & Vitaro, 2009). Gifford-Smith, Dodge, Dishion, and McCord (2005) state, "Deviant peer influence is an important contributing factor to the development of delinquent behavior. By combining deviant children and juveniles into

treatment groups or educational programs without attending to these processes and the factors that impinge upon them, we may be harming inadvertently the very children we are trying to help" (p. 264). This issue of deviancy training is an area that demands additional exploration in order to understand it more thoroughly, which may lead to the development of mitigating factors (e.g., more security measures, higher levels of structure).

Social Climate. "Social climate is a construct that reflects the perceived ecological characteristics of a particular setting, which can vary by dimensions such as time, physical objects, and participants" (Bootsmiller, Davidson, Luke, Mowbray, Ribisil, & Herman, 1997, p. 326). Some researchers previously held the belief that a setting's environment had very little impact on the occupant's behaviors, and a change in environment would produce minimal change. However, contemporary research has affirmed that the social climate of a treatment environment is a vital component of inpatient care within psychiatric hospitals (Beazley & Gudjonsson, 2011; Jörgensen, Römma, & Rundmo, 2009; Schjødt, Middelboe, Mortensen, & Gjerris, 2003; Nicholls, Kidd, Threader, and Hungerford, 2015). In other words, a positive treatment climate includes higher levels of support (Jörgensen, Römma, & Rundmo, 2009), clear program direction (Bootsmiller, Davidson, Luke, Mowbray, Ribisil, & Herman, 1997), and involvement in social interactions (Brunt & Rask, 2005), which may lead to higher levels of patient satisfaction and symptom reduction. Conversely, a negative treatment climate is one that overly protects and controls the patients (Brunt & Rask, 2005), and includes high levels of aggression (Jörgensen, Römma, & Rundmo, 2009), which may inhibit the patient's ability and willingness to progress through the treatment program.

Consequently, the perception of the social climate by the juvenile has been increasingly valued, and quantitative data on this variable is crucial for outcome literature. Previous studies

have often placed their focus on the perception of the ward staff, while data conveying juvenile perception has been lagging significantly behind (Edelson & Paul, 1977; Slate & Vogel, 1997). Schjødt, Middelboe, Mortensen, and Gjerris (2003) underscored this discrepancy in their article; which investigated the level of agreement attained between juveniles and staff ward perceptions of the treatment environment. Because research on secure care facilities for juveniles with sexual behavior problems is deficient, one particular point of focus for this current study will examine the relationship concerning the perceptions held by juveniles and staff, respectively.

The Ward Atmosphere Scale (WAS), developed by Moos and Houts (1968), is the most widely utilized assessment instrument of the social climate of inpatient facilities (Sørlie, Parniakov, Rezvy, & Ponomarev, 2010). It is a 100 question true-false inventory that generates ten subscales (Involvement, Support, Spontaneity, Autonomy, Practical Orientation, Personal Problem Orientation, Anger and Aggressive Behavior, Order and Organization, Program Clarity, and Staff Control) are further divided into three higher order domains (Relationship, Personal Development, and System Maintenance). The WAS has been translated into German, French, Dutch, Afrikaans, Hebrew, Danish, Swedish, Finnish, Italian, and Norwegian languages.

Van der Helm, Stams, and Van der Laan (2011) developed the Prison Group Climate Instrument (PGCI) as an assessment tool to analyze group climate outcomes, as well as the facility's ability to provide a controlled and safe environment. Their study was a vital part of the conversation that acknowledged how the social climate, in a secure facility, had far-reaching effects on the therapeutic process. This instrument has also been used within adolescent facilities (Heynen, Van der Helm, Stams, & Korebrits, 2014; Van der Helm, Stams, Van Genabeek, & Van der Laan, 2012). Consequently, this study will seek to build on previous

findings related to treatment outcome by focusing on both client and staff perceptions of the treatment milieu social climate.

The Group Environment Scale (GES) (Moos, 1994) is a 90 item true-false assessment that has 10 subscales (9 questions per subscale) that are organized into three dimensions of social climate. The Relationship dimension addresses the aspects of personal relationships in a group, and contains the Cohesion, Leader Support, and Expressiveness subscales. The Personal Growth dimension is concerned with the extent to which a group contributes to personal growth and goal completion, and has the Independence, Task Orientation, Self-Discovery, and Anger and Aggression subscales. The Systems Maintenance and Change dimension attends to the structure and flexibility of the environment, and encompasses the Order and Organization, Leader Control, and Innovation subscales.

The Essen Climate Evaluation Schema (EssenCES) (Schalast, Redies, Collins, Stacey, & Howells, 2008) is a 17-item questionnaire (15 valid items and 2 positively worded un-scored items) that was originally utilized within forensic psychiatric hospitals to assess social care, and has recently been modified for use in a prison environment. It measures three climate subscales (five items each): Hold and Support (e.g., "Staff take a personal interest in the progress of inmates"), Inmates' Social Cohesion and Mutual Support (e.g., "The inmates care for each other"), and Experienced Safety (e.g., "There are some really aggressive inmates in this unit"). Both staff and inmates answer each item based on a 5-point Likert-type scale, where responses range from 1 (*I agree not at all*) to 5 (*I agree very much*), with higher scores being indicative of a more positive perception of the social climate.

Problem Statement

It is not known if, or to what degree, the perception of the social climate of a secure care facility for juveniles with sexual behavior problems differs between staff and juveniles. Because this subgroup has only recently been differentiated in their characterization (e.g., etiology, traits) (Cashwell & Caruso, 1997; Prescott, 2004; Righthand & Welch, 2004), the depth of understanding is underdeveloped and in need of research in order to strengthen this weakness in the literature. Juveniles with sexual behavior problems have been studied more extensively in the past couple of decades; however, researchers have been unable to agree on a homogenous picture of the traits of this growing group (Edwards, Whittaker, Beckett, Bishopp, & Bates, 2012; Fanniff & Kimonis, 2014; Geradin & Thibaut, 2004; Knight, Ronis, & Zakireh, 2009; Mousavi, Gharraee, Ashouri, & Habibi, 2016; Righthand & Welch, 2004; Rasmussen, Lev-Wiesel, & Eisikovits, 2013; Hart-Kerhoffs, Boonmann, Doreleijers, Jansen, van Wijk, & Vermeiren, 2015; Whittle, Bailey, & Kurtz, 2006).

Furthermore, the social environment of the facility has been considered an important measure of juvenile satisfaction in their secure care experience (Jörgensen, Römma, & Rundmo, 2009; Moos & Houts, 1968; Røssberg, Melle, Opjordsmoen, & Friis, 2006; Sørlie, Parniakov, Rezvy, & Ponomarev, 2010). While several studies have focused on the effect the atmosphere of the facility in psychiatric hospital setting has on juveniles (Beazley & Gudjonsson, 2011; Jörgensen, Römma, & Rundmo, 2009; Schjødt, Middelboe, Mortensen, & Gjerris, 2003; Nicholls, Kidd, Threader, and Hungerford, 2015), the literature on its effect on juveniles with sexual behavior problems in secure care is minimal. Thus, more research is necessary to further the knowledge base of salient factors of effective treatment as it relates to a juvenile's experience of the social climate.

This study will address the existing questions regarding the possible differences between social climate perceptions of staff and juveniles with sexual behavior problems by analyzing the results of the Ward Atmosphere Scale from juveniles who had adjudicated to juvenile secure care programs in the southeastern United States, and the working staff in the facilities.

Purpose of the Study

The purpose of this study is to compare the potential differences that may exist between the staff and juveniles' perception of the social climate. Previous research has discovered similarities in certain areas of social climate when comparing staff and resident scores regarding social climate, while there remain specific variables of the social climate in which their respective perceptions diverge (e.g., support, open expression of feelings, practical skills education, open defiance and anger) (Bootsmiller, Davidson, Luke, Mowbray, Ribisil, & Herman, 1997). Therefore, data analysis will be concentrated on particular scores (detailed in the next section) from the administration of the Ward Atmosphere Scale to staff and juveniles.

Research Question(s) and/or Hypotheses

The previous sections delineated the paucity of research dedicated towards the differences between the social climate perceptions of juveniles with sexual behavior problems in a secure care treatment facility, and the respective staff. As such, the following research questions (RQ) and hypotheses (H) are proposed for this study. This study intends to investigate the following research questions:

Research Questions.

RQ1: Is there a statistically significant difference between the WAS Personal Problem Orientation subscale scores of juveniles, and the WAS Personal Problem Orientation subscale scores of the staff in secure care sites?

RQ2: Is there a statistically significant difference between the WAS Support subscale scores of juveniles, and the WAS Support subscale scores of the staff in secure care sites?

RQ3: Is there a statistically significant difference between the WAS Involvement, and Anger and Aggression subscale scores of juveniles, and the WAS Involvement, and Anger and Aggression subscale scores of the staff in secure care sites?

RQ4: Is there a statistically significant difference between the WAS System Maintenance domain scores of juveniles, and the WAS System Maintenance domain scores of the staff in secure care sites?

RQ5: Is there a statistically significant difference between the WAS Relationship domain scores of juveniles, and the WAS Relationship domain scores of the staff in secure care sites?

Hypotheses.

H1: There will be a statistically significant difference between the WAS Personal Problem Orientation subscale scores of juveniles, and the WAS Personal Problem Orientation subscale scores of the staff in secure care sites.

H2: There will be a statistically significant difference between the WAS Support subscale scores of juveniles, and the WAS Support subscale scores of the staff in secure care sites.

H3: There will be a statistically significant difference between the WAS Involvement, and Anger and Aggression subscale scores of juveniles, and the WAS Involvement, and Anger and Aggression subscale scores of the staff in secure care sites.

H4: There will be a statistically significant difference between the WAS System Maintenance domain scores of juveniles, and the WAS System Maintenance domain scores of the staff in secure care sites.

H5: There will be a statistically significant difference between the WAS Relationship domain scores of juveniles, and the WAS Relationship domain scores of the staff in secure care sites.

Review of the Literature

Introduction to the Chapter and Background to the Problem

The United States' Department of Justice (2009) attributes 25.6% of all sexual offenders, and 35.6% of sex offenders with juvenile victims, as being perpetrated by juveniles. Each year in the United States, juveniles are responsible for 20 percent of rapes, and they account for approximately 20-50 percent of child sexual abuse cases (Hart-Kerkhoffs et al., 2009). Keogh (2012) noted no downward trend in the rates of juvenile sex offenses; in fact, it is a growing epidemic that demands more nuanced research into characteristics of this population, available and effective treatment, and treatment variables (e.g., social climate) that influences positive outcomes.

Therefore, this literature review will extrapolate the available research and data concerning three overarching areas: juveniles with sexual behavior problems, treatment programs, and the social climate of treatment programs. As research on this group continues to emerge, the knowledge base of common attributes is becoming more crystalized and focused. This initial section of the dissertation will review juveniles with sexual behavior problems and their history of traumatization, presence of learning disabilities, cognitive distortions, and mental health issues (e.g., depression and anxiety). Next, treatment interventions will be reviewed; including community based treatment, as well as treatment approaches within residential and secure care. Finally, the existing research related to contributing factors in the overall experience

of treatment facilities, specifically the social climate as communicated by both resident and treatment staff will be reviewed.

Historically, juveniles with sexual behavior problems have been consolidated within the overall sexual offender literature, without consideration for the unique aspects they possess that directly impacts identification and treatment (Abrams, 2006; Hair, 2005; Bettmann & Jasperson, 2009). Research has primarily focused on adult sex offenders, and findings were often generalized to include juveniles (Cashwell & Caruso, 1997; Christiansen & Vincent, 2013). The seriousness of juvenile offenses was often glossed over, and the magnitude of the perception was labeled "exploratory" (Christiansen & Vincent, 2013). More recent research highlights the differences between adult and juveniles with sexual behavior problems. Juveniles often have fewer victims, their offenses tend to be less aggressive than their adult counterparts, and treatment is obtained in correctional and residential treatment programs (Miranda & Corcoran, 2000; Underwood, Dailey, Merino, & Crump, 2015).

As literature begins to clarify the differences between these two groups, research concerning proper treatment options has begun to formulate and develop. Generally, when juveniles are charged with a sexual offense, they are assigned a level of treatment that is equivalent to the level of offense, and assessed for risk of recidivism (Underwood, Dailey, Merino, & Crump, 2015). The continuum in types of treatment progress from least restrictive (e.g., community outpatient clinical services, traditional and treatment foster care) to more restrictive (e.g., residential group care, acute inpatient psychiatric services) and to most restrictive (e.g., secure care juvenile correctional services) (Underwood et al., 2006). The Association for the Treatment of Sexual Abusers (ATSA) (2000) found that, with appropriate

treatment, juveniles are more likely to benefit from treatment and have less risk of re-offending when their needs are appropriately identified.

Although there are treatment options available for juveniles with sexual behavior problems, there remains division within the realm of this population's treatment concerning the differing levels of outcome effectiveness across modalities (e.g., community based, residential care) (Rehfuss et al., 2013). While these discrepancies have called attention to the necessity for further research in this area, researchers continue to discover mixed results in the efficacy of distinctive treatments (Abrams, 2006; Hair, 2005; Bettmann & Jasperson, 2009; Pratt, 2013; Underwood, Robinson, Mosholder, & Warren, 2008). In a meta-analysis of over 400 residential placement evaluations, recidivism rates were only reduced by 5 to 10% when compared to a control group that received less intensive treatment options (Abrams, 2006). However, a study assessing the behavioral and emotional disturbances of youth discovered a decrease in symptomology by the conclusion of treatment (Hair, 2005). In response, Underwood et al. (2015) studied the Office of Juvenile Justice (OJJ) utilization of a multi-system approach in implementation and management in the care of juveniles with sexual behavior problems, their families, and the community. They found the secure care treatment programs adequately addressed the needs of the juveniles who were assessed as having a higher risk for recidivism as measured by the Juvenile Sex Offender Assessment Protocol II (J-SOAP-II) (Underwood et al., 2015). Furthermore, the Ward Atmosphere Scale (WAS) was used to measure the perception of the treatment milieu's social climate for staff, youth, and their families. Underwood et al. (2015) discovered that support and relational variables are important factors (e.g., Support, Spontaneity, Personal Problems, Order and Organization) for the staff and youth in regards to the efficacy of

the treatment program. "They [support and relational variables] are also main foci of the treatment program and support the program's success as a whole" (p. 29).

Despite the aforementioned research studies that signify a burgeoning interest in, and respect for, the importance of the social climates' effect on juveniles in treatment, a gap remains in the literature. To further the depths of understanding in regards to the impact of social climate in treatment facilities, more research is necessitated to uncover the perceptions of social climate for staff and juveniles, respectively. Thus, this research will search for a bridge that can be built to link these variables that are currently disconnected, in order to strengthen our treatment and care for juveniles with sexual behavior problems and the community.

Overall, literature continues to highlight the need for increased research focused on the perceptions of social climate within secure care settings for staff and juveniles with sexual behavior problems due to the impact on their respective communities. This current study addresses the various types of treatment programs available for juveniles with sexual behavior; however, the data is inconclusive regarding their effectiveness in attaining their respective treatment goals. Moreover, the impact of a treatment program's social climate has been acknowledged in particular milieu (e.g., prison, psychiatric unit); yet, research on juveniles with sexual behavior problems in secure care treatment programs has garnered insufficient data. The subsequent section details the theory, Cognitive Behavioral Theory (CBT), and how it relates to the research on treatment for juveniles with sexual behavior problems.

Theoretical Foundations and/or Conceptual Framework

Cognitive Behavioral Therapy (CBT) is a commonly applied counseling theory where the clinician focuses on a youth's negative thoughts and cognitive distortions, and work to develop intervention strategies that combat the damaging thoughts or distortions. Recent research

regarding CBT has affirmed it as an appropriate and viable method of working with juveniles with depression, anxiety, childhood trauma, and learning disabilities (Hollenbeck, 2012; Loades, 2015; Swart & Apsche, 2014; Webb, Auerbach, & DeBubeis, 2012), as well as adolescent sexual behavior problems (Rehfuss, Underwood, Enright, Hill, Marshall, Tipton, West, & Warren, 2013). A study done with several treatment providers for juveniles with sexual behavior problems found that CBT was the most commonly used, as well as the most successful, approach utilized when compared to covert sensitization, aversion therapy, and biological therapy (Ikomi, Harris-Wyatt, Doucet, & Rodney, 2009). Additionally, CBT treatment was deemed effective in reducing internal distress (e.g., negative internal mood, cognitions, attitudes), and aggressive behaviors with youth in a residential treatment facility (Apsche, Evile, & Murphy, 2004). Further empirical research on CBT's effectiveness with juveniles with sexual behavior problems in secure care facilities is necessary to ensure they are receiving the correct treatment. It is important that the treatment of juveniles with sexual behavior problems, while maintaining its focus on the inappropriate behaviors, also encompasses the ability to work with the co-morbid disorders (Grisso & Underwood, 2002).

In an article addressing co-morbidity with the sexual offenses of juveniles, Pratt (2013) studied the impact violence, abuse, trauma and neglect have on a child in leading them to perpetrate sexual harm on another. The presence of sexually deviant fantasies in juveniles is viewed as a risk factor for those who sexually offend (Apsche, Evile, & Murphy 2004; McCamey, 2010; Stevens, Hutchins, French, & Craissati, 2013). Additionally, juveniles with learning disabilities are a representative population among youth who sexually harm (Whittle, Bailey, & Kurtz, 2006). CBT is a theory that has proven to be empirically sound in treating the symptomologies often associated with juveniles with sexual behavior problems.

Depressive symptoms have been experienced by 18% of juveniles at some point in their lives, and if left untreated, the risk of the symptoms worsening dramatically increases the risk of damaging effects (Straub, Koelch, Fegert, Plener, Gonzolez-Aracil, Voit, Sproeber, 2013). For example, depression in juveniles often presents comorbid with social, juridical, and learning problems, as well as substance abuse, physical issues, teen pregnancies, and suicide (Stikkelbroek, Bodden, Deković, & van Baar, 2013). The efficacy of CBT as a treatment modality for decreasing hopelessness and depression scores in depressed juveniles has been confirmed in previous research (Alavi, Sharifi, Ghanizadeh, & Dehbozorgi, 2013; Stanley, Brown, Brent, Wells, Poling, Curry, Kennard, Wagner, Cwik, Klomek, Goldstein, Vitiello, Barnett, Daniel, & Hughes, 2009; Barbe, Bridge, Birmaher, Kolko, & Brent, 2004). Goodyer, Dubicka, Wilkinson, Kelvin, Roberts, Byford, and Harrington (2007) conducted a study that showed moderately to severely depressed participants experienced a 21% improvement in their symptoms of depression after brief (three sessions) cognitive behavioral interventions.

Anxiety disorders are common among juveniles, with some research estimating 15% to 20% of juveniles having experienced anxiety to some degree (Lundkvist-Houndoumadi, Hougaard, & Thastum, 2014). As with depression, anxiety can create significant developmental, academic, and social functioning for the individual (Cartwright-Hatton, Roberts, Chitsabesan, Fothergill, & Harrington, 2004; Lundkvist-Houndoumadi, Hougaard, & Thastum, 2014). CBT has proven to be effective for juveniles struggling with an anxiety disorder; although, there remains a segment of this population that respond with little to no benefit towards symptom relief (Reynolds, Wilson, Austin, & Hooper, 2012). In fact, Hogendoorn, Prins, Boer, Bervoort, Wolers, Moorlag, Nauta, Garst, Hartman, and de Haan (2014) highlighted that beyond treatment, three to four out of ten children remain clinically anxious. For reasons that range from cost,

time, availability, and stigma, few juveniles, who could benefit from this modality, receive appropriate mental health care (National Research Council-Institute of Medicine, 2009).

Cognitive Behavioral Therapy encompasses numerous interventions that are aimed at shifting the juvenile with sexual behavior problems deviant sexual thoughts and arousal, thinking errors, beliefs systems, and self-regulation (Karokosta, Underwood, Merino, Williams, Todd, Williams, Fairchild, Dailey, & Crump, 2016; Waldram, 2010). James B. Waldram, professor at the University of Saskatchewan stated:

> Foundational within CBT is the idea that many offenders suffer from 'cognitive distortion' or 'thinking error,' especially the propensity to harbor and act on incorrect or fallacious ideas that allow them to justify, minimize, and deny responsibility for their sexual crimes (Waldram, 2010, p. 251).

Furthermore, current research is broadening the knowledge base of cognitive distortions by incorporating the concept of "schemata," which are the ways in which our mind holds onto data from past experiences and filters all incoming information accordingly (Karokosta, Underwood, Merino, Williams, Todd, Williams, Fairchild, Dailey, & Crump, 2016). Juveniles who sexually offend often have poor, and many times abusive, experiences in relationships (Apsche, Evile, & Murphy 2004; Pratt, 2013; Stevens, Hutchins, French, & Craissati, 2013); which creates a belief system that is based on faulty information regarding how to engage in relationships in sexual and non-sexual ways (Underwood, Robinson, Mosholder, & Warren, 2008). Therefore, CBT treatment that focuses on re-working schemata from past experiences will significantly contribute to a clinicians' ability to effectively work with this population.

Cognitive Behavioral Therapy is an approach that has been implemented in several treatment programs for juveniles with sexual behavior problems. The literature details its

efficacy with juveniles who possess depression, anxiety, learning disabilities, as well as a history of childhood trauma. Research has also focused on CBT treatments addressing the cognitive distortions juveniles maintain towards their sexual offenses, and the victim(s) of their offense(s). The formal review of the literature related to juveniles with sexual behavior problems will provide an overview of the common characteristics of this population, varied treatment programs and their effectiveness with juveniles, and how perceptions of the social climate impact the youth.

Formal Review of the Literature

Juveniles with sexual behavior problems. Literature pertaining to juveniles with sexual behavior problems continues to develop as the knowledge base of this population strengthens. In 2003, juveniles under 18 years of age accounted for 2.3 million arrests, while 130,000 were placed in secure care facilities (detention and juvenile correctional facilities) (Underwood, Robinson, Mosholder, & Warren, 2008). Borduin and Dopp (2015) referenced a statistic by the Federal Bureau of Investigation, which stated that 17% of arrests for sexual crimes (not including prostitution) are connected to juveniles under the age of 18. Christiansen and Vincent (2013) stated that juveniles with sexual behavior problems are involved in a substantial fraction of all sex crimes and forcible rapes. Furthermore, the annual cost associated with sexual victimization in the United States is estimated to be between $8 billion and $25 billion (Letourneau & Borduin, 2008).

This population can prove to be extremely difficult to classify by way of typology and motivation due to their diversity of backgrounds, motivation, age of onset of perpetration, types of acting out, and demographics of victims (Hackett, Carpenter, Patsios, & Szilassy, 2013; Whittle, Bailey, & Kurtz, 2006). "They differ in types of offending behaviors, family

environments, histories of child maltreatment, social skills and interpersonal relationships, sexual knowledge and experiences, academic and cognitive functioning, and mental health" (Righthand & Welch, 2001, p. 17). In fact, the research has been so sparse, Seto and Lalumière (2010) sought to broaden the knowledge base by comparing male juveniles with sexual behavior problems with male juveniles with non-sexual behavior problems. They discovered that juveniles with sexual behavior problems were five times more likely to be the victim of sexual abuse, had lower self-esteem, and maintained fewer antisocial peer relationships than their non-sexual counterparts (Seto & Lalumière, 2010).

Building on this research, specific traits that are thought to be indicative of juveniles with sexual behavior problems have begun to be recognized as sharing a positive correlation with one another. Literature suggests that this group often suffers from a history of traumatization (Apsche, Evile, & Murphy, 2004; Becker & Hunter, 1997; Creeden, 2013; Stevens, Hutchins, French, & Craissati, 2013), learning and/or cognitive disabilities (Cantor, Blanchard, Robichaud, & Christensen, 2005; Miyaguchi & Shirataki, 2014; Pratt, 2013), cognitive distortions (Gannon, Ward, & Collie, 2006; Marshall, Marshall, & Kingston, 2011; Ò Ciardha, & Gannon, 2011), and/or psychopathology (e.g., anxiety, depression) (Apsche, Evile, & Murphy, 2004; Becker, Kaplan, Tenke, & Tartaglini, 1991; Gerardin & Thibaut, 2004; Righthand & Welch, 2004; Seto & Lalumière, 2010; Stevens, Hutchins, French, & Craissati, 2013; Walters, Hughes, Sutton, Marshall, Crothers, Lehman, Paserba, Talkington, Taormina, & Huang, 2013).

History of traumatization. Pratt (2013) called attention to our burgeoning knowledge of childhood developmental theories as one avenue to inform our work with juveniles with sexual behavior problems. Specifically studying the reverberating impact of traumatic childhood experiences as manifested in the adolescent's inability to regulate emotions, attach properly in

relationships, and express intimacy (both sexual and non-sexual) in healthy ways (Creeden, 2013). Some research places the range of juveniles with sexual behavior problems who have been the victim of sexual abuse between 25 and 50% (Becker & Hunter, 1997). Other literature has found that juveniles with sexual behavior problems are five times more likely to have been sexually abused than juvenile nonsexual offenders (Stevens, Hutchins, French, & Craissati, 2013). In one particular setting, 98% of the juveniles reported previous victimization of abuse (Apsche, Evile, & Murphy, 2004).

Additionally, in comparison with other juveniles, those who sexually offend were victimized at a younger age, experienced abusive encounters, took longer to disclose abuse, and perceived less support from family at the time of disclosure (Righthand & Welch, 2004). Juveniles with sexual behavior problems typically had closer relationships with the perpetrator, the perpetrator was most likely male, victimization was for a longer period, and there was more force and penetration when compared to non-sexual juvenile offenders (Burton, Miller, & Shill, 2002). Cooper, Murphy, and Haynes (1996) discovered differences between abused (physical and sexual) and non-abused juvenile offenders that further delineate the literature on the contributing factors for sexual offending. Abused juveniles with sexual behavior problems begin their offending 1.6 years earlier, have twice as many victims, both male and female victims, and were more likely to offend outside of their family system.

Until recently, literature did not address the interplay of trauma and developmental theory thoroughly when working with these individuals. This was due, in large part, to the fact that juveniles with sexual behavior problems were often labeled with the same characteristics as adult sex offenders (Cashwell & Caruso, 1997; Christiansen & Vincent, 2013). An absence of the accurate identification of differential factors, as well as appropriate concern for the moral

development and developmental stage differences between juveniles and adults, contributed to poor treatment of juveniles who sexually offend (Abrams, 2006; Bettmann & Jasperson, 2009; Hair, 2005).

Juveniles, who have been identified as perpetrators of sexual offenses, have garnered increased research describing how they have suffered high levels of neglect, family violence, psychological, physical, and emotional abuse (Creeden, 2013; Pratt, 2013; Seto & Lalumière, 2010). They were not afforded a home environment and relationships that provided security, which is vital for the emotional development of children. "Emotional and behavioral regulation, promoted by a sense of safety and parental engagement, are important developmental foundations for pro-social functioning" (Creeden, 2013, p. 13). Juveniles that have experienced trauma and neglect often develop a distorted view of self, others, relationships, love, sex, and a impedance in socially appropriate interactions; which may lead to sexual offending behavior. Pratt (2013) posited a developmental conceptualization of these offenses as a form of "stimulation seeking" to replicate past feelings associated with their trauma, and a way to "self soothe" sexually. These offenses also display an inability to regulate their emotions and behaviors, and serve as a re-enactment of past trauma. Juveniles with sexual behavior problems tend to perpetrate similar kinds of sex acts on their victims that they experienced as victims themselves (Seto & Lalumière, 2010).

Neurobiology also informs comprehension of the problems juveniles who have been abused and neglected experience, as well as appreciating the bearing it has on the areas of the brain that are responsible for an individual's ability to engage interpersonally, relational attachment, emotional and behavioral regulation, and the capacity to problem solve (Creeden, 2013). "[The brain regions impacted] include the amygdala, the H-P-A axis, anterior cingulate

cortex, hippocampus, different regions in the prefrontal cortex, and broader left hemisphere development" (Creeden, 2013, p. 13). Rather than viewing their behavior as an inherent bent towards offending, the deviant conduct of juveniles is placed in their developmental and neurobiological context, and a therapeutic response can be implemented to bring about a healthy readjustment (Pratt, 2013). As the clinical world is gaining a more robust insight into the mind of the juvenile, greater understanding is granted into how trauma impacts brain development. Projecting forward, this should allow professionals to create programs that are developmentally tailored to the health and growth of juveniles with sexual behavior problems.

Disabilities. The presence of learning and cognitive disabilities have been discussed in sex offender literature as potential correlational factors of offending (Cantor, Blanchard, Robichaud, & Christensen, 2005; Miyaguchi & Shirataki, 2014; Pratt, 2013). In a statewide study of juveniles with sexual behavior problems, 12.5% suffered from some type of disability (e.g., autism, ADD/ADHD, developmental delay, intellectual disability) (Pratt, 2013). Moreover, additional studies affirm that juveniles with sexual behavior problems have displayed low executive functioning abilities in working memory, sustained attention, and inhibition (Ferrara & McDonald, 1996; Kelly, Richardson, Hunter, & Knapp, 2002). In spite of numerous studies that span almost 80 years, discrepancies remain concerning the actual level of impact intellectual and cognitive impairments have within the sex offender. In fact, some studies have found little to no statistical relationship between juveniles with sexual behavior problems and cognitive issues (Butler & Seto, 2002; Cantor, Blanchard, Robichaud, & Christensen, 2005; Seto & Lalumière, 2010).

Cantor, Blanchard, Robichaud, and Christensen (2005) reanalyzed previous research on general intelligence and sexual offenders, and compared multiple aspects associated with

offending populations and behavior. Their analysis yielded results that showed a statistically significant difference in IQ, with adult males who commit sexual offenses scoring lower in IQ than that of their nonsexual offending counterparts. Furthermore, the researchers found a nonsignificant difference between juveniles with sexual behavior problems samples and juvenile nonsexual offender samples, which was an unexpected finding. Cantor, Blanchard, Christensen, Dickey, Klassen, and Beckstead (2004) offered an explanation of these results surmising that individuals with lower cognitive functioning exhibit poor judgment and impulse control, which may lead to sexual offending based on opportunity. Furthermore, the researchers posited that people of lower cognitive aptitude might face greater sexual rejection by peers, and thus turn to sexual coercion against peers or adults.

Literature related to the cognitive concerns of juveniles with sexual behavior problems is limited and findings must be weighed against the existing body of research that continues to caution against making general assertions of correlation between sexual behavior problems and cognitive issues (Butler & Seto, 2002; Cantor, Blanchard, Robichaud, & Christensen, 2005; Seto & Lalumière, 2010). In their study of 210 juvenile offenders in a Japanese correctional facility, Miyaguchi and Shirataki (2014) revealed juveniles with sexual behavior problems with low IQ had more difficulties with switching attention ($U = 1080.5$, $Z = 2.23$, $p = .03$), processing information ($U = 225.0$, $Z = 2.59$, $p = .01$), working and prospective memory ($U = 259.5$, $Z = 2.09$, $p = .04$) than the nonsexual juvenile offender with low IQ. Interestingly, there was no statistically significant difference between the sex offender and non-sex offenders who did not display low IQ.

The inconsistency in the data concerning the relationship between cognitive abilities and juvenile sexual offending can be difficult to navigate. Research must persist in an effort to

obtain a clearer picture of the etiology, and proper treatment programs that are sensitive to this factors potential impact on juveniles who sexually offend. Ferrara and McDonald (1996) remarked, "Furthermore, it is likely that the neurologically impaired juvenile sex offender who goes undetected will not attain the [optimal] benefit from treatment due to problems in concentration, comprehension, and memory" (p. 13).

Cognitive Distortions. Abel, Becker, and Cunningham-Rathner (1984) were some of the first researchers to incorporate cognitive distortions as a standard focus of treatment for sexual offenders. Initially, much of the work was centered on the cognitions of child molesters (Gannon, Keown, & Polascheck, 2007; Gannon, Ward, & Collie, 2006; Marshall, Marshall, & Kingston, 2011; Ò Ciardha, & Gannon, 2011). Bumby (1996) asserted, "Cognitive distortions related to sexual offending are learned assumptions, sets of beliefs, and self-statements about deviant sexual behaviors such as child molestation… which serve to deny, justify, minimize, and rationalize an offender's actions" (p. 38). Marshall, Marshall, and Kingston (2011) described cognitive distortions as "various thoughts, perceptions, beliefs and ideas that are understood to present obstacles to the offender taking responsibility for his crimes, and that taking responsibility is understood to be essential to effective treatment" (p. 118). Cognitive distortions are also seen as the way in which an offender avoids the internal consequences of guilt and shame that their offending behavior may produce (Karokosta, Underwood, Merino, Williams, Todd, Williams, Fairchild, Dailey, & Crump, 2016). Ward (2009) divided models of cognitive distortions into those that (a) emphasize on the cognitions and impression management of post-offense individuals; or (b) are created within cognitive structures that precede and maintain offending. Moreover, they are given a prominent place in sexual offending research for their

significant contribution to the development and execution of offending behavior, as well as being recognized as offense disinhibitors (Gannon, Keown, & Polascheck, 2007).

Discord surrounding the definition of the term "cognitive distortion" has presented itself in sex offender literature, with different terminology taking shape (Gannon, Ward, & Collie, 2006; Marshall, Marshall, & Kingston, 2011; Ò Ciardha, & Gannon, 2011). Some researchers view the term as being too all encompassing, and lacking the specificity that will help future research synthesize findings in this area (Gannon, Ward, & Collie, 2006; Marshall, Marshall, & Kingston, 2011; Ò Ciardha, & Gannon, 2011). As a result, multiple variations of "cognitive distortions" have emerged in literature: "thinking errors," (Waldram, 2010) "schemata," (Karokosta, Underwood, Merino, Williams, Todd, Williams, Fairchild, Dailey, & Crump, 2016) and "distorted beliefs hypothesis" (Gannon, Ward, & Collie, 2006). For the purpose of this study, the term "cognitive distortions" will be uniformly employed.

Coinciding with the previous literature on juveniles with sexual behavior problems and trauma history, a child who has been abused or neglected are typically less empathic than a non-abused child. Furthermore, abused children have difficulty recognizing emotions in others, and rarely take the perspective of another person (Righthand & Welch, 2004). They will often ascribe the blame of their actions to their victims (Underwood, Robinson, Mosholder, & Warren, 2008). Research by Kahn and Chambers (1991) found that the byproduct of these cognitive distortions (e.g., blaming the victim) was increased sexual offense recidivism among juveniles with sexual behavior problems. Yet, a discussion remains as to the exact role cognitive distortions actually plays in the offender's sexually deviant acts (Barriga, Sullivan-Cosetti, & Gibbs, 2009; Burn & Brown, 2006; Van Vugt, Hendriks, Stams, Van Exter, Bijleveld, Van der Laan, & Asscher, 2011).

Ryan, Miyoshi, Metzner, Krugman, and Fryer (1996) conducted a study on the sexual beliefs of 1,600 juveniles sex offenders. They found that 33% of the juveniles described sex as a loving encounter that communicates care for another person, 24% viewed it as a way to exert power and control over another, 9% a way to decrease anger, and 8% saw it as a way to hurt or punish someone else. Additionally, outcome research has found that an integrated treatment program for juveniles with sexual behavior problems produced a significant reduction in their reports of cognitive distortions (Karokosta, Underwood, Merino, Williams, Todd, Williams, Fairchild, Dailey, & Crump, 2016).

Empirical evidence for the existence of cognitive distortions in an individual is mainly procured through self-report assessments, and cannot be measured directly (Karokosta, Underwood, Merino, Williams, Todd, Williams, Fairchild, Dailey, & Crump, 2016). One of the most common assessment tools researchers utilize to collect data around the role of cognitive distortions is the Bumby Cognitive Distortions Scale (BCDS). The BCDS, specifically the MOLEST and RAPE scales, have exhibited good reliability and validity (Hermann, Babchishin, Nunes, Leth-Steensen, & Cortoni, 2012), and is a trusted assessment tool for participants' beliefs about sexual offenses. However, although this instrument was developed for its use with adult offenders, it is routinely applied towards juveniles with sexual behavior problems. Thus, inherent limitations arise when using this measure for juveniles now that research is beginning to establish a differentiated understanding between these two subsets of sexual offenders. Developmentally, juveniles may not understand certain statements on the BCDS, which may skew the validity of the scores.

However, some researchers have called into question the value of such *a priori,* cognitive approaches towards an individual's cognitive distortions (Auburn & Lea, 2003). They suggest a

paradigm shift in the way cognitive distortions are currently approached, from "something people do," to view them as "something people have." Auburn and Lea (2003) believe the former way of operating has overlooked two important issues when working with sexual offenders. To begin, cognitive approaches have not taken into account the offender's actual description of their offense. Secondly, the cognitive approach places all the power of identifying the distorted self-statements in a simulated context, subsequently losing the depth and tone of the offender's reactions to their statements. Gannon, Keown, and Polaschek (2007) echo these concerns as they pointed to the propensity for impression management in respondents of cognitive approaches, as they tended to disagree with a majority of the items, skewing the data towards *disagreement*.

Psychopathology. Mental illness within the juvenile offender population is a growing, and overwhelming concern for the justice system; however, literature on this issue remains inadequate in comparison to the existing need (Underwood, Phillips, von Dresner, & Knight, 2006). In 2003, 2.3 million juveniles were arrested, and over 130,000 were placed in detention and juvenile correctional facilities (Underwood, Phillips, von Dresner, & Knight, 2006). Four million juveniles suffer from a major disorder that significantly impacts their involvement at home, school and with peers (Report of the Surgeon General's Conference of Children's Mental Health, 2000). Furthermore, the Coalition for Juvenile Justice (2000) released a statistic stating that between 50 to 75 percent of juveniles entering the judicial system have diagnosable mental health issues.

Additionally, a study solely dedicated to juveniles with sexual behavior problems, where their MMPI-A scores were compared to the scores of juvenile non-sex offenders, yielded results which revealed sexual offenders gained higher scores in the clinical scale of depression and

validity scale of infrequency type 1 (Mousavi, Gharraee, Ashouri, & Habibi, 2016). Juveniles reporting higher levels of mental health issues tend to receive longer sentences in residential and/or secure care facilities (Karokosta, Underwood, Merino, Williams, Todd, Williams, Fairchild, Dailey, & Crump, 2016). Moreover, studies have shown that juveniles with sexual behavior problems frequently exhibit signs of low self-esteem and elevated experiences of negative emotion, and they also have a lack of coping skills, substance abuse problems, and a deficiency of assertive characteristics (McCamey, 2010).

Anxiety is a trait that is often connected to sex offenders, and there have been significant discussions concerning its place as cause or consequence of offending (Fanniff & Kimonis, 2014; Nunes, McPhail, & Babchishin, 2012; Seto & Lalumière, 2010). Seto and Lalumière's (2010) research upheld the findings of prior studies (Galli, McElroy, Soutullo, Kizer, Raute, Keck, & McConville, 1999; Kafka & Hennen, 2002), as they to noted that juveniles with sexual behavior problems score higher in anxiety than non-sex offending juveniles. Researchers contend that emotional disorders that manifest early in an individual's life often have anxiety as a root cause (Ryngala, Shields, & Caruso, 2005). For many juveniles with sexual behavior problems, the root cause of anxiety is the sexual abuse that was perpetrated upon them (Apsche, Evile, & Murphy, 2004; Gerardin & Thibaut, 2004; Righthand & Welch, 2004; Seto & Lalumière, 2010; Stevens, Hutchins, French, & Craissati, 2013).

Maladaptive affect regulation, of which anxiety is a heavy contributor, has been shown to be a precursor towards outward manifestations of behaviors in juveniles with sexual behavior problems (Fanniff & Kimonis, 2014). Once in the treatment facility, it is difficult for researchers to differentiate if it was anxiety that led to their offense(s), or whether the observed dysregulation is a product of their current situation (e.g., criminal adjudication, stigma, mandated treatment)

(Hart-Kerhoffs, Boonmann, Doreleijers, Jansen, van Wijk, & Vermeiren, 2015). Therefore, it would be important for future studies to explore the degree to which anxiety was present in juveniles prior to the initial sexual offense.

Existing literature is in agreement that juveniles with sexual behavior problems often suffer from depressive symptomology (Becker, Kaplan, Tenke, & Tartaglini, 1991; Righthand & Welch, 2004; Walters, Hughes, Sutton, Marshall, Crothers, Lehman, Paserba, Talkington, Taormina, & Huang, 2013). Consequently, juveniles with sexual behavior problems, with a history of abuse or neglect, tend to have high rates of depression as well (Walters, Hughes, Sutton, Marshall, Crothers, Lehman, Paserba, Talkington, Taormina, & Huang, 2013). Thus, it is vital for treatment programs to take the juveniles with sexual behavior problems' abuse history when evaluating their levels of depression (Righthand & Welch, 2004). Becker, Kaplan, Tenke, and Tartaglini (1991) conducted a study of depressive symptomatology in juveniles with sexual behavior problems who have experienced previous abuse. They discovered 42% of the participant offenders confirmed significant depressive symptoms, and had significantly higher self-report of depression than a random sample of juveniles. "It may be that juveniles' depressive symptoms as well as their sexually abusive behavior relates to their deficiencies in social and interpersonal competencies, leading to possible loneliness, isolation, and subsequent depression" (Rasmussen, Lev-Wiesel, & Eisikovits, 2013). Literature that produced different results, where there was no significant difference between juveniles with sexual behavior problems and juvenile non-sexual offenders, has also contributed to the depth of understanding within this field (Gerardin & Thibaut, 2004).

Most treatment facilities assess the mental health of their youth as a routine component of intake; yet, the resulting data is often neglected in the evaluation of such programs and have little

input in the reevaluation process. The comorbidity of psychopathology and sexual offending behavior in juveniles has generated compelling data surrounding their relationship to one another. These findings demand further research into factors that influence juveniles with sexual behavior problems psychopathological symptomology, and how that in-turn dictates their experiences with treatment.

Treatment programs. Treatment for juveniles with sexual behavior problems can vary greatly depending on the type of facility the youth resides, the programs offered, the staff involvement, as well as many other variables. The facilities provided for this population range from restrictive, secure care facilities to less restrictive, outpatient community based care (Underwood & Dailey, 2016). Due to the illegal nature of these behaviors, the juvenile justice system often makes their rulings and recommendations with a twofold objective: protect the community from any potential risk that may occur by having these juveniles in close proximity to others, and provide for the specific needs of this group (Souverein, Van der Helm, & Stams, 2013; Underwood & Dailey, 2016). The most common forms of outpatient treatment for juveniles with sexual behavior problems are residential and secure care.

Once admitted in sex offender treatment program, the main objective is to be able to safely assimilate the juvenile back into the community in the hopes that they do not reoffend, but become a positive, contributing individual in society (Crump, Underwood, & Dailey, 2013; Efta-Breitbach & Freeman, 2004). Little to no methodologically empirical research has been available that assesses differences in outcomes centered on the treatment setting (Efta-Breitbach & Freeman, 2004; Ertl & McNamara, 1997; Worling, Littlejohn, & Bookalam, 2010). Thus, a tension is felt when making a decision between an outpatient community setting, a residential facility, or a more restrictive setting of secure care facilities; depending on the severity and

specific needs represented by the juvenile (Bettmann & Jasperson, 2009). Ertl and McNamara (1997) offer variables to consider when choosing the best treatment for juveniles with sexual behavior problems: (1) number of offenses and/or victims; (2) presence of aggression in assault(s); (3) presence of emotional and/behavioral problems; (4) demonstration of antisocial attitude; (5) treatment motivation; (6) presence of suicidal/homicidal ideation; (7) home life; (8) presence of a victim in the home.

Fundamentally, juveniles present a unique challenge to the mental health community due, in part, to the developmental changes and challenges that accompany this life stage, and must be taken into consideration when evaluating treatment options (Pratt, 2013). Research conducted on the effectiveness of the two most utilized facilities for adolescent offender treatment, residential and secure care, continues to birth mixed results, while yielding marginally positive outcomes (DeSwart, Van den Broek, Stams, Asscher, Van der Laan, Holsbrink-Engels, & Van der Helm, 2012; Garrido & Morales, 2007; Gatti, Tremblay, & Vitaro, 2009; Knorth, Harder, Zandberg, & Kendrick, 2008; Koehler, Lösel, Akoensi, & Humphreys, 2013). These mixed results are indicative of the reason why a consensus on the most efficacious treatment for this population has yet to be reached (Abrams, 2006; Bettmann & Jasperson, 2009; Edwards, Whittaker, Beckett, Bishopp, & Bates, 2012; Ebesutani, Ale, Luevve, Viana, & Young, 2011; Hair, 2005; Pratt, 2013). Some studies have reported a decrease in sexual recidivism among juveniles with sexual behavior problems who have received treatment as compared to those who have not (Edwards, Beech, Bishopp, Erikson, Frienship, & Charlesworth, 2012; Reitzel & Carbonell, 2006; Worling, 1998). In light of the weakness in empirical research on juveniles with sexual behavior problems, the current study will draw up relevant adult sex offender and juvenile offender literature.

Furthermore, there is literature beginning to come forward that is broadening the treatment community's focus on what factors are indicative of effective treatment for juvenile offenders. Recidivism of offense behaviors has historically been the benchmark for the evaluation of treatment facilities and juveniles. However, studies are starting to take the ramifications of the mental health of the adolescent within the facility into greater consideration (Soler, 2002; Hermanns, 2012). Souverein, Van der Helm, and Stems (2013) discovered a promising link between the juvenile's mental health, the overall social climate of the residential facility, and reduced recidivism. Supplementary research into a possible correlation between particular mental health diagnoses, identifiable social climate factors, and treatment outcomes is necessary to increase the effectiveness of care for juvenile offenders (Dailey, Underwood, Crump, Williams, Newmeyer, Washburn, Washington, & Poole, 2016; Dodge, Dishion, & Lansford, 2006; Gifford-Smith, Dodge, Dishion, & McCord, 2005; Souverein, Van der Helm, & Stams, 2013; Van Ryzin & Dishion, 2014).

Community based. Community based treatment programs do not follow a standard formula of practice; rather, there are many ways in which this modality can be structured (Craissati, South, & Bierer, 2009; Crump, Underwood, & Dailey, 2013; Kolko, Noel, Thomas, & Torres, 2004; Mandeville-Norden & Beech, 2004; Turner, Bingham, & Andrasik, 2000). Often, individuals are placed with their natural family, foster or mentor homes, while receiving oversight from probation officers and/or a mental health provider (Crump, Underwood, & Dailey, 2013; Fagan, 1991). One principle that has guided the system of care philosophy states that children and adolescents experiencing emotional disturbances should receive services that are the least restrictive while maintaining a normative environment that is clinically appropriate (Stroul, Blau, & Friedman, 2010). In a pioneering article, Levine (1977) championed this

principle when he called attention to the need for increased advocacy of community treatments programs as a vital alternative to intensive facilities.

Furthermore, they often imbed multiple components in their treatment regimen, with the main formats of individual, group, and family therapy. Therapy with sex offenders, regardless of its format, often utilizes cognitive-behavioral therapy as the main psychotherapeutic modality, and focuses predominantly on the offender's own trauma, cognitive distortions around sex and relationship, development of offense prevention plan, improved victim empathy, and personal responsibility (Efta-Breitbach & Freeman, 2004; Ertl & McNamara, 1997; Kolko, Noel, Thomas, & Torres, 2004; Turner, Bingham, & Andrasik, 2000). Individual therapy has the capacity to encourage further insight into their offenses, enhance their group experience, and may increase treatment motivation (Turner, Bingham, & Andrasik, 2000). It can also be used as alternative for offenders who are resistant to treatment, behaviorally destructive, or unwilling to accept responsibility for their offense (Craissati, South, & Bierer, 2009).

Group therapy is the most common modality in treatment programs for sexual and nonsexual offenders, respectively (Craissati, South, & Bierer, 2009; Crump, Underwood, & Dailey, 2013; Efta-Breitbach & Freeman, 2004; Turner, Bingham, & Andrasik, 2000). The overarching goal of group work is for the participants to begin to see themselves in the greater context of society, and not simply as individuals. Modeling and vicarious learning is possible as group members verbalize their interactional experiences within the group (Ertl & McNamara, 1997). Moreover, more seasoned group participants can speak from personal experience about their previously help cognitive distortions and opposition to treatment, and challenge new, or resistant, group members to relinquish these attitudes and beliefs that are destructive (Ertl & McNamara, 1997). Facilitators commonly concentrate the group focus on exploration of

emotions, social skills, and appropriate relational boundaries with others (Efta-Breitbach & Freeman, 2004).

The community based treatment model has been found to be quite effective for juveniles with non-sexual behavior problems when measured against recidivism rates upon program completion. Turner, Bingham, and Andrasik (2000) studied the participants of a community based sexual offenders treatment program in an effort to gauge the effectiveness of this short-term program. The outcome research data confirmed the hypothesis that a short-term community based treatment program, that partner with the judicial system, is successful in lowering sexual recidivism. Furthermore, research that shows community based treatment programs as effective for juveniles with sexual behavior problems are bolstered by a price tag around $10,000 (Pratt, 2013).

A study conducted by Kahn and Chambers (1991) found juveniles who participated in outpatient programs were less likely than those in residential care to be adjudicated for a sexual offense at the 10-month follow-up. However, there is a limitation with this data since the researchers did not analyze the possible effects the demographic differences between the two types of programs; which minimizes its external validity. Worling, Littlejohn, and Bookalam (2010) furthered Kahn and Chambers' (1991) research by measuring re-offense rates in a 20-year follow-up study of juveniles with sexual behavior problems. The offenders had been enrolled in a community based program called the Sexual Abuse: Family Education and Treatment (SAFE-T) Program that was individualized for their specific needs. The data showed treatment produced the desired effect, with a meaningful decline in sexual and nonsexual offenses for those engaged in the treatment for a minimum of 10 months. In fact, only 9% of those adolescent

reoffended, compared to 21% of juveniles who did not participate in the treatment were charged with a sexual offense during the 12 to 20-year follow-up period.

Residential care. Residential care facilities provide out-of-home, 24-hour care and mental health treatment (Hair, 2005), where individuals are placed in a structured and therapeutic environment (Ebesutani, Ale, Luevve, Viana, & Young, 2011). Furthermore, residential facilities are less restrictive than a secure unit, and youth tend to have longer stays in the latter (Hair, 2005). Unlike secure care facilities, residential care does not require the juvenile justice system's involvement with non-sexual juvenile offenses; however, the juvenile justice system is almost always involved in some capacity when dealing with sexual offenses (Underwood & Dailey, 2016). Such treatment programs are semi-secure facilities, which provide inpatient living accommodations, ranging from 6 to 200 juveniles. Although, most residential programs operate at a smaller scale, averaging 20 to 50 juveniles (Pratt, 2013). Additionally, their cost can vacillate between $120,000 and $200,000 per year, with money primarily being raised through the government departments' use of the taxation system (Pratt, 2013). Therefore, third party providers are guiding those in need of greater mental health assistance, towards the short-term, acute care settings that residential facilities offer (James, Leslie, Hurlburt, Slymen, Landsverk, Davis, Mathiesen, & Zhang, 2006).

The utilization of residential treatment options has shown a marked increase from 81,000 served in 1980, to approximately 250,000 juveniles in 2000 (Ebesutani, Ale, Luevve, Viana, & Young, 2011). Their services are typically sought when outpatient treatment proves to be ineffective in adequately addressing a juvenile's extensive behavioral and psychological symptoms (Bettmann & Jasperson, 2009; Knoverek, Briggs, Underwood, & Hartman, 2013). In an effort to house the swelling number of juveniles, residential settings tend to commingle the

varying degrees of psychological and psychosocial issues found within their juvenile demographic (Hussey & Guo, 2002). Some professionals believe that combining children with psychological and behavioral issues together carries the risk of causing significant harm (Barth, 2005), which will be addressed in the current study. A study conducted by Hussey and Guo (2002) sampled a residential treatment program that housed children from child welfare, mental health, education, and juvenile justice systems. The characteristics of the juvenile in need of residential facilities populate a wide swath along the mental health spectrum; which has proven to be disruptive in formulating conclusions on treatment modalities within the facility. Thus, treatment can differ depending on the population (James, Leslie, Hurlburt, Slymen, Landsverk, Davis, Mathiesen, & Zhang, 2006), and may include but is not limited to, psychoanalytic, psychoeducational, and peer-cultural models, with the purposes of increasing internal stability, skills, and developmental tasks (Connor, Miller, Cunningham, & Melloni, 2002). Furthermore, most facilities provide on-site schooling and treatment for juveniles (Pratt, 2013).

A residential facility for intensive mental health treatment of juveniles in the District of Columbia used a re-education model for emotionally disturbed juveniles, and treatment consisted of psychotherapies, recreational therapy, and life skills training (Barth, Greeson, Guo, Green, Hurley, & Sisson, 2007). Additionally, a state-supported residential mental health facility in Texas offers education, psychiatric treatment, medical, clinical, psychological and habilitation services, as well as after-care (Harr, Horn-Johnson, Williams, Jones, & Riley, 2013). Individual programs typically lie somewhere on the continuum between a more therapeutic emphasis, and an emphasis on punitive correction (Abrams, 2006).

Experts in adolescent rehabilitation are divided concerning the overall benefit residential care facilities provide their youth. Hair (2005) posited the inherent difficulty in conducting

outcome research necessary to demonstrate the effectiveness of residential care is due in large part to an inability to conduct controlled laboratory studies. The complications in performing studies that produce strong external validity stem from the myriad of variables within residential treatment programs (Hussey & Guo, 2002). Some literature contends that such care could provide consistency within a nurturing environment, as well as structure to the chaotic behaviors and emotions that often plagued the juveniles (Hair, 2005). Several studies have discovered that juveniles who have entered into this type of treatment facility show a reduction in negative symptoms, a rise in daily functioning, and high rates of school completion within the course of treatment as well as post-treatment (Ebesutani, Ale, Luevve, Viana, & Young, 2011). Conversely, Bettmann and Jasperson (2009) suggested this newfound structure, in relation to the juvenile's previous experience with chaos, abuse and neglect, might create confusion and discomfort for them.

McCamey (2010) cited the lack of definitive data on the efficacy of treatment within residential care facilities, combined with the toll these programs take on the adolescent and family (Bettmann & Jasperson, 2009), as further justification to deem this as a last resort in the rehabilitation process. Hussey and Guo's (2002) study discovered little evidence to suggest that overall behavioral changes were made during residential treatment. Moreover, they were unable to come to substantial conclusions in narrowing down the variables of treatment success. In a study by Barth et al. (2007), the effectiveness of residential care was evaluated against intensive in-home treatment. Their findings showed that juveniles who were in the intensive in-home treatment group had a greater tendency towards positive outcomes, such as, living with family, making progress in school, less trouble with the law, and placement stability.

The exploration of the effectiveness of residential treatment has yielded literature that supports this model; however, the research often points to additive factors as a necessity in contributing to its value. A study done by Hoagwood and Cunningham (1992) found that shorter juvenile stays, as opposed to longer ones, correlated with positive outcomes. The hypothesis of the researchers was that the length of stay was tied to a greater availability to additional community-based services or increased involvement from the juvenile's family. Subsequent studies have also discovered a link between the frequency of family visits during residential treatment and goal accomplishment and graduation from the residential program (Gorske, Srebalus, & Walls, 2003; Sunseri, 2001).

For the current study, it is important to not only understand effectiveness of residential treatment with the general population of juveniles, but to explore the literature as it relates specifically to juveniles with sexual behavior problems. Of the 600 nationwide programs that work with this population, 200 are specifically residential or inpatient (Walker & McCormick, 2004). Additionally, Ertl and McNamara (1997) believe the type of residential setting must take into account the juvenile's needs and case history. Edwards et al. (2012) partnered with the SWAAY (Social Work with Abused and Abusing Juveniles) project, which is a residential therapeutic community, to perform their research. Results showed that individuals, who completed the program, indeed did not continue to sexually offend within the prescribed follow-up time frame (Edwards et al., 2012).

Sexual recidivism, if it does occur, is likely to take place rather quickly after discharge from treatment (Hendriks & Bijleveld, 2008). Specifically, juveniles with sexual behavior problems appear to progress in the first 18-24 months; however, beyond that time frame minimal improvement is accomplished (Hendriks & Bijleveld, 2008). A 10-year follow-up with juveniles

with sexual behavior problems suggested rates of sexual offense recidivism of 4.7% with the average at risk time over five years (Waite, Keller, McGarvey, Wieckowski, Pinkerton, & Brown, 2005). Thus, there appears to be a need to expedite individuals from residential into outpatient treatment in an effort to combat the potential for such recidivism. Unfortunately, these findings cannot be viewed as canonical since uncovering universal indicators of adolescent sexual recidivism continues to present treatment difficulties due to the lack of homogeneity within this population (Edwards et al., 2012).

Secure care. Several commonalities exist between residential and secure care facilities, and it can be difficult to differentiate between the two treatment environments. Both types of facilities detain their juveniles in-house, have highly structured atmospheres, and maintain separation from the community. While similarities exist, secure care is most notably distinguishable from residential care due to the higher levels of restriction in their facility (James, Leslie, Hurlburt, Slymen, Landsverk, Davis, Mathiesen, & Zhang, 2006). Depending on the specific treatment modality, the range of focus for secure care is broad and far-reaching. Some facilities emphasize safety, humane treatment, and rehabilitation (Molleman & Leeuw, 2011), while others concentrate on discipline, prevention, and recovery (Van der Helm, Beunk, Stams, & Van der Laan, 2014). Warner and Bartels, (2015) in their study on the prevalence and criminal justice response to juvenile sex offender proposed a moderated expectation of rehabilitation:

> Rehabilitation is always a significant factor when dealing with young offenders… However, as a matter of sentencing principle and community expectation, there are times when the offending by a young person… is so serious that considerations of youth and

rehabilitation must take second place to the elements of punishment, denunciation and general deterrence (p. 65).

Similar to residential care, the amount of time a resident stays in secure care is beginning to diminish as a result of health-care management oversight and regulation. James et al. (2006) called attention to the research that suggests that shorter stays may be a predictor in a resident's probability of returning to inpatient care after initial discharge. However, there is also research on the destructive interactions that take place within a secure facility between juveniles, and their influence on anti-social behaviors and recidivism (Hermanns, 2012). These articles, in particular, highlight the prevalence of disunity in the field juvenile treatment facilities and the call for more research in this area.

Inpatient psychiatric units came into prominence in the 1920's and 30's for children with behavior disorders (Blanz & Schmidt, 2000). Due to little research, and poor insight into the mental disorders of children, these settings often focused their treatment on caring for the basic needs of the resident, but largely ignored emotional and behavioral issues (Blanz & Schmidt, 2000). As inpatient admissions rose, so too did the breadth of treatment options for children who could not benefit from outpatient treatment (Blanz & Schmidt, 2000).

Currently, secure care is a model most commonly used with individuals struggle with extensive mental health issues, requiring intensive psychiatric care (Burns, Hoagwood, & Mrazek, 1999; James et al., 2006). Juveniles who are involved in extensive legal issues pertaining to substance abuse and delinquent behavior are often directed to secure care by way of the juvenile justice system (Lemieux, Barthelemy, Schroeder, & Thomas, 2012). Underwood, Robinson, Mosholder, and Warren (2008) noted that recent research has shown that secure care facilities have risen to the forefront of juveniles with sexual behavior problems treatment.

Although the literature focuses on certain problems that encompass a majority of inpatient admissions, Blanz and Schmidt (2000) warn against becoming too rigid in identified criteria. This may be advantageous in developing a treatment plan once in the program; however, the subsequent criteria may not take the severity into consideration. Thus, potentially resulting in inappropriate treatment decisions being made for the adolescent. If this happens, treatment centers and/or placing agencies run the risk of assigning treatment to children that is not suitable for their needs (Blanz & Schmidt, 2000).

As was acknowledged previously, residential and secure care facilities contain numerous similarities, while maintaining some differentiation. Bettmann and Jasperson (2009) encouraged the outcome research for these two treatments to be regarded indiscriminately from one another due to the immense similarities in their populations served and treatment programming. However, for the purpose of this study, the efficacy of residential and secure care will be kept separate due to the difference in treatment duration, as well as respecting the literature that suggests duration as an important variable in treatment (James et al., 2006).

Consistent with the treatment literature for juveniles with sexual behavior problems, research on the efficacy of secure care facilities remains divisive in the recommendations (Abrams, 2006; Bettmann & Jasperson, 2009; De Swart et al., 2011; Hair, 2005; Van der Helm, Beunk, Stams, & Van der Laan, 2014; Van Ryzin & Dishion, 2014). In fact, Burns, Hoagwood, and Mrazek (1999) lament that, although this type of intervention has garnered the weakest amount of data to show its value in the face of high cost and high risk, it remains a necessity for children with acute disorder in need of secure, inpatient care. Pfeifer and Strzelecki (1990) analyzed these facilities, and found several factors that contributed to a beneficial treatment outcome: (1) high intelligence of adolescent; (2) greater family functioning and involvement in

the treatment program; (3) treatment completion; (4) utilization of aftercare services upon discharge.

Literature that disparages the use of such restrictive facilities continues to grow in light of the adverse effects that appear to contain some correlation with institutionalized treatment (James et al., 2006). Dishion, McCord, and Poulin (1999) discovered that these settings, which house high-risk juveniles, create an atmosphere where problem behavior is reinforced. Thus, juveniles are unable to adequately learn and practice pro-social behaviors that would be advantageous as they seek to re-enter their communities (Burns et al., 1999). Coupled with negative outcomes, it has been estimated that the monthly cost for secure care is 6 to 10 times higher than that of regular foster care (James et al., 2006). More research on the efficacy of secure care treatment facilities for juveniles with sexual behavior problems is needed in light of the high levels of cost, high risk of increased deviant behavior, and restrictions that are inherent in this type of care (Burns, Hoagwood, & Mrazek, 1999). If lowering the risk to the community is an overarching goal of secure care, research has shown that secure care may not be an adequate option.

In several longitudinal studies, male juvenile offenders in secure care were assessed upon arrival, three months (Kroll, Rothwell, Bradley, Shah, Bailey, & Harrington, 2002), two years (Harrington, Kroll, Rothwell, McCarthy, Bradley, & Bailey, 2005), and six years (Chitsabesan, Rothwell, Kenning, Law, Carter, Bailey, & Clark, 2012) post-treatment. In the first two studies, the mental health needs remained, and in many cases, became worse with depression, anxiety and PTSD symptoms developing; substance use increased by 10% and anxiety persisted two years post-assessment (Harrington, Kroll, Rothwell, McCarthy, Bradley, & Bailey, 2005; Kroll, Rothwell, Bradley, Shah, Bailey, & Harrington, 2002). Chitsabesan et al. (2012) contributed to

the literature in their study, which found that most adolescent offenders continued to offend in adulthood. Additionally, while substance abuse remained six-year post-assessment, other mental health disorders as a juvenile did not necessarily correlate to these disorders as an adult.

De Swart et al. (2011) posited that if secure care facilities are more diligent in their research and evaluation, and focus their treatment on evidence-based practices, they would be able to help care for the continuum of behavioral and developmental problems that often characterize their youth. Distinguishing evidence-based practices is extremely difficult within the context of treatment facilities because of the exponential combination of variables, provided by both facility and resident, that must be taken into consideration (Abrams, 2006; Bettmann & Jasperson, 2009; Hair, 2005; Lyons, Libman-Mintzer, Kisel, & Shallcross, 1998; Van Ryzin, & Dishion, 2014). Lipsey (2009) warned that an inability to confidently narrow the list of best practices for this population could lead to harmful interventions that actually have an adverse effect on those upon whom they are used (e.g., punishment as a goal).

Social climate. Social climate is characterized by the way an individual views their environment, which can encompass contributing variables such as physical space, individuals in a shared setting, interpersonal relationships, and intrapersonal matters (Bootsmiller, Davidson, Luke, Mowbray, Ribisil, & Herman, 1997). Nicholls, Kidd, Threader, and Hungerford (2015) incorporated the social climate and physical environment as concepts that make up the overarching ward atmosphere of a setting. "A milieu, or ward atmosphere is important because it includes the interactions between the physical environment and people located in that environment, and also within and between the people" (Nicholls, Kidd, Threader, & Hungerford, 2015).

Moreover, Ros, Van der Helm, Wissink, Stams, and Schaftenaar (2013) compiled descriptors of institutional climates considered open or closed (repressive) in an effort to understand their influence on the juvenile. A closed climate was described as having a grim atmosphere, lack of trust, inconsistent rules and consequences, and little mutual respect between staff and juvenile (Ros, Van der Helm, Wissink, Stams, & Schaftenaar, 2013). An open climate, by contrast, is defined by structure, emphasis on therapeutic interventions, and respectful, supportive relationships that add to the overall feelings of safety. Group climate literature corroborates the claim that an open climate can aid in cognitive-behavioral treatment, overall treatment motivation, and feelings of safety (Heynen, Van der Helm, Stams, & Korebrits, 2014; Van der Helm, & Stams, 2012). These research studies highlight the need for future research to incorporate the treatment environment as a factor to be measured with the interpersonal and intrapersonal aspects in social climate literature.

In the past, a uniform understanding of the impact of social climate on a setting had yet to be attained, and research findings in this area were tentative. As more literature on social climate is being accumulated in several different treatment milieus, a clearer picture of causal aspects, and its overall effect, is being formulated. Contemporary research has affirmed the social climate of a treatment environment as a vital component of inpatient care within psychiatric hospitals (Beazley & Gudjonsson, 2011; Jörgensen, Römma, & Rundmo, 2009; Schjødt, Middelboe, Mortensen, & Gjerris, 2003; Nicholls, Kidd, Threader, & Hungerford, 2015).

The distinctive features that contribute to the perception and experience of social climate are becoming more refined as research continues to be produced. Deviancy training found in treatment facilities that house large numbers of offenders in a shared environment has been extracted from social climate research as an impacting variable (Dishion, McCord, & Poulin,

1999; Dodge et al. 2006; Gifford-Smith, Dodge, Dishion, & McCord, 2005; Van Ryzin & Dishion, 2014). Furthermore, research contributing to a more in-depth understanding of social climate has discovered that juvenile satisfaction and motivation for treatment are positively correlated with the juvenile's perception of the social climate (Beazley & Gudjonsson, 2011; Jörgensen, Römma, & Rundmo, 2009; Røssburg, Melle, Oppjordsmoen, & Friss, 2006). Staff attitudes and perceptions of social climate, which have been a main focus of research in the past, are now being compared with juvenile attitudes and perceptions in an effort to gain a consistent representation of their relationship (Bootsmiller, Davidson, Luke, Mowbray, Ribisil, & Herman, 1997; Brunt & Rask, 2005; Moos, Shelton, & Petty, 1973).

Literature concentrating on the impact of social climate on treatment for juveniles with sexual behavior problems in residential or secure care programs is limited. However, there are current studies being conducted and published that incorporate social climate as a factor to be researched. For example, Underwood, Dailey, Merino, and Crump (2015) evaluated a statewide juvenile sexual offender program using the Ward Atmosphere Scale (WAS), with social climate being a variable analyzed amongst the different facilities. Even so, their research did not make any direct and definitive links between the social climate and client outcomes. Although the literature shows how the social climate of a treatment facility is an area of study that researchers are beginning to pay closer attention to when examining the levels of treatment effectiveness, there are still knowledge gaps.

A growing body of research concentrating on the social climate of a treatment facility has produced greater homogeneous results concerning its significance importance (Jörgensen, Römma, & Rundmo, 2009). The WAS is the most extensively utilized assessment in gathering outcome measures for the social climate and treatment environment, as experienced by staff,

residents, and their families (Moos, 1996; Sørlie, Parniakov, Rezvy, & Ponomarev, 2010). Several studies have implemented the WAS in their research across multiple contexts as the foremost tool in collecting an accurate representation of the facility's social climate. Beazley and Gudjonsson (2010) tested 60 juveniles, with a range of diagnoses (e.g., schizophrenia-spectrum disorder, antisocial personality disorder) in a medium secure unit in London. Additionally, a study measuring the change in atmosphere for residents was conducted with an acute adult mental health setting in Australia during their relocation period into a new facility (Nicholls, Kidd, Threader, & Hungerford, 2015). The research by Underwood et al. (2015), as previously discussed, also incorporated the WAS in their evaluation of a state-run juveniles with sexual behavior problems treatment program.

Additionally, within the specific context of juveniles with sexual behavior problems treatment, satisfaction and motivation have been recognized as key factors that impact its effectiveness (Austin, Williams, & Kilgour, 2011; Patel, Lambie, & Glover, 2008; Shaw, 2013). Accompanying research has identified the ward atmosphere as a major contributing factor in the juveniles' degree of satisfaction (Beazley & Gudjonsson, 2011; Jörgensen, Römma, & Rundmo, 2009; Schjødt, Middelboe, Mortensen, & Gjerris, 2003; Nicholls, Kidd, Threader, & Hungerford, 2015). Austin, Williams, and Kilgour (2011) gathered positive results when they utilized motivational interviewing in an effort to bolster the motivation of juveniles with sexual behavior problems. Although initial literature has uncovered encouraging results to suggest the important role motivation has on the offender, more research is needed to look specifically at the connection motivation shares with the juveniles with sexual behavior problems experience of the social climate in secure care facilities (Beazley & Gudjonsson, 2011).

The social climate of juveniles with sexual behavior problems in secure care facilities is an area of literature where minimal progress has been made beyond the research from prior prison studies. Recently, Underwood et al. (2015) conducted a program evaluation for a statewide juveniles with sexual behavior problems program that encompassed eight different treatment sites and used the WAS as one of their outcome measures. Out of their research, four subscales emerged as statistically significant: Support, Spontaneity, Personal Problems, and Order and Organization, and these results emphasize aspects of all three domains (relationship, personal growth, and system maintenance) of the Ward Atmosphere Scale. Beyond the Underwood et al. (2015) study, there is no literature expressly devoted to juveniles with sexual behavior problems' perception of the social climate in secure care. Therefore, since existing research already confirms social climate as a fundamental part of treatment effectiveness (Beazley & Gudjonsson, 2011; Jörgensen, Römma, & Rundmo, 2009; Røssburg, Melle, Oppjordsmoen, & Friss, 2006), the current study will enhance our understanding of the depth of its impact within the juveniles with sexual behavior problems population.

Deviancy training. "It is becoming clear that one of the major ways that deviant juveniles become more deviant is through unrestricted interaction with deviant peers" (Gifford-Smith, Dodge, Dishion, & McCord, 2005). Slatterly et al. (2012) also believed that the label of "sex offender" has a more profound iatrogenic effect in juveniles than in adults. Deviancy training, found in groups of delinquent juveniles, is a component in the over-arching concept of social climate garnering greater research attention (Dishion, McCord, & Poulin, 1999; Dodge et al. 2006; Gifford-Smith, Dodge, Dishion, & McCord, 2005; Van Ryzin & Dishion, 2014). Deviant peer clusters often engage in behaviors that are reinforced by peer pressure and modeling (Van Ryzin & Dishion, 2014). Additionally, high-risk juveniles are more susceptible

to the effects of deviancy training as opposed to low-risk juveniles (Dishion, McCord, & Poulin, 1999).

The iatrogenic effect of deviancy training is commonly experienced in a multitude of settings when a significant amount of deviant juveniles are grouped together; which can have a dramatic impact on the outcome of treatment (Dodge et al., 2006). The juvenile justice system, through which most juveniles with sexual behavior problems are connected from adjudication to treatment, is one such institution that has displayed a propensity to become "schools of crime" (Gatti, Tremblay, & Vitaro, 2009). Lipsey (2006) discovered the programs that grouped their deviant peers together were 30% less effective in working with their population than compared with individual treatment programs. More alarming, were the findings that the behavior of the participants actually deteriorated with 42% of preventative, and 22% of probation interventions administered at the group level.

An inescapable risk of this effect exists for residential and secure care facilities that have few options other than housing these individuals in order to protect the community (Abrams, 2006; Underwood, Robinson, Mosholder, & Warren, 2008). In their longitudinal study on the long-term effects of juvenile justice intervention, Gatti, Tremblay, and Vitaro (2009) built on previous data that found the more restrictive and intense interventions utilized, the greater the negative impact on the juveniles. Therefore, it is imperative that research continues to press forward in order to understand this phenomenon more completely, and to discover mitigating factors to ensure healthy treatment for youth of residential and secure care facilities (Gifford-Smith, Dodge, Dishion, & McCord, 2005).

In an effort to diminish the negative impact that iatrogenic effects have on juveniles, some research suggests that juveniles with sexual behavior problems would benefit the most

from a plan of care that follows the offender from the initial stages of inpatient, secure care through the final stages of outpatient, community based care (Underwood, Robinson, Mosholder, & Warren, 2008). In fact, some research would suggest that a fully outpatient mode of care could better control for the iatrogenic effect that is fused within the secure care form of treatment (Dodge et al., 2006; Pratt, 2013). Thus, in order to gain a more thorough understanding of the factors that creates and embolden this effect, research is needed that takes iatrogenesis into consideration as an important variable in treatment (Gifford-Smith, Dodge, Dishion, & McCord, 2005).

Although research exists that calls into question the efficacy of residential and secure care programming, there have been subsequent studies that have discovered factors that moderate a portion of the negative outcomes associated with inpatient facilities. In their study on interventions for deviant peer influences, Dodge et al. (2006) identified two factors that can lessen the severity of such effects. The research showed that proper training and good, on-site supervision for the adult leaders were additive factors in their ability to manage the juveniles in such a way that the iatrogenic effect was reduced. Additionally, high-structure environments that decreased the amount of time a juvenile was allowed to engage in unstructured and unsupervised activities also contributed to the effect being minimized (Dodge et al., 2006). This study will take these factors into consideration when exploring the concept of social climate in greater detail, as research persists in supporting the relationship between this and treatment outcomes.

Staff attitudes. The development and maintenance of the social climate in secure care facilities is not entirely incumbent on the juveniles receiving treatment. Rather, the climate of the facility is co-created with the institutional staff, and their perceptions and interactions are

valuable for research consideration (Schjødt, Middelboe, Mortensen, & Gjerris, 2003). Literature has continued to parcel out the existing variables that have a significant effect on the social climate, specifically the reciprocal relationship of staff engagement, juveniles in the treatment faculties, and the general atmosphere of the particular environment. Some such studies analyze how ward size and the degree of chronicity in juveniles sway staff and youth attitudes (Edelson & Paul, 1977; Pederson & Karterud, 2007), the different treatment environments and the resulting types of staff helping behaviors (Bootsmiller, Davidson, Luke, Mowbray, Ribisil, & Herman, 1997; Molleman & Leeuw, 2011); Sidman & Moos, 1973), as well as the overall differences between staff and juvenile perceptions (Bootsmiller, Davidson, Luke, Mowbray, Ribisil, & Herman, 1997; Brunt & Rask, 2005; Moos, Shelton, & Petty, 1973).

The research surrounding the generalizability of distinctive attitudes of staff and juveniles on their perceptions and outcomes of treatment has mustered little in the way of a cohesive picture. While the characteristics of staff have shown to be effected by differing ward sizes and levels of juvenile chronicity, there were no significant findings to confirm the effect on treatment (Edelson & Paul, 1977). Additionally, Pederson and Karterud (2007) found that the juvenile's view of their treatment, when tested against their personal characteristics and diagnoses into consideration, had no substantial impact on perception or outcome. This implies that individual differences, whether staff or juvenile, should be viewed within their context without moving too quickly to generalize the individual conclusions. Thus, more research is needed to discover variables contributed by staff, youth, and staff-youth relationships that impact the social climate of treatment facilities.

Molleman and Leeuw (2011) studied prison staff and inmates, and focused primarily on the amount of influence that staff held in relation to inmate conditions. They discovered that

"staff and management can help or hinder the satisfaction of the needs of inmates, such as the need for autonomy and activities. That is, these factors are malleable and contribute to the explanation of perceived prison conditions" (p. 229-230). Consequently, there was a positive correlation between the attitudes and behaviors of the prison staff, and the social climate as experienced by the inmates. Furthermore, a research study examining a Dutch prison system revealed that the work-place environment directly affects attitudes and behaviors of staff (Molleman & Van der Broek, 2014). The approach of the staff is affected; which ultimately forms the inmates' opinion of the climate. More specifically, if the staff feels as though they are in a good work situation, they are more active with the inmates, and the greater the activity, the greater the inmate satisfaction (Molleman & Van der Broek, 2014).

In a foundational article on ward climate, Moos, Shelton, and Petty (1973) studied the perceptions of the treatment atmosphere between staff and juveniles; which paved the way for numerous correlation research studies. Day, Casey, Vess, and Huisy (2012) designed a study to examine the differences in staff and inmate perceptions of prison climate in two different Australian prisons. One prison is considered more therapeutic in its approach, and offers intensive rehabilitation programs for its inmates, while the other is a mainstream prison that is less treatment oriented. What the researchers discovered was that the combined data of inmates and staff was statistically insignificant between the two prisons. However, the responses of the staff were more positive than that of the inmates (Day, Casey, Vess, & Huisy, 2012); which has been replicated involving studies of psychiatrist hospitals (Bootsmiller, Davidson, Luke, Mowbray, Ribisil, & Herman, 1997). Schjødt, Middelboe, Mortensen, and Gjerris (2003) underscored this discrepancy in their article; which investigated level of agreement attained between juveniles and staff ward perceptions. They found the differences in scores between

these two groups could be attributed to distinctions in point of view, as opposed to fundamental differences in opinion. Because research in this area is deficient, one particular point of focus for the current study will be to look at the relationship concerning the perceptions held by juveniles and staff, respectively.

Additionally, continued research within prisons has provided a context to gather more atmosphere and social climate research as experienced by a group of individuals in a secure setting (Heynen, Van der Helm, Cima, Stams, & Korebrits, 2016; Van der Helm, Stams, & Van der Laan, 2011). Out of this research, the relationship between staff control and flexibility has come to the forefront as the principal factors in shaping the climate of the facility (Van der Helm, Stams, & Van der Laan, 2011). Control and flexibility have the capacity to create a climate that is either open or closed, and that is determined by the perceptions of resident and staff interactions (Heynen, Van der Helm, Stams, & Korebrits, 2014). An open climate is representative of a secure setting that is flexible, supportive, structured, safe, with opportunities for personal growth. Whereas a closed climate is overly rigid, has a poor group atmosphere, perceived as having no staff support, with few opportunities for personal growth.

The influence of social climate upon other variables is an overlooked area of research; which has historically concentrated on the differences in types of wards (Bootsmiller, Davidson, Luke, Mowbray, Ribisil, & Herman, 1997), and the disparity in staff-juvenile perception when looking at treatment outcomes (Brunt & Rask, 2005). Beazley and Gudjonsson (2011) led a research study that sought to understand the relationship between depression and social climate, as well as to discover if it was indeed a reciprocal one. It is reasonable to infer that if a juvenile is depressed, it will be likely that they rate their experience in their environment as negative. Conversely, the atmosphere of an environment, in which an individual spends extended periods

of time, has a good chance to impact the emotional state of the individual. In fact, through the course of their research, Beazley and Gudjonsson (2011) discovered that "depression not only influences the perceptions of the ward a patient is on, but a poor ward can actually increase a patient's symptoms of depression" (p. 98). Despite the promising connection between ward atmosphere and depression, this author was unable to discover current studies where juveniles with sexual behavior problems have completed the CDI-2. The current study will aim to fill in the knowledge gap within this population.

Social climate assessment tools. Presently, a scale that explicitly assesses the social climate of juveniles with sexual behavior problems treatment programs does not exist. The Ward Atmosphere Scale, Prison Guard Climate Instrument, Group Environment Scale, and the Essen Climate Evaluation Schema have been the instruments utilized most frequently when researchers want to measure social climate (Beazley & Gudjonsson, 2011; Day, Casey, Vess, & Huisy, 2012; Heynen, Van der Helm, Stams, & Korebrits, 2014; Jörgensen, Römma, & Rundmo, 2009; Moos, 1994; Nicholls, Kidd, Threader, & Hungerford, 2015; Salter & Junco, 2007; Schalast, Redies, Collins, Stacey, & Howells, 2008; Schjødt, Middelboe, Mortensen, & Gjerris, 2003; Van der Helm, Stams, & Van der Laan, 2011; Wright & Boudouris, 1982). It must be stated that these assessment tools have not been normed for juveniles with sexual behavior problems, and the specific needs and concerns for this population (e.g., iatrogenic effect) have not been taken into consideration. Therefore, the data and subsequent discussion of the results from this study must be carefully examined with this fact in mind.

Ward Atmosphere Scale. The Ward Atmosphere Scale (WAS) (Moos & Houts, 1968) was developed in order to quantify such a fundamental variable in social climate evaluation, and has ten subscales divided into three domains. The Relationship Domain encompasses

Involvement, Support, and Spontaneity; the Personal Growth Domain encompasses Autonomy, Practical Orientation, Personal Problems Orientation, and Anger and Aggression; the System Maintenance Domain includes Order and Organization, Program Clarity, and Staff Control. Alden (1978) conducted a factor analysis of the WAS, and found that one factor had a high positive loading on 8 of 10 scales, and accounted for 50% of the total variance. A second factor reported a high positive loading on the Anger subscale that accounted for 14% of total variance. The third factor, accounting for 10% of the variance, was represented by Staff Control. Furthermore, the WAS is beginning to reach other global areas, and has been given and evaluated in non-Western countries (AL-Sagarat, Moxham, Curtis, & Crooke, 2014; Sørlie, Parniakov, Rezvy, & Ponomarev, 2010).

It has been difficult for research studies to isolate specific factors of ward atmosphere, and their subsequent effects on the juvenile (Beazley & Gudjonsson, 2011; Røssberg, Melle, Opjordsmoen, & Friis, 2006). Mistral, Hall, and McKee (2002) researched the effects that particular interventions had on the functioning of a high-care psychiatric ward, as assessed from the perspective of the staff. The researchers discovered a statistically significant positive improvement in the Involvement and Practical Orientation subscales, and a positive inclination (not statistically significant) for the other eight ward atmosphere subscales. Furthermore, the implementation of intentional treatment programming in an acute psychiatric care hospital garnered significant change in the juvenile's WAS subscales scores of Involvement, Support, and Practical Orientation (Hansen & Slevin, 1996). Although literature from these studies has found a promising connection between social climate and treatment outcomes, more research is necessary to discover the actual strength and validity of that connection (Jörgensen, Römma, & Rundmo, 2009).

Prison Group Climate Instrument. The Prison Group Climate Instrument (PGCI) was developed by Van der Helm, Stams, and Van der Laan (2011) in order to assess the living group climate in prisons. The PGCI consists of 63 items scored on a 5-point Likert-type scale ranging from 1= *I do not agree* to 5 = *I totally agree.* Each of these items are broken into one of the four separate scales: Support, Growth, Repressions, and Group Atmosphere. The Support scale assesses the professional behavior of staff, their attentiveness to inmates, dealing respectfully with inmates, and trustworthiness. The Growth scale evaluates inmates' perception of learning, hopefulness, and the meaning they make out of their time in prison. The Repression scale measures perceptions of the level of strictness, control, flexibility, and the rigidity of meaningless rules. The Group Atmosphere scale judges the way inmates treat and trust one another, perceptions of safety with each other, ability to relax, and have adequate exposure to the outdoors.

Initial test on the instrument indicated that it was reliable and valid at assessing the "overall climate" of a facility; the Cronbach's alpha for the overall scale was found to .82 (Van der Helm, Stams, & Van der Laan, 2011). The Support and Growth dimensions loaded the highest on the "overall climate" scale; which affirms they are the most important factors when determining group climate in the prison setting. This instrument is also sensitive to the balance between an open and therapeutic climate and a restrictive and closed climate (Van der Helm, Stams, & Van der Laan, 2011). In a study done with Dutch juveniles in a correctional facility, the prison group climate scales of Support, Repression, and Group Atmosphere correlated with cognitive empathy. Yet, none of the four PGCI subscales were associated with affective empathy (Van der Helm, Stams, Van der Stel, Van Langen, & Van Der Laan, 2012).

Group Environment Scale. The Group Environment Scale (GES) (Moos, 1994) is a 90 item true-false assessment that has 10 subscales (9 questions per subscale) that are organized into three dimensions of social climate. The Relationship dimension addresses the aspects of personal relationships in a group, and contains the Cohesion, Leader Support, and Expressiveness subscales. The Personal Growth dimension is concerned with the extent to which a group contributes to personal growth and goal completion, and has the Independence, Task Orientation, Self-Discovery, and Anger and Aggression subscales. The Systems Maintenance and Change dimension attends to the structure and flexibility of the environment, and encompasses the Order and Organization, Leader Control, and Innovation subscales.

In a standardized sample of 305 groups, comprising 2,400 individuals, Moos (1994) discovered internal consistencies that ranged from .69 to .86, and one-month retest reliability estimates that ranged from .69 to .83. However, there are conflicting studies that found a modest concurrent validity of the GES and another social climate assessment (Salter & Junco, 2007), while the validity and reliability of this instrument has been called into question (Wright & Boudouris, 1982).

Essen Climate Evaluation Schema. The Essen Climate Evaluation Schema (EssenCES) (Schalast, Redies, Collins, Stacey, & Howells, 2008) is a 17-item questionnaire (15 valid items and 2 positively worded un-scored items) that was originally utilized within forensic psychiatric hospitals to assess social care, and has recently been modified for use in a prison environment. It measures three climate subscales (five items each): Hold and Support (e.g., "Staff take a personal interest in the progress of inmates"), Inmates' Social Cohesion and Mutual Support (e.g., "The inmates care for each other"), and Experienced Safety (e.g., "There are some really aggressive inmates in this unit"). Both staff and inmates answer each item based on a 5-point Likert-type

scale, where responses range from 1 (*I agree not at all*) to 5 (*I agree very much*), with higher scores being indicative of a more positive perception of the social climate.

Data was collected from 17 forensic hospitals in Germany from staff (n = 333) and inmates (n = 327), and a moderately strong internal consistency from the Cronbach's alpha ranged between .79 and .87 for juveniles, .73 and .78 for staff, and .78 to .86 for the total sample. Moreover, in their study of two Australian prisons, Day, Casey, Vess, and Huisy (2012) found similar results as the validation study from Schalast et al. (2008). Staff had a Cronbach's alpha of .72 on the total score and .82 (Inmates' Social Cohesion and Mutual Support), .74 (Hold and Support), and .75 (Experienced Safety), respectively. On the other hand, prisoners had a Cronbach's alpha of .64 on the total score and .86 (Inmates' Social Cohesion and Mutual Support), .74 (Hold and Support), and .62 (Experienced Safety), respectively.

Rationale for the Study

Researchers have only recently begun to differentiate this subset of sex offenders from their adult counterparts. As such, the information pertaining to appropriate care, and effective forms of treatment, are limited. The current study aims to provide more information concerning how the perception of social climate in secure care facilities differs between staff and juveniles.

While social climate has proven to exhibit a connection to patient attitudes and the attainment of treatment outcomes specific to the facility (Beazley & Gudjonsson, 2011; Jörgensen, Römma, & Rundmo, 2009; Rossburg et al., 2006), currently, little information exists regarding the effect that social climate has on the outcome of treatment for juveniles with sexual behavior problems. Specifically, the staff and juvenile's perception of social climate and institutional context has garnered very little research within the sexual offending context. Brunt

and Rask (2005) contributed to the knowledge base of patient and staff perceptions of the ward atmosphere in their study of a Swedish psychiatric care system.

Summary

The primary purpose of this study is to better understand the differences between the perceived social climate of staff and juveniles with sexual behavior problems residing in secure care. It is not known if, or to what degree, the perception of the social climate of a secure care facility for juveniles with sexual behavior problems correlates with depression, anxiety, and cognitive distortions. Consequently, a paucity of literature plagues the field concentrated on comprehending and aiding juvenile community of individuals who have sexual behavior problems, which contributes to a vicious cycle between poor treatment and results. This study is designed to lessen the gap in the literature for these juveniles, and the factors (e.g., social climate) that possess substantial correlations while in a secure care treatment facility. In order to collect valid data for these factors, the Ward Atmosphere Scale will be utilized as the social climate assessment tool.

Juveniles with sexual behavior problems are a subset of the population with which researchers and clinicians have historically experienced difficulty in formulating a clear conceptualization of the origins, characteristics, or consistent treatment that decreases recidivism of their acting out (Christiansen & Vincent, 2013; Edwards, Whittaker, Beckett, Bishopp, & Bates, 2012; Pratt, 2013; Whittle, Bailey, & Kurtz, 2006). They account for a significant number of sexual and non-sexual offenses (Christiansen & Vincent, 2013), which results in a great financial and emotional cost for the nation (Letourneau & Borduin, 2008). Recently, literature has contributed to greater societal awareness, increased advocacy on behalf of victims, and juveniles becoming more educated about the judicial system (McCamey, 2010). Although

knowledge base for juveniles with sexual behavior problems continues to grow, there remains a distinct and substantial gap in the empirical research for the etiology and attributes of these individuals.

A growing number of research findings suggest this population may have a history of traumatization, learning and mental disabilities, cognitive distortions, and/or psychopathology (e.g., anxiety, depression). Some studies, exploring the trauma background of juveniles with sexual behavior problems, have discovered an overwhelming number of their participants were the victims of some form of abuse (Apsche, Evile, & Murphy, 2004; Becker & Hunter, 1997; Stevens, Hutchins, French, & Craissati, 2013). Additionally, research is inconclusive concerning the depth and scope of learning and/or mental disabilities have in conceptualizing the traits of juveniles with sexual behavior problems (Butler & Seto, 2002; Cantor, Blanchard, Robichaud, & Christensen, 2005; Miyaguchi & Shirataki, 2014; Pratt, 2013; Seto & Lalumière, 2010).

Furthermore, as research is establishing a differentiated view between adult and juvenile offenders, the literature highlights how cognitive distortions are maintained, as well as what purpose they serve for the individual (Karokosta, Underwood, Merino, Williams, Todd, Williams, Fairchild, Dailey, & Crump, 2016). However, contributors in this field are not united their terminology and definitions regarding cognitive distortions (Gannon, Ward, & Collie, 2006; Marshall, Marshall, & Kingston, 2011; Ò Ciardha, & Gannon, 2011), and there persists a need for a more cohesive understanding of this concept. Psychopathology, specifically anxiety and depression, has been linked to both the etiology and trait profile of juveniles with sexual behavior problems (Apsche, Evile, & Murphy, 2004; Becker, Kaplan, Tenke, & Tartaglini, 1991; Fanniff & Kimonis, 2014; Righthand & Welch, 2004; Seto & Lalumière, 2010; Stevens, Hutchins, French, & Craissati, 2013; Walters et al., 2013). Conversely, research that produced

different results, where there was no significant difference between juveniles with sexual behavior problems and juvenile non-sexual offenders, has also contributed to the realization that more depth of understanding is necessitated within this field (Gerardin & Thibaut, 2004).

Treatment modalities for juveniles with sexual problems range from community based, residential care, and secure care, with the former representing the least restrictive and the latter representing the most restrictive. Literature focused on the respective outcomes of treatment programs for juveniles with sexual problems is scant and diverse. (Efta-Breitbach & Freeman, 2004; Ertl & McNamara, 1997; Worling, Littlejohn, & Bookalam, 2010). Burns, Hoagwood, and Mrazek (1999) stated secure care, which in necessary for children who require acute treatment has collected the weakest amount of data to show its value despite the exceedingly high costs and high risks. The combination of little empirical research and differing points of view has created increasing confusion and dissention regarding best treatment facilities for this group.

While research concerning the most efficacious form of treatment for juveniles with sexual behavior problems is inconclusive, a discovery has been made pertaining to the impact of social climate in a facility (Beazley & Gudjonsson, 2011; Jörgensen, Römma, & Rundmo, 2009; Schjødt, Middelboe, Mortensen, & Gjerris, 2003; Nicholls, Kidd, Threader, & Hungerford, 2015). Yet, studies exploring the explicit role of social climate in secure care for these juveniles are virtually nonexistent, save for one recent study (Underwood et al., 2015). Further research is required in order to examine the relationship between the crucial variables of juveniles with sexual behavior problems, secure care facilities, and social care.

CHAPTER II

METHODOLOGY

Introduction

This quantitative study is focused on contributing to the growing research on juveniles with sexual behavior problems, their experiences in sexual offender treatment programs, and how that may correlate with additional interpersonal issues. More specifically, the study seeks to assess the differences between the perceptions of the social climate of staff and juveniles with sexual behavior problems in secure care treatment facilities.

The purpose of this chapter was to provide details germane to this study in order for potential future research to have a methodological framework from which to continually build. Initially, this was accomplished by delineating essential terms within this study to provide a common language, as well as extrapolating upon the rationale found within literature for the particular research questions and hypotheses put forth by this study. Further information will be provided on research methodology and design, population and sampling, and data collection (e.g., instrumentation, procedures, dependent and independent variables). Additionally, a step-by-step description of the statistical analysis, and how it was aligned with the specific design of the research study will be produced. The chapter will conclude with the ethical considerations the researcher upheld throughout the research process, as well as an understanding of the limitations contained within this study.

Definition of Terms

Juveniles with sexual behavior problems and the various factors surrounding this population have, historically, been greatly misunderstood which has subsequently inhibited research. This section defines the essential terms of this study in order to maintain an objective and cohesive understanding throughout.

Cognitive distortions. A variety of definitions have been used throughout the literature to categorize the specific thoughts of juveniles with sexual behavior problems. This study applied Marshall, Marshall, and Kingston's (2011) description, which stated, "various thoughts, perceptions, beliefs and ideas that are understood to present obstacles to the offender taking responsibility for his crimes, and that taking responsibility is understood to be essential to effective treatment" (p. 118). Moreover, Ward (2009) divided models of cognitive distortions into those that (a) emphasize on the cognitions and impression management of post-offense individuals, or (b) are created within cognitive structures that precede and maintain offending.

Community based treatment programs. The term community based treatment will be used to describe the programs where individuals are placed with their natural family, foster or mentor homes, while receiving oversight from probation officers and/or a mental health provider (Crump, Underwood, & Dailey, 2013; Fagan, 1991). These programs often imbed multiple components in their treatment regimen, with the main formats of individual, group, and family therapy.

Deviancy training. This study adheres to a definition of deviancy training provided by Gifford-Smith et al. (2005): "It is becoming clear that one of the major ways that deviant juveniles become more deviant is through unrestricted interaction with deviant peers" (p. 255). Deviancy training is the process by which juveniles placed within a deviant group will

experience an exacerbation and consolidation of their antisocial behaviors (Slatterly et al., 2009). Dodge et al. (2006) detailed it as a phenomenon experienced in a multitude of settings where a significant amount of deviant juveniles are grouped together, which can have a dramatic impact on the outcome of treatment. The juvenile justice system is one such institution that has displayed a significant propensity to become "schools of crime," (Gatti, Tremblay, & Vitaro, 2009) where deviant peer clusters often engage in behaviors that are reinforced by peer pressure and modeling (Van Ryzin & Dishion, 2014).

Iatrogenic effect. The concept of an iatrogenic effect on individuals has been studied across a multitude of disciplines (Hancock, 2013; Permpongkosol, 2011; Whitley, 2013). For the purpose of this study, iatrogenic effect is defined as the "expressions of the amenable and adaptive human subject adhering or complying with the situational constraints and contexts laid out by the avid and enthusiastic but eventually misguided researcher" (Hancock, 2013, p. 107). This study will concentrate on the main idea of the iatrogenic effect as the significant influence and impact an "other" has on an individual.

Juveniles with sexual behavior problems. Juveniles with sexual behavior problems are individuals whose ages range between 12 and 25 that have perpetrated a sexual offense against another person of any age (Underwood et al., 2015).

Secure care facilities. This study characterized secure care as those facilities that detain their youth in-house, have highly structured atmospheres, and maintain separation from the community. While similarities exist, secure care is distinguishable from residential care due to the higher levels of restriction in their facility (James, Leslie, Hurlburt, Slymen, Landsverk, Davis, Mathiesen, & Zhang, 2006). Depending on the specific treatment modality, the range of focus for secure care is broad and far-reaching. Some facilities emphasize safety, humane

treatment, and rehabilitation (Molleman & Leeuw, 2011), while others concentrate on discipline, prevention, and recovery (Van der Helm, Beunk, Stams, & Van der Laan, 2014). The population served are often juveniles involved in extensive legal issues pertaining to substance abuse and delinquent behavior, who are often directed by way of the juvenile justice system (Lemieux, Barthelemy, Schroeder, & Thomas, 2012).

Social climate. For the purpose of this study, social climate is described as the way an individual views their environment; which can encompass contributing variables such as physical space, individuals in a shared setting, interpersonal relationships, and intrapersonal matters (Bootsmiller, Davidson, Luke, Mowbray, Ribisil, & Herman, 1997). Nicholls, Kidd, Threader, and Hungerford (2015) incorporated the social climate and physical environment as concepts that make up the overarching atmosphere of a setting. "A milieu, or ward atmosphere is important because it includes the interactions between the physical environment and people located in that environment, and also within and between the people" (Nicholls, Kidd, Threader, & Hungerford, 2015).

Staff. Staff is the term used to denote the employees of a secure-care facility who are responsible for the supervision, monitoring and care of juveniles with sexual behavior problems.

Research Questions and Hypotheses

The previous chapter delineated the paucity of research dedicated towards the differences between the social climate perceptions of juveniles with sexual behavior problems in a secure care treatment facility, and the respective staff. As such, the following research questions (RQ) and hypotheses (H) are proposed for this study. This study intends to investigate the following research questions:

Research Questions.

RQ1: Is there a statistically significant difference between the WAS Personal Problem Orientation subscale scores of juveniles, and the WAS Personal Problem Orientation subscale scores of the staff in secure care sites?

RQ2: Is there a statistically significant difference between the WAS Support subscale scores of juveniles, and the WAS Support subscale scores of the staff in secure care sites?

RQ3: Is there a statistically significant difference between the WAS Involvement, and Anger and Aggression subscale scores of juveniles, and the WAS Involvement, and Anger and Aggression subscale scores of the staff in secure care sites?

RQ4: Is there a statistically significant difference between the WAS System Maintenance domain scores of juveniles, and the WAS System Maintenance domain scores of the staff in secure care sites?

RQ5: Is there a statistically significant difference between the WAS Relationship domain scores of juveniles, and the WAS Relationship domain scores of the staff in secure care sites?

Hypotheses.

H1: There will be a statistically significant difference between the WAS Personal Problem Orientation subscale scores of juveniles, and the WAS Personal Problem Orientation subscale scores of the staff in secure care sites.

H2: There will be a statistically significant difference between the WAS Support subscale scores of juveniles, and the WAS Support subscale scores of the staff in secure care sites.

H3: There will be a statistically significant difference between the WAS Involvement, and Anger and Aggression subscale scores of juveniles, and the WAS Involvement, and Anger and Aggression subscale scores of the staff in secure care sites.

H4: There will be a statistically significant difference between the WAS System Maintenance domain scores of juveniles, and the WAS System Maintenance domain scores of the staff in secure care sites.

H5: There will be a statistically significant difference between the WAS Relationship domain scores of juveniles, and the WAS Relationship domain scores of the staff in secure care sites.

Research Methodology and Design

"An [important] element of quantitative research relates to a more planned sourcing process in which the researcher has a definitive or clean objective as a basis from which to research" (McCusker & Gunaydin, 2015, p. 539). Therefore, this study will use an ex post facto quantitative research methodology to examine the pre-determined, identified questions regarding the differences between social climate of staff and juveniles with sexual behavior problems in secure care settings. The literature on juveniles with sexual behavior problems continues to grow, as do inferences concerning factors that impact their experience in secure care treatment facilities (e.g., social climate). Yet further empirical research is required to cultivate a deeper understanding of those differences, and whether or not they exist.

This methodology is best suited for the study due to the quantifiable output of the variables being examined. For example, the degree of social climate is a concept that has been measured via existing, validated instruments. The results of the WAS are being utilized to assess the data as numerical and quantifiable, making a quantitative study an obvious choice (Avgousti,

2013). Data from the subjects will be collected at one time, with the instrument previously completed by juveniles and staff. The results will then be collated into a database and analyzed by SPSS.

Furthermore, quantitative studies allow for an important and necessary degree of separation between the researcher, the subject(s), and the subject matter of the study (Miller, Poole, Seibold, Myers, Park, Monge, & Shumate, 2011). In the case of the present investigation, this distinction is an essential element to maintain objectivity for the researcher, as well as a protection against skewing the self-report of the participants. Consequently, McCusker and Gunaydin (2015) refer to quantitative research as an "objective light" (p. 541) that affords the researcher the ability to interpret their findings untainted.

Specifically, this investigation will use a correlational study as its primary design because the foundational questions addressed by the study are that of group differences, and quantitative studies are best suited for examining and analyzing complex differences in quantifiable ways (Miller et al., 2011). Lutz and Hill (2009) reiterated this as they noted,

> "Quantitative research methods are helpful tools for achieving these goals because they help us study the complex relationship between the patient [youth], the therapist, the process of therapy, external events in the life of [youth], and in-session progress, postsession progress, and therapy outcome at the end of treatment as well as during the follow-up period; they can also help us aggregate and integrate findings about psychotherapy" (p. 369).

This study asks what difference, if any, exists between social climate perceptions of staff and juveniles in secure care treatment facilities. The research design was selected because the variable was not manipulated for the purposes of research (Fitzgerald, Rumrill, & Schenker,

2004). "Participants in these types of studies are assumed to possess the characteristics of interest prior to the study, and they are measured on those characteristics during the study, no attempt is made by the researchers to change them" (Fitzgerald, Rumrill, & Schenker, 2004, p. 143-144). As such, the researchers will utilize the independent t-test design to quantitatively analyze the difference between these variables so as to better establish and understand their distinction, or connection, with one another. To the knowledge of this author, there has been no other empirical study examining staff and resident perceptions of social climate in secure care facilities for juveniles with sexual behavior problems, which makes this design an appropriate methodology of choice.

Population and Sampling

Juveniles with sexual behavior problems, although not a homogeneous group, have a significant impact on their communities due to their perpetration of sex crimes and forcible rapes (Christiansen & Vincent, 2013; Vitacco et al., 2009). Although research has yet to develop a cohesive picture of this population, due to a modicum of discord in the findings, there are certain commonalities that have risen to the top of the literature. Some studies initial results tentatively suggest a correlation between juveniles with sexual behavior problems and trauma history (Stevens, Hutchins, French, & Craissati, 2013), learning and/or mental disabilities (Kelly et al., 2002), cognitive distortions (Karokosta et al., 2016), anxiety (Seto & Lalumière, 2010), and depression (Mousavi et al., 2016).

Moreover, literature concentrated on juveniles with sexual behavior problems, placed in secure care treatment facilities is beginning to increase (Crump, Underwood, & Dailey, 2013; Dailey et al., 2016; Slattery, Cherry, Swift, Tallon, & Doyle, 2012; Underwood et al., 2008; Underwood et al., 2015). Typically, juveniles in secure care are charged and

adjudicated, with the nature of their offense, as well as their assessed risk of recidivism, taken into consideration when placing them in a treatment facility (Underwood et al., 2015). If they are assigned to this higher level of restriction, it denotes a riskier nature to their offense and a greater propensity towards reoffending.

The current study was designed to explore the differences between perceptions of social climate for staff and juveniles with sexual behavior problems in secure care treatment facilities. In 2008, the Office of Juvenile Justice (OJJ) developed a continuum of services, which involved a three-tiered model treatment: secure care facilities, community based residential nonsecure facilities, and community based outpatient clinics (Crump, Underwood, & Dailey, 2013). In the secure care facility, juveniles are placed in either the general population, or more structured dormitories depending on their assessed risk for recidivism (Crump, Underwood, & Dailey, 2013). The two secure care facilities that housed the research participants are included in this study.

Participants in this study consisted of male juveniles who were adjudicated by a court magistrate to either a secure care program or a non-secure program after committing sexually aggressive crimes. All juveniles completed the Sexual Behavior Problem Treatment Program (SBPTP), were 12-21 years of age (as defined by state legal statutes), and were adjudicated sometime in between the years of 2008 and 2014. The respondents for the WAS consisted of 56 total respondents, which included juveniles (n=35) as well as staff (n=21). Archived demographic information for respondents of the WAS was incomplete; it did not specify ethnicity for either juveniles or staff, and age was only recorded for 3 SCY staff members (53, 56, 59, respectively). Additionally, the gender for 8 of the 21 staff members was identified as female.

Data Collection: Instrumentation

The following section will highlight the identified measures for the current study. Attempts were made to find the most relevant, statistically sound measures in the literature, and the strengths and weaknesses of each instrument will be discussed. The primary instrument, which will be utilized to assess the variables, is the Ward Atmosphere Scale (WAS). Furthermore, demographic information on each of the subjects will be collected through a review of the subject's clinical file and intake assessments to the facility.

The WAS was incorporated in this study based on its extensive utilization in assessing social climate (AL-Sagarat, Moxham, Curtis, & Crooke, 2014; Nicholls, Kidd, Threader, and Hungerford, 2015; Smith, Gross, & Roberts, 1996; Sørlie, Parniakov, Rezvy, & Ponomarev, 2010). Furthermore, literature shows that a poor social climate can contribute to the regression of treatment interventions (e.g., cognitive distortion restructuring) and pro-social behaviors through the deviancy training that is widespread in secure care facilities (Slatterly et al., 2009). In several longitudinal studies based on male juvenile non-sexual offenders in secure care, researchers discovered an increase in anxious symptomology, as well as persistent anxiety two years post-treatment (Harrington, Kroll, Rothwell, McCarthy, Bradley, & Bailey, 2005; Kroll, Rothwell, Bradley, Shah, Bailey, & Harrington, 2002).

Ward atmosphere scale (WAS). The Ward Atmosphere Scale (WAS) (Moos, 1989) is a self-report measure consisting of 100 brief statements on the WAS (10 per scale), answering true or false whether the statement was indicative of their ward. Ten subscales tap three higher order domains: (1) Relationships, (2) Personal Growth, and (3) System Maintenance. The Relationship domain includes the subscales: Involvement, Support, and Spontaneity. The Personal Growth domain includes: Autonomy, Practical Orientation, Personal Problem

Orientation, and Anger and Aggression. The three System Maintenance scales are: Order and Organization, Program Clarity, and Staff Control (Bootsmiller, Davidson, Luke, Mowbray, Ribisil, & Herman, 1997).

The 10 subscales have displayed respectable internal consistency (.68 to .83), high item-to-subscale correlations, and high test–retest reliability for all subscales (Moos & Houts, 1968). Moreover, previous research has confirmed both the content (Friis, 1986) and criterion validity (Ellsworth & Maroney, 1972) of the WAS. Additionally, it has been implemented in several cross-cultural contexts (AL-Sagarat et al., 2014; Brunt & Rask, 2005; Schjødt et al., 2003; Sørlie et al., 2010).

Demographic questionnaire. The demographic questionnaire (Appendix 1) was developed based on a previous framework from Dailey et al. (2016), and utilized to obtain conceptual information on a wide variety of areas. The questionnaire was applied by the primary investigator's thorough review of each subject's archival data file, and the information collected included 16 items regarding each subject. It obtained information on several pertinent areas for the current study: date of birth, age at time of arrest, race/ethnicity, arrest charge, adjudicated charge, number of victims, site where the juvenile received treatment for sexual behavior problems, mental health diagnoses prior to and/or during treatment, the date of the WAS, evaluations, discharge date from juvenile sex offender treatment program, treatment refusal/acceptance, presence of caregiver beyond treatment, initial and discharge sites of the juvenile sex offender treatment program.

Data Collection: Variables

The direction and specificity of this study's research questions and hypotheses were informed by literature on juveniles with sexual behavior problems, secure care facilities, the

Ward Atmosphere Scale (WAS), social climate, as well as staff and resident perceptions of a facility's social climate. The variable is social climate perception of staff and juveniles as it pertains to the secure care facilities, which will be examined by the participant's WAS domain scores of Personal Problem Orientation, Support, Involvement, Anger and Aggression, System Maintenance, and Relationship.

Underwood et al. (2015) conducted a program evaluation of secure care facilities for juvenile sex offenders, and it is a foundational study from which the current study will be building upon. When considering specific factors in the social climate of different facilities, the research of Underwood et al. (2015) uncovered statistically significant differences in several subscales of the WAS (Support, Spontaneity, Personal Problems, Order and Organization). Therefore, these results contribute to the literature on social climate's impact on juveniles in secure care facilities, and point to the need for further exploration of social climate within this population.

Furthermore, juvenile satisfaction was studied by Røssberg, Melle, Opjordsmoen, and Friis, (2003) and the relationship with social climate was determined through the interpretation of results from different subscales on the WAS. Their longitudinal study of juvenile satisfaction on wards for psychotic juvenile s found that four of the WAS subscales, Involvement, Practical Orientation, Angry and Aggression, and Staff Control, strongly co-varied with juvenile satisfaction. These results informed the current study's decision to incorporate Involvement and Anger and Aggression into the third Research Question and Hypothesis. Additionally, although their results yielded differing statistical significance for the Support and Order and Organization subscales as opposed to Underwood et al., (2015) the current study utilized the Support subscale as a factor in the second Research Question and Hypothesis.

Day et al., (2012) formulated their study within two distinct prisons, one considered more therapeutic and the other one more closely aligned with mainstream prisons, and discovered a discrepancy in social climate perceptions of staff and prisoners. Specifically, staff tended to rate their level of support and care for inmates statistically higher than did their inmate counterparts. Thus, this study will contribute to body of literature that is increasing our awareness and knowledge of social climate as understood by staff and juveniles.

The current study's research questions and hypotheses were further informed by the study from Bootsmiller et al. (1997), and their emphasis on staff and client perceptions of social climate as assessed through the WAS. Once again, the staff rated the social climate more positively than the juveniles. "The WAS staff-client differences indicated that environmental perceptions may have been differently constructed according to the position of the seeing participants, as well as their past experiences and other variables" (Bootsmiller et al., 1997, p. 334).

Data Collection: Procedures

Subjects who had entered into the Sexual Behavior Problem Treatment Program (SBPT) between 2008 and 2014 were chosen from archival data. Data will be collected from the subjects' initial intake assessment into the program, as well as their discharge from the program. The assessments were conducted in a classroom setting, or office, after the treatment facility's management team received the state court mandate to assess the juveniles for risk, and sex offender treatment and service needs. Prior to administration, the provider conducted a verbal description of the assessment process and its use to the subject. Following the description, subjects were afforded an opportunity to consent or dissent prior to completing the instruments. All subjects were provided directions and monitoring during the

test administration process. Following the administration, the provider collected the data, which was securely stored, and will only be accessible by the researcher for scoring at a later date (Dailey et al., 2016).

Statistical Analysis

Research Questions.

RQ1: Is there a statistically significant difference between the WAS Personal Problem Orientation subscale scores of juveniles, and the WAS Personal Problem Orientation subscale scores of the staff in secure care sites?

RQ2: Is there a statistically significant difference between the WAS Support subscale scores of juveniles, and the WAS Support subscale scores of the staff in secure care sites?

RQ3: Is there a statistically significant difference between the WAS Involvement, and Anger and Aggression subscale scores of juveniles, and the WAS Involvement, and Anger and Aggression subscale scores of the staff in secure care sites?

RQ4: Is there a statistically significant difference between the WAS System Maintenance domain scores of juveniles, and the WAS System Maintenance domain scores of the staff in secure care sites?

RQ5: Is there a statistically significant difference between the WAS Relationship domain scores of juveniles, and the WAS Relationship domain scores of the staff in secure care sites?

Hypotheses.

H1: There will be a statistically significant difference between the WAS Personal Problem Orientation subscale scores of juveniles, and the WAS Personal Problem Orientation subscale scores of the staff in secure care sites.

H2: There will be a statistically significant difference between the WAS Support subscale scores of juveniles, and the WAS Support subscale scores of the staff in secure care sites.

H3: There will be a statistically significant difference between the WAS Involvement, and Anger and Aggression subscale scores of juveniles, and the WAS Involvement, and Anger and Aggression subscale scores of the staff in secure care sites.

H4: There will be a statistically significant difference between the WAS System Maintenance domain scores of juveniles, and the WAS System Maintenance domain scores of the staff in secure care sites.

H5: There will be a statistically significant difference between the WAS Relationship domain scores of juveniles, and the WAS Relationship domain scores of the staff in secure care sites.

As previously discussed, data for each of the variables in question was collected through the Ward Atmosphere Scale. Research Question One will utilize an independent t-test between the WAS Personal Problem Orientation subscale scores of the youth and staff in secure care facilities. Research Question Two will utilize an independent t-test between the WAS Support subscale scores of youth and staff in secure care facilities. Research Question Three will utilize an independent t-test between the WAS Involvement and Anger and Aggression subscales scores of youth and staff in secure care facilities. Research Question Four will utilize an independent t-test between the WAS System Maintenance domain scores of the youth and staff in secure care facilities. Research Question Five will utilize an independent t-test between the WAS Relationship domain scores of the youth and staff in secure care facilities.

Ethical Considerations

This research study will follow the ethical guidelines provided by the American Counseling Association Code of Ethics (2014), including but not limited to conducting a systematic, accurate, and credible inquiry of archived data. Furthermore, this current study underwent an examination by the Human Subjects Research Committee (HSRC) to ensure the integrity of the research in maintaining and protecting the rights of the participants. Due to the sensitive nature of the analyzed data, the researcher and research participant entered into a formal agreement detailing the procedures utilized to protect the confidentiality of the participants. Additionally, a formal confidentially agreement between the researcher and Office of Juvenile Justice (OJJ) was attained in an effort to honor the privacy of institutionalized juveniles. Special attention was given to the security of all de-identified data files for confidentiality of all participants (Underwood et al., 2015).

Moreover, this current study has addressed the respective ethical considerations of confidentiality and informed consent for the participants. The subjects of the study were adjudicated juveniles residing in secure care; thus, consent for their participation in the study was obtained from both the juveniles and their parents/guardians. The primary investigator (PI) will maintain confidentiality by creating a secure master list that assigned each participant a corresponding number, while only the numbers will be recorded on each instrument. Additionally, access to the master list will be limited to only the PI. All data collection documents were electronic and encrypted with passwords; they have been stored on a password protected primary jump drive, as well as a back-up drive. All participants were properly informed about the nature of their involvement in a research study, the instruments used for assessment, and their roles in achieving the purpose. Furthermore, staff was made

available for any participants who wished to discuss the assessment process, and any thoughts or feelings that developed before, during, or after administration of the instruments (Dailey et al., 2016).

Limitations and Delimitations

A limitation of the current study is the concern of random responding by participants that is often attributed to self-report measures, which has the potential to bring further bias into the research findings. Although this is a widely accepted part of the research process, and effects are often minimal, the results that rely on these types of measures must be viewed in a discerning manner. In an effort to combat the impact of random responding, many inventories incorporate some type of validity scale as an indicator that measures the likelihood a respondent's answers are the result of random or careless responding (Credé, 2010). The measures utilized in this study did not have validity scores to adjust for the presence of random responding. Additionally, the WAS was written for adult populations, and the need to further evaluate effectiveness of these instruments within the juvenile population is also warranted.

Archival data is a growing trend in research studies (Turiano, 2014); however, the sample being obtained from archival data could be considered a limitation of this study. Groups that are not randomly selected, or randomly assigned to groups, may limit the researcher's ability to attribute group differences solely to treatment settings (Dailey et al., 2016). Fortunately, this study also has the ability to collaborate with individuals familiar with the data source (Dailey et al., 2016; Underwood et al., 2015), which Turiano (2014) identified as a possible mitigating factor when working with archival data.

Furthermore, most outcome literature for juveniles with sexual behavior problems utilizes measures of recidivism to determine treatment success. While treatment programs for juveniles with sexual behavior problems have demonstrated reduced recidivism elsewhere in the literature, the main focus of the current study was to provide additional factors to consider in treatment outcome studies. The current study did not examine recidivism; however, considering it in addition to the other measures utilized in the study would add another important contribution to the literature (Karoskosta et al., 2016).

Summary

This study seeks to explore the potential differences of social climate perception between staff and juveniles with sexual behavior problems in secure care treatment programs. The lack of literature examining the intersection of these constructs is apparent in the literature despite ethical and societal implications for the counseling profession. Social climate will be measured using the WAS, which is a measure that has been the premier assessment when assessing social climate in a secure environment. This is a reliable and valid instrument that is commonly used in the literature. Statistically, an independent t-test will be used to analyze the data.

The results of this study have several implications for the counseling profession, specifically, secure care programs working with juveniles with sexual behavior problems. Considering the ethical and financial implications of appropriate treatment programs for this population, this study will offer empirical insight into the differences in social climate perceptions of staff and juveniles in secure care facilities. Furthermore, the results of this study will provide insight into the differing perspectives of social climate between staff and juveniles of a secure care program, which will ultimately helps to address the gaps in the literature regarding what constitutes a beneficial social climate environment.

CHAPTER III

DATA ANALYSIS & RESULTS

Introduction

The purpose of this study is to compare the differences that may exist between the staff and juveniles perception of the social climate in secure care facilities. The study was accomplished though an ex post facto quantitative research methodology. Data from the subjects was collected at one time, with the Ward Atmosphere Scale (WAS) instrument previously completed by subjects and/or staff. This chapter encompasses a description of the population of the study and demographics of the participants in the study. The data analysis procedure will be highlighted in conjunction with the study research questions and hypotheses. Finally, a summary of the results will follow the research questions and hypotheses.

Descriptive Data

Participants in this study consisted of male juveniles who were adjudicated by a court magistrate to either a secure care program or a non-secure program after committing sexually aggressive crimes. All juveniles completed the Sexual Behavior Problem Treatment Program (SBPTP), were 12-21 years of age (as defined by state legal statutes), and were adjudicated sometime in between the years of 2008 and 2014. The respondents for the WAS consisted of 56 total respondents, which included juveniles (n=35) as well as staff (n=21). Archived demographic information for respondents of the WAS was incomplete; it did not specify

ethnicity for either juveniles or staff, and age was only recorded for 3 SCY staff members (53, 56, 59, respectively). Additionally, the gender for 8 of the 21 staff members was identified as female.

Data Analysis Procedures

Research question 1 (without outlier). Is there a statistically significant difference between the WAS Personal Problem Orientation domain scores of juveniles, and the WAS Personal Problem domain scores of the staff in secure care sites? SPSS data was run for Research Question 1, and found no missing data with one outlier. Additionally, the assumption of normality and homogeneity of variance were accepted based on the corresponding histogram and non-significant Levene's Test.

Research question 2. Is there a statistically significant difference between the WAS Support domain scores of juveniles, and the WAS Support domain scores of the staff in secure care sites? SPSS data was run for Research Question 2, and found no missing data or outliers. Additionally, the assumption of normality and homogeneity of variance were accepted based on the corresponding histogram and non-significant Levene's Test.

Research question 3 (without outlier). Is there a statistically significant difference between the WAS Involvement, and Anger and Aggression domain scores of juveniles, and the WAS Involvement, and Anger and Aggression domain scores of the staff in secure care sites? SPSS data was run for Research Question 3, and found no missing data Involvement or Anger and Aggression with one outlier for each domain, respectively. Additionally, the assumption of normality was assumed for Involvement, while Anger and Aggression showed a minor negative skew based on the histogram results. Furthermore, homogeneity of variance was accepted for both domains based on a non-significant Levene's Test.

Research question 4 (without outlier). Is there a statistically significant difference between the WAS System Maintenance domain scores of juveniles, and the WAS System Maintenance domain scores of the staff in secure care sites? SPSS data was run for Research Question 4, and found no missing data with one outlier. Additionally, the assumption of normality and homogeneity of variance were accepted based on the corresponding histogram and non-significant Levene's Test.

Research question 5. Is there a statistically significant difference between the WAS Relationship domain scores of juveniles, and the WAS Relationship domain scores of the staff in secure care sites? SPSS data was run for Research Question 5, and found no missing data with one outlier. Additionally, the assumption of normality and homogeneity of variance were accepted based on the corresponding histogram and non-significant Levene's Test.

Differences in data analysis. During preliminary analysis, it was discovered that there were significant differences between the secure care sites (Site A and Site B). Thus, it was necessary to address this variable within the corresponding hypotheses. Additionally, the site results will be referenced in the subsequent section, and discussed in greater detail in the following chapter.

Results

Hypothesis 1. Hypothesis 1 stated: There will be a statistically significant difference between the WAS Personal Problem Orientation subscale scores of juveniles, and the WAS Personal Problem Orientation subscale scores of the staff in secure care sites. A 2 x 2 ANOVA was conducted to evaluate the effects of site (Site A versus Site B) and position (juvenile versus staff) on WAS Personal Problem Orientation subscale scores. The results for the ANOVA indicated a significant main effect for site, $F(1,51) = 8.90$, $p = .004$, partial $\eta 2 = .15$, a non-

significant main effect for position, $F(1,51) = .83$, $p = .37$, partial η2 = .02, and a non-significant interaction between site and position, $F(1,51) = 3.18$, $p = .08$, partial η2 = .06. The site main effect indicated that BCY scored higher on the WAS Personal Problem Orientation subscale scores than SCY. Hypothesis 1 was rejected.

Source	*Type III Sum of Squares*	*df*	*Mean Square*	*F*	*Sig.*	*Partial* η^2
site2	738.819	1	738.819	8.895	.004	.149
Name2	68.900	1	68.900	.830	.367	.016
Site2 * Name2	264.294	1	264.294	3.182	.80	.059

Hypothesis 2. Hypothesis 2 stated: There will be a statistically significant difference between the WAS Support subscale scores of juveniles, and the WAS Support subscale scores of the staff in secure care sites. A 2 x 2 ANOVA was conducted to evaluate the effects of site (Site A versus Site B) and position (juvenile versus staff) on WAS Support subscale scores. The results for the ANOVA indicated a significant main effect for site, $F(1,52) = 6.43$, $p = .01$, partial η2 = .11, a non-significant main effect for position, $F(1,52) = 1.00$, $p = .32$, partial η2 = .02, and a non-significant interaction between site and position, $F(1,52) = 1.03$, $p = .31$, partial η2 = .02. The site main effect indicated that BCY scored higher on the WAS Support domain scores than SCY. Hypothesis 2 was rejected.

Source	*Type III Sum of Squares*	*df*	*Mean Square*	*F*	*Sig.*	*Partial* η^2
site2	378.594	1	378.594	6.426	.014	.110
Name2	58.617	1	58.617	.995	.323	.019
Site2 * Name2	60.838	1	60.838	1.033	.314	.019

Hypothesis 3. Hypothesis 3 stated: There will be a statistically significant correlation between the WAS Involvement, and Anger and Aggression subscale scores of juveniles, and the WAS Involvement, and Anger and Aggression subscale scores of the staff in secure care sites. A set of 2 x 2 ANOVAs were conducted to evaluate the effects of site (Site A versus Site B) and position (juvenile versus staff) on WAS Involvement and WAS Anger and Aggression subscale scores. The results for the first ANOVA indicated a significant main effect for site, $F(1,51) = 11.61$, $p = .001$, partial $\eta 2 = .19$, a non-significant main effect for position, $F(1,51) = .21$, $p = .65$, partial $\eta 2 = .004$, and a non-significant interaction between site and position, $F(1,51) = .55$, $p = .46$, partial $\eta 2 = .01$. The site main effect indicated that BCY scored higher on the WAS Involvement domain scores than SCY.

The results for the second ANOVA indicated a non-significant main effect for site, $F(1,51) = .15$, $p = .70$, partial $\eta 2 = .003$, a non-significant main effect for position, $F(1,51) = 1.58$, $p = .21$, partial $\eta 2 = .03$, and a non-significant interaction between site and position, $F(1,51) = 1.56$, $p = .22$, partial $\eta 2 = .03$. Thus, there did not appear to be significant differences in WAS Anger and Aggression subscale scores based on site or position. Hypothesis 3 was rejected.

Source	*Type III Sum of Squares*	*df*	*Mean Square*	*F*	*Sig.*	*Partial* η^2
site2	718.536	1	718.536	11.611	.001	.185
Name2	13.272	1	13.272	.214	.645	.004
Site2 * Name2	34.194	1	34.194	.553	.461	.011

Source	*Type III Sum of Squares*	*df*	*Mean Square*	*F*	*Sig.*	*Partial* η^2
site2	9.259	1	9.259	.146	.704	.003
Name2	100.635	1	100.635	1.584	.214	.030
Site2 * Name2	99.344	1	99.344	1.584	.217	.030

Hypothesis 4. Hypothesis 4 stated: There will be a statistically significant difference between the WAS System Maintenance domain scores of juveniles, and the WAS System Maintenance domain scores of the staff in secure care sites. A 2 x 2 ANOVA was conducted to evaluate the effects of site (Site A versus Site B) and position (juvenile versus staff) on WAS System Maintenance domain scores. The results for the ANOVA indicated a significant main effect for site, $F(1,51) = 8.50$, $p = .005$, partial $\eta 2 = .14$, a significant main effect for position, $F(1,51) = 10.25$, $p = .002$, partial $\eta 2 = .17$, and a non-significant interaction between site and position, $F(1,51) = 2.39$, $p = .13$, partial $\eta 2 = .05$. The site main effect indicated that BCY scored higher on the WAS System Maintenance domain scores than SCY and that staff scored higher than juveniles. Hypothesis 4 was accepted.

Source	*Type III Sum of Squares*	*df*	*Mean Square*	*F*	*Sig.*	*Partial* η^2
site2	2563.696	1	2563.696	8.501	.005	.143
Name2	3090.572	1	3090.572	10.248	.002	.167
Site2 * Name2	721.807	1	721.807	2.393	.128	.045

Hypothesis 5. Hypothesis 5 stated: There will be a statistically significant difference between the WAS Relationship domain scores of juveniles, and the WAS Relationship domain scores of the staff in secure care sites. A 2 x 2 ANOVA was conducted to evaluate the effects of

site (Site A versus Site B) and position (juvenile versus staff) on WAS Relationships domain scores. The results for the ANOVA indicated a significant main effect for site, $F(1,51) = 18.45$, $p < .001$, partial $\eta 2 = .27$, a non-significant main effect for position, $F(1,51) = 3.86$, $p = .06$, partial $\eta 2 = .07$, and a non-significant interaction between site and position, $F(1,51) = 2.04$, $p = .16$, partial $\eta 2 = .04$. The site main effect indicated that BCY scored higher on the WAS Relationship domain scores than SCY. Hypothesis 5 was rejected.

Source	*Type III Sum of Squares*	*df*	*Mean Square*	*F*	*Sig.*	*Partial* η^2
site2	6402.216	1	6402.216	18.450	.000	.266
Name2	1340.597	1	1340.597	3.863	.055	.070
Site2 * Name2	708.910	1	708.910	2.043	.159	.039

Summary

This section provided a brief review of this study's subjects and the study's intent to analyze the social climate perceptions of staff and juveniles with sexual behavior problems in secure care settings. Of the five corresponding hypotheses, Hypotheses 1, 2, 3, and 5 were rejected, while Hypothesis 4 was accepted. These results reveal (a) non-significant difference for Personal Problem Orientation between positions; (b) non-significant difference for Support between positions; (c) non-significant difference for Involvement, and Anger and Aggression between positions; (d) significant difference for System Maintenance between positions; (e) non-significant difference for Relationship between positions.

Some limitations emerged based on data analysis concerning sample size. For a relational survey design, literature suggests the sample size should not be less than 30, and no less than 50 in causal comparative and experimental studies (Delice, 2010). This study utilized a correlational design examining group differences using a non-experimental design; therefore

sample size is a study limitation. The number of participants was restricted and fixed due to the WAS only being administered once, and once the groups were broken into cells based on position, the sample size was drastically reduced. Therefore, it is difficult to make substantial research claims concerning identified groups. Consequently, the analysis on the WAS scores was conducted for one-time administration, which significantly reduces this study's generalizability, and will be covered in greater depth in the following chapter.

Overall, the data analysis provided intriguing findings involving the social climate perceptions of staff and juveniles in secure care facilities. T-tests were initially run between the two sites, and once a statistical difference was shown, a 2x2 ANOVA was utilized for each of the research questions in order to look at both site (Site A and Site B) and position (staff and juvenile). In Chapter 4, more in-depth discussion will surround the statistically significant difference discovered between staff and juveniles on the System Maintenance domain scores, and the research implications. Moreover, the subsequent chapter will explore the data analysis that uncovered a consistent statistical difference concerning the different secure care sites, and how these findings may impact future practice within the secure care sector.

CHAPTER IV

DISCUSSION

Introduction

The purpose of this study was to compare the social climate perceptions of staff and juveniles with sexual behavior problems in secure care facilities. Empirical evidence surrounding the impact of social climate on staff and juveniles in a secure treatment milieu was obtained through a non-experimental research design. An initial administration of the Ward Atmosphere Scale (WAS) with staff and juveniles was utilized to measure their perspectives of the social climate in their respective secure care facilities. The empirical data obtained through the research conducted in this study contributes to a growing body of literature supporting the use of social climate assessments as an important component of secure care treatment milieus. Throughout literature, there are no studies that focus specifically on comparing juveniles with sexual behavior problems and staff on their experience of the social climate within secure care facilities. The related analyses provided in the previous chapter give quantifiable evidence that social climate perceptions maintain similarities and differences between position (staff and juvenile) as well as sites (Site A & Site B), and more research is necessary to further understand the depth and breadth of these differences.

This chapter provided an overall summary of the research study, as well as a summary of findings and conclusions based on the outcomes of the research. Next, an evaluation of the strengths and weaknesses of the study is utilized in order to formulate theoretical, practical, and

future research implications. Finally, research recommendations are made for future research and practice based on the results of this study.

Summary of the Study

This study is focused on juveniles with sexual behavior problems due to the substantial number of sexual crimes in the United States each year (Fanniff & Kimonis, 2014; Righthand & Welch, 2004). The amount of programs for juveniles with sexual behavior problems has grown in the past 30 years (Walker & McCormick, 2004), and this study provides more literature for efficacious treatment with this population in secure care settings. Furthermore, the social climate of the facility has been considered an important measure of juvenile satisfaction in their secure care experience (Jörgensen, Römma, & Rundmo, 2009; Moos & Houts, 1968; Røssberg, Melle, Opjordsmoen, & Friis, 2006; Sørlie, Parniakov, Rezvy, & Ponomarev, 2010). Consequently, literature has shown the social climate of the facility to be co-created with the institutional staff, and their perceptions and interactions are valuable for this study's research questions and hypotheses (Schjødt, Middelboe, Mortensen, & Gjerris, 2003).

Moreover, this study used an ex post facto quantitative research methodology to examine the pre-determined, identified questions regarding the differences between social climate of staff and juveniles with sexual behavior problems in secure care settings. This methodology was best suited for the study due to the quantifiable output of the variables being examined. For example, the degree of social climate is a concept that has been measured via existing, validated instruments. For this study, social climate was measured using the WAS, which has been the premier assessment when evaluating social climate in a secure environment and is a reliable and valid instrument. The results of the WAS were utilized to assess the data as numerical and quantifiable, making a quantitative study an obvious choice (Avgousti, 2013).

For the data analysis of this study, t-tests were initially run between the two sites (Site A and Site B), and once a statistical difference was shown, a 2x2 ANOVA was utilized for each of the research questions in order to examine both site and position (staff and juvenile). Both statistically significant and non-significant findings were discovered based on the corresponding research questions and hypotheses, and the specifics of these findings will be discussed in the following section.

Summary of Findings and Conclusions

As the previous chapter described, the analysis of the data accepted Hypothesis 4, while Hypotheses 1, 2, 3, and 5 were rejected based on statistically non-significant findings of their corresponding research questions. Data from the WAS demonstrated statistically significant differences between the social climate perceptions of staff and juveniles concerning the System Maintenance domain scores. Conversely, the data showed a statistically non-significant difference for the Personal Problem Orientation, Support, Involvement, and Anger and Aggression subscales, as well as the higher order Relationship domain scores.

Additionally, as was discussed in the previous chapter, statistical differences were discovered during preliminary analysis between the secure care sites (Site A and Site B). Thus, the differences were addressed within each of the study's hypotheses. What follows are the subsequent findings and conclusions to the study's hypotheses.

The first hypothesis (Hypothesis 1) proposed that there will be a statistically significant difference between the WAS Personal Problem Orientation subscale scores of juveniles, and the WAS Personal Problem Orientation subscale scores of the staff in secure care sites. The hypothesis was rejected indicating that there was not a significant difference between the social climate perceptions of juveniles and staff in secure care facilities; insofar as the archival data

demonstrated no statistically significant difference in WAS Personal Problem Orientation subscale scores. This signifies that the staff and juveniles have a similar perception of the extent to which juveniles in the secure care milieu seek to understand their feelings and personal problems (Jörgensen, Römma, & Rundmo, 2009). Furthermore, there was a statistical difference for this subscale between the sites, with Site A scoring higher. The difference indicates that the staff and juveniles perceive their facility as being better at helping juveniles understand their feelings and personal problems than Site B.

The second hypothesis (Hypothesis 2) proposed that there will be a statistically significant difference between the WAS Support subscale scores of juveniles, and the WAS Support subscale scores of the staff in secure care sites. The hypothesis was rejected indicating that there was not a significant difference between the social climate perceptions of juveniles and staff in secure care facilities; insofar as the archival data demonstrated no statistically significant difference in WAS Support subscale scores. This signifies that the staff and juveniles have a similar perception of the extent to which juveniles in the secure care milieu help and support each other and how supportive the staff is towards the juveniles (Jörgensen, Römma, & Rundmo, 2009). Furthermore, there was a statistical difference for this subscale between the sites, with Site A scoring higher. The difference indicates that the staff and juveniles perceive their facility as being better at peer-to-peer and staff-to-peer support than Site B.

The third hypothesis (Hypothesis 3) proposed that there will be a statistically significant difference between the WAS Involvement, and Anger and Aggression subscale scores of juveniles, and the WAS Involvement, and Anger and Aggression subscale scores of the staff in secure care sites. The hypothesis was rejected indicating that there was not a significant difference between the social climate perceptions of juveniles and staff in secure care facilities;

insofar as the archival data demonstrated no statistically significant difference in WAS Involvement, and Anger and Aggression subscale scores. The findings concerning the Involvement subscale signifies that the staff and juveniles have a similar perception of the extent to which juveniles in the secure care milieu are active and energetic in the facility (Jörgensen, Römma, & Rundmo, 2009). The lack of difference indicates that the staff and juveniles of both sites perceive their facility in a similar way at helping juveniles understand their feelings and personal problems. Conversely, there was a statistical difference for this subscale between the sites, with Site A scoring higher. The difference indicates that the staff and juveniles perceive the juveniles in their facility as more active and energetic than Site B.

Additionally, the findings for the Anger and Aggression subscale signifies that the staff and juveniles have a similar perception of the extent to which juveniles in the secure care milieu argue with other juveniles and staff, and become openly angry and display other aggressive behavior (Jörgensen, Römma, & Rundmo, 2009). Furthermore, there was no statistical difference for this subscale between the sites. The lack of difference indicates that the staff and juveniles of both sites perceive their facility similarly in how anger and aggression are expressed.

The fourth hypothesis (Hypothesis 4) proposed that there will be a statistically significant difference between the WAS System Maintenance domain scores of juveniles, and the WAS System Maintenance domain scores of the staff in secure care sites. The hypothesis was accepted indicating that there was a significant difference between the social climate perceptions of juveniles and staff in secure care facilities; insofar as the archival data demonstrated no statistically significant difference in WAS System Maintenance domain scores. The findings concerning the System Maintenance domain score signifies that the staff and juveniles have a different perception of the extent to which both understand the importance of order and

organization in the treatment facility, the clarity of the day-to-day routines of the juveniles as well as the explicitness of rules and procedures, and how the staff use measures to keep patients under necessary control (Jörgensen, Römma, & Rundmo, 2009). Furthermore, there was a statistical difference for this subscale between the sites, with Site A scoring higher. The difference indicates that the staff and juveniles perceive their facility as better at communicating the importance of order and organization in the treatment facility, the clarity of the day-to-day routines of the juveniles as well as the explicitness of rules and procedures, and how the staff use measures to keep patients under necessary control than Site B.

The fifth hypothesis (Hypothesis 5) proposed that there will be a statistically significant difference between the WAS Relationship domain scores of juveniles, and the WAS Relationship domain scores of the staff in secure care sites. The hypothesis was rejected indicating that there was not a significant difference between the social climate perceptions of juveniles and staff in secure care facilities; insofar as the archival data demonstrated no statistically significant difference in WAS Relationship domain scores. The findings concerning the Relationship domain score signifies that the staff and juveniles have a similar perception of the extent to which juveniles in the secure care milieu are active and energetic, help and support one another as well as how supportive the staff are towards the juveniles, and how the treatment facility encourages open expression of feelings by juveniles and staff (Jörgensen, Römma, & Rundmo, 2009). Furthermore, there was a statistical difference for this subscale between the sites, with Site A scoring higher. The difference indicates that the staff and juveniles perceive their facility as better at being active and energetic, helping and supporting one another as well as how supportive the staff are towards the juveniles, and how the treatment facility encourages open expression of feelings by juveniles and staff than Site B.

The overall findings of this study slightly differ from certain literature that indicates the social climate perceptions of staff and clients are often dissimilar (Brunt & Rask, 2005; Bootsmiller et al., 1997; Day et al., 2012; Røssburg, Melle, Oppjordsmoen, & Friss, 2006; Schjødt, Middelboe, Mortensen, & Gjerris, 2003). Research has commonly found that staff tends to view the social climate as more positive than the clients do (Bootsmiller et al., 1997; Jörgensen, Römma, & Rundmo, 2009). Brunt and Rask (2005) stated, "Staff perceptions can be expected to be higher on dimensions that represent positive effects of their roles (e.g., Practical Orientation) and lower in areas that could have negative implications (e.g., Staff Control)" (p. 264-265).

However, the data from this study discovered similar responses regarding the perceptions of staff and juveniles for the Personal Problem Orientation, Support, Involvement, and Anger and Aggression subscales, as well as the higher order Relationship domain scores within the secure care facilities. This is likely due to the importance placed on relational and support variables by the facilities within the OJJ (Underwood et al., 2015). Staff are trained to prioritize the relationship with the juveniles; thus, the WAS scores concerning relational variables between the staff and juveniles are similar. Furthermore, structure, emphasis on therapeutic interventions, and respectful, supportive relationships that add to the overall feelings of safety. Group climate literature corroborates the claim that an open climate can aid in overall treatment motivation, as well as feelings of safety (Heynen, Van der Helm, Stams, & Korebrits, 2014; Van der Helm, & Stams, 2012).

On the other hand, Hypothesis 4 involved the comparison of perceptions for the System Maintenance domain and did affirm previous literature, which states that perceptions of social climate vary between staff and patients, with staff often scoring higher than the patients

(Bootsmiller et al., 1997; Jörgensen, Römma, & Rundmo, 2009). Furthermore, prior research discovered the most noticeable difference in perceptions for staff and patients were in the aforementioned domain (Brunt & Rask, 2005). This difference is attributed to the three subscales (Order and Organization, Program Clarity, Staff Control), which are a part of the System Maintenance domain, that are entirely contingent on the work of the staff. The Order and Organization subscale measures how important order and organization are in the program Jörgensen, Römma, & Rundmo, 2009). Also, the Program Clarity subscale measures the extent to which patients know what to expect in their day-to-day routine, and the explicitness of facility rules and procedures Jörgensen, Römma, & Rundmo, 2009). The Staff Control subscale measures the extent to which the staff use measures to keep patients under necessary control Jörgensen, Römma, & Rundmo, 2009).

Thus, the juveniles score lower because there is no responsibility ascribed to them in this domain, and they function strictly as participants. They do not control the organizational structure of the program; rather, they must follow the way in which the OJJ has designed the program. Additionally, there is likely a communication gap between the staff and juveniles, in which the staff believes they are clearly communicating the rules and expectations for the juveniles, while the juveniles do not have a clear sense of their expected roles and rules. Furthermore, the control exerted in a secure care facility is only one-way and the locus of control resides with the staff. Thus, the benefit of skewing positively drastically diminishes for the juvenile. Whereas, the staff would be more apt to perceive their role more positively in light of the responsibility they hold in relation to the maintenance of the facility.

Additionally, while this study did not originally intend to highlight the differences between sites, the statistical difference found in the preliminary analysis made it a point of

discussion. Specifically, Hypotheses 1, 2, 4, and 5 all had differences, whereas the Anger and Aggression subscale in Hypothesis 3 did not have a statistically significant difference. The different results between the sites show the importance of assessing individual treatment milieus in order to accurately measure how the staff and juveniles perceive the social climate of the facility. Although this study did not research the specific programs within the respective sites, the following sections will articulate implications and potential future research to understand why the site score were statistically different.

In summary, this study found no statistically significant difference in the social climate perceptions of staff and juveniles regarding the Personal Problem Orientation, Support, Involvement, and Anger and Aggression subscales, as well as the higher order Relationship domain scores. Yet, a statistically significant difference was discovered with the System Maintenance domain scores. The findings of this study are different than what previous research has established, and the following sections will explore how this study can add to the knowledge base of social climate perceptions in juveniles with sexual behavior problems in secure care facilities. Moreover, there was a statistical difference in site scores on the subscales of Personal Problem Orientation, Support, Involvement, and the higher order domains of Relationship and System Maintenance.

Implications

This study broadened the scope of the current knowledge base regarding social climate and juveniles with sexual behavior problems in secure care treatment facilities. The implications derived from this study will emphasize the theoretical and practical insights derived from the study results.

Theoretical implications. Social climate is a variable of secure care facilities that has been recognized as an important piece of the secure care experience (Beazley & Gudjonsson, 2011; Jörgensen, Römma, & Rundmo, 2009; Schjødt, Middelboe, Mortensen, & Gjerris, 2003; Nicholls, Kidd, Threader, & Hungerford, 2015). However, literature on social climate in secure care for juveniles with sexual behavior problems has been minimal (Underwood et al., 2015). This study offers empirical research concerning the gaps in knowledge reinforcing the importance the social climate perceptions of staff and juveniles with sexual behavior problems in secure care treatment programs.

This study aligns with previous research in assessing and comparing staff perceptions of social climate, as they are compared with juvenile perceptions in an effort to gain a consistent representation of their relationship (Bootsmiller, Davidson, Luke, Mowbray, Ribisil, & Herman, 1997; Brunt & Rask, 2005; Moos, Shelton, & Petty, 1973). However, several of the findings slightly differ from other literature that indicates the social climate perceptions of staff and patients are often dissimilar (Brunt & Rask, 2005; Bootsmiller et al., 1997; Day et al., 2012; Røssburg, Melle, Oppjordsmoen, & Friss, 2006; Schjødt, Middelboe, Mortensen, & Gjerris, 2003). Only one hypothesis (Hypothesis 4) in this study affirmed dissimilarity in perception. This implies that there could be more agreement between staff and juveniles than previously discovered, and an assumption on a divergence in social climate perceptions may not be entirely appropriate.

Furthermore, a significant difference was found in the perceptions of social climate between the two secure care treatment sites, with only the Anger and Aggression subscale of the Ward Atmosphere Scale (WAS) failing to exhibit a significant difference. The implication is that differences remain in the methods secure care facilities use to develop and manage their

social climate, even within similar treatment milieus (e.g., secure care treatment for juveniles with sexual behavior problems). Although secure care facilities have similarities and common modes of operation, the results from this study demonstrate that this does not presuppose that the execution is similar.

Another theoretical implication is connected to the utilization of the WAS as the main assessment in this study. Research has shown it is the most extensively used tool in assessing the experience of staff, residents, and their families in the social climate and treatment environment (Moos, 1996; Sørlie, Parniakov, Rezvy, & Ponomarev, 2010). While several studies have implemented the WAS in their research across multiple contexts as the foremost tool in collecting an accurate representation of the facility's social climate (Beazley & Gudjonsson, 2011; Nicholls, Kidd, Threader, & Hungerford, 2015; Underwood et al., 2015). The results of this study, which show both significant and non-significant differences, imply that the WAS has the item sensitivity to compare and assess the social climate perceptions of respondents.

Practical implications. This study has practical implications for research and application on the perceptions of social climate in secure care treatment facilities. Prior research has contributed to the understanding of social climate and the positive correlation between juvenile satisfaction and motivation for treatment with the juvenile's perception of the social climate (Beazley & Gudjonsson, 2011; Jörgensen, Römma, & Rundmo, 2009; Røssburg, Melle, Oppjordsmoen, & Friss, 2006). Therefore, it has become increasingly acknowledged within literature that social climate must be highly considered when working in a secure care setting. These facilities can no longer focus solely on the implementation of a set program; rather, staff and administration must value the different factors within social climate in order to provide overall effective treatment.

Additionally, this study added substantial data in the area of differences between two secure care sites that accommodate juveniles with sexual behavior problems. Before this study, Underwood et al. (2015) conducted a program evaluation for a statewide juveniles with sexual behavior problems program that encompassed eight different treatment sites and used the WAS as one of their outcome measures. However, it was not the main assessment tool used, and the focus was not entirely on the social climate of the sites. Because this study discovered significant differences in social climate perceptions between the two sites, secure care treatment providers have access to more information to aid in the identification of social climate components, as well as improved awareness towards the aspects of social climate that may be affected by dynamic variables (e.g., location, individual staff members).

Also, in an effort to create an effective treatment facility for juveniles with sexual behavior problems, the administration and staff must possess an overarching awareness of how each is experiencing the social climate. Literature does suggest that staff tends to view the social climate as more positive than do the patients (Bootsmiller et al., 1997; Jörgensen, Römma, & Rundmo, 2009). The staff should know what variables contribute towards the social climate perception so their work can be intentionally focused on nurturing and maintaining this type of environment. For example, the higher order System Maintenance domain of the Ward Atmosphere Scale (WAS) was statistically significantly different between the staff and juveniles of the two sites, with staff scoring higher. This finding implies staff should be more cognizant of the way in which the treatment facility is ordered and organized. Since staff are in charge of order and organization, they are also the ones in charge of the importance placed on it. Moreover, the onus is on the staff to clearly and openly articulate routines, rules, and procedures for the juveniles within the secure care facility. Staff may see a clear program direction;

however, clients may not recognize this on a day-to-day basis (Bootsmiller et al., 1997). An overall feeling of safety is developed through structure, emphasis on therapeutic interventions, and respectful, supportive relationships. Group climate literature corroborates the claim that an open climate can aid in overall treatment motivation, as well as feelings of safety (Heynen, Van der Helm, Stams, & Korebrits, 2014; Van der Helm, & Stams, 2012). Finally, this study's results indicate a discrepancy between the perceptions of staff and juveniles concerning the extent to which staff use measures to keep patients under necessary control. The concept of "necessary control" is highly subjective, and how staff views it may be drastically different from juveniles. Thus, it is vital that staff receive proper training and good, on-site supervision for the adult leaders in an effort to increase their ability to manage the juveniles in the facility. Secure care facilities need to emphasize the creation of high-structure environments in order to decrease the amount of time a juvenile is allowed to engage in unstructured and unsupervised activities (Dodge et al., 2006).

Limitations of the Study

The results of this study provide valuable data in social climate research, specifically for juveniles with sexual behavior problems, and their perceptions of social climate in secure care facilities. However, there are some weaknesses exposed throughout the course of the research and data analysis. The following section identifies limitations within this study, and how they may affect the generalizability of the research.

A limitation in this study is the size of the sample population, with the scores of 56 participants being analyzed. While the sample size assumption was maintained per overall sites, it was violated once the groups were broken into cells based on position (staff or juveniles). It should be noted that in literature with juveniles with sexual behavior problems, a smaller sample

size is not abnormal. Although this research yielded different results in a comparison of perception in social climate between staff and juveniles, which has the potential to add a different layer to the literature, any steps towards generalizing the results must be done extremely tentatively. An added limitation is connected to the methodology in which the sample was acquired as archival data and was not randomly selected.

Another limitation of this study is found in the WAS and how it was administered. For one, as was previously discussed, this assessment was not expressly developed for juveniles, nor was it validated in this population. It is conceivable that some items within this tool may be difficult for juveniles to fully comprehend their meaning, or gaps may exist when assessing juveniles as opposed to adults. Moreover, there was only a one-time dispensation of the WAS, and no pre or post-test was given. Only gathering data from one WAS administration truncates the ability to determine if the perception of social climate changes over time. Also, it is unknown at what juncture of the juvenile's stay in the secure care facility the WAS was given. These limitations challenge the ability to fully grasp the context and peripheral variables that may have had an impact on the respondents' perception of social climate in secure care. With this in mind, a related limitation is that the WAS was the only assessment administered, with social climate being the sole variable considered.

Recommendations

This section will detail several recommendations for potential future research and practice based on the results of this study. The findings from this study, along with the limitations identified in the previous section, will be the foundation from which the recommendations will be constructed.

Recommendations for future research. There are methodological recommendations that can be made based on the limitations and gaps experienced in this study. Future studies must prioritize increasing the number of juveniles with sexual behavior problems that participate in the studies. This study's sample size (n=56) creates an issue as researchers look to extrapolate the results into broader contexts (e.g., juveniles with sexual behavior problems, secure care treatment facilities, social climate perceptions). A potential solution would be for subsequent studies to include other secure care sites that work with juveniles with sexual behavior problems. By incorporating additional sites, the sample size is improved and the social climates of more milieus can be assessed. Furthermore, the inclusion of more diverse secure care sites (i.e., outside the current study's OJJ region) would allow researchers to study how social climate is developed and perceived in order to gain a more robust understanding of its implications.

The findings of this study, specifically the statistically significant difference between staff and juveniles in their perception of the System Maintenance domain, could be a foundational step for a future study to explore and expound upon the individual subscales of this domain (Order and Organization, Program Clarity, Staff Control). A future study might be a phenomenological qualitative study where the researcher uses the items from the domain to gather a descriptive picture of the lived experience of staff and juveniles in secure care facilities. Because System Maintenance was the only domain or subscale that had a significant difference in positions, it could be valuable to gather a more in-depth representation of staff and juveniles' perceptions and experiences of the System Maintenance. Also, an independent or dependent t-test could be conducted for each subscale based on the responses of the staff and juveniles. A dependent t-test would necessitate a pre and post-testing administration of the System

Maintenance domain for each position. Then, an independent t-test analysis could be run to compare the scores of staff and juveniles.

Consequently, another recommendation is that future researchers administer a pre and post-test for staff and juveniles, or intermittently throughout treatment, in order to gauge the presence of treatment progress in regards to social climate perceptions. The addition of at least one more round of WAS assessments opens up a myriad of possibilities for further studies. One such study might be a correlation analysis of the pre and post WAS scores, with the amount of time the juvenile has spent in the secure care facility. Another study that would benefit from pre and post-test WAS assessments could be a quasi-experimental design in which one facility acted as a control group and would not intentionally manage the different social climate variables. The remaining sites would actively develop and train on the various aspects of social climate, per the WAS subscales, and the data would be analyzed to determine if intentionality within the facility impacts the perception of social climate.

A limitation with this study, as was discussed in the previous section, is the fact that the WAS is the only assessment utilized and social climate is the only variable analyzed. Based on the juveniles with sexual behavior problems literature examined in Chapter 1, there are several factors found within this population that potentially effect their perceptions of social climate. One study could be designed as a correlation study between juveniles' depression scores, as assessed by the Children's Depression Inventory-2, and the WAS. In a study conducted by Becker, Kaplan, Tenke, and Tartaglini (1991), they discovered 42% of the participant offenders confirmed significant depressive symptoms, and had significantly higher self-report of depression than a random sample of juveniles. Similarly, a study might include analysis of the level of anxiety (Children's Manifest Anxiety Scale-2) felt by juveniles in secure care, and how

it is correlated with social climate. Maladaptive affect regulation, of which anxiety is a heavy contributor, has been shown to be a precursor towards outward manifestations of behaviors in juveniles with sexual behavior problems (Fanniff & Kimonis, 2014). Another study where adding another variable based on juveniles with sexual behavior problems literature, could be a stepwise multiple regression with depression, anxiety, and trauma history (Trauma Symptom Checklist) serving as the independent variables, and social climate as the dependent variable. Juveniles with sexual behavior problems are five times more likely to have been sexually abused than juvenile nonsexual offenders (Stevens, Hutchins, French, & Craissati, 2013). In one particular setting, 98% of the juveniles reported previous victimization of abuse (Apsche, Evile, & Murphy, 2004). This type of study could help determine which independent variable has the largest, or smallest, impact on the dependent variable. Literature has been consistent in connecting a history of trauma and neglect with higher rates of depression and anxiety in juveniles with sexual behavior problems (Apsche, Evile, & Murphy, 2004; Gerardin & Thibaut, 2004; Righthand & Welch, 2004; Seto & Lalumière, 2010; Stevens, Hutchins, French, & Craissati, 2013; Walters et al., 2013).

Recommendations for future practice. This section outlines recommendations grounded in the results and finding of this study, as well as, a full explanation regarding why each recommendation is being made. Recommendations will center on the work of secure care facilities, their work with juveniles with sexual behavior problems, the importance of social climate, and the implementation in the clinical or educational setting.

Broadly speaking, this study addresses a gap in the developing literature regarding a juvenile with sexual behavior problems' time in a secure care facility, and the role social climate plays in their experience. Research has revealed that juvenile satisfaction and motivation for

treatment are positively correlated with the juvenile's perception of the social climate (Beazley & Gudjonsson, 2011; Jörgensen, Römma, & Rundmo, 2009; Røssburg, Melle, Oppjordsmoen, & Friss, 2006). Therefore, it is incumbent upon the administration and staff in secure care facilities to prioritize education on social climate, and be diligent about implementing programs and procedures in an effort to nurture this concept. In their study on interventions for deviant peer influences, Dodge et al. (2006) identified two factors that can lessen the severity of such effects. The research showed that proper training and good, on-site supervision for the adult leaders were additive factors in their ability to manage the juveniles in such a way that the iatrogenic effect was reduced. The recommendation is that the administration and staff would be trained concerning the subscales and higher order domains of the WAS to incorporate an empirically validated tool to aid in the improvement of social climate. It is a variable that needs to be emphasized within secure care treatment facilities so that staff feels empowered to take an active role in its development.

Furthermore, it is recommended that proper training on social climate would be conducted in order to strengthen the staff's ability to provide effective supervision of the juveniles in the facility. Training is a necessity for those in positions of authority to be on the same page surrounding the importance of the facility's social climate, and they ways in which their supervisory roles will protect it. Supervisors educated in social climate must also be educated in the detrimental impact that unsupervised groups of high-risk juveniles have on it. Deviant peer clusters often engage in behaviors that are reinforced by peer pressure and modeling (Van Ryzin & Dishion, 2014). Thus, the supervisors can implement the information into the construction of highly structured environments, which decrease the amount of time juveniles are allowed to engage in unstructured and unsupervised activities (Dodge et al., 2006).

Conclusion

This study was able to compare the differences between the perceived social climate of staff and juveniles with sexual behavior problems residing in secure care. Through the course of preliminary data analysis, a statistically significant difference was discovered between the two sites participating in this research study. Overall, this study increased the knowledge base of social climate as an important variable in secure care facilities, the variance of perceptions in social climate between staff and juveniles, the specific components of social climate, as well as differential perceptions between secure care sites.

The data obtained from this study identified the higher order domain of System Maintenance to be statistically significantly different between staff and juveniles. The analysis reveals a discrepancy in the way these two positions perceive the importance of order and organization in the treatment facility, the clarity of the day-to-day routines of the juveniles as well as the explicitness of rules and procedures, and how the staff use measures to keep patients under necessary control (Jörgensen, Römma, & Rundmo, 2009). Additionally, the results of the study noted significant differences in social climate perception between two sites; thus, presenting data shows a quantifiable difference in treatment perceptions, as well as an opportunity to understand what contributes to these differences. As a result, this study increases the burgeoning foundation of knowledge for a multitude of research areas: juveniles with sexual behavior problems, secure care, staff attitudes, assessments of social climate, and the influence it has on each of these areas. Moreover, the research conducted for this study provides a picture of social climate as a valuable variable to assess within secure care treatment facilities. Subsequent implications and future recommendations add to the foundation, which can continue to increase

and fine-tune a secure care facility's ability to follow best care practices through an educated awareness of their social climate.

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Table 1

Ward Atmosphere Scale (WAS) three higher order domains and ten subscales (Jörgensen, Römma, & Rundmo, 2009)

Category	Description
Relationship	
1. Involvement	How active and energetic patients are in the ward
2. Support	The extent to which patients help and support each other and how supportive the staff are towards patients
3. Spontaneity	The extent to which the program encourages the open expression of feelings by patients and staff
Personal Growth	
4. Autonomy	How self-sufficient and independent are the patients in making their own decisions
5. Practical Orientation	The extent to which patients learn practical skills and are prepared for discharge from the ward
6. Personal Problems Orientations	The extent to which patients seek to understand their feelings and personal problems
7. Anger and Aggression	The extent to which patients argue with other patients and staff, become openly angry and display other aggressive behavior
System Maintenance	
8. Order and Organization	How important are order and organization in the ward

9. Program Clarity	The extent to which patients know what to expect in their day-to-day routine, and the explicitness of ward rules and procedures
10. Staff Control	The extent to which the staff use measures to keep patients under necessary control

Table 2

Univariate Analysis of Variance for Personal Problem Orientation (without outlier) for Hypothesis 1

Source	*Type III Sum of Squares*	*df*	*Mean Square*	*F*	*Sig.*	*Partial* η^2
site2	738.819	1	738.819	8.895	.004	.149
Name2	68.900	1	68.900	.830	.367	.016
Site2 * Name2	264.294	1	264.294	3.182	.80	.059

Table 3

Univariate Analysis of Variance for Support for Hypothesis 2

Source	*Type III Sum of Squares*	*df*	*Mean Square*	*F*	*Sig.*	*Partial* η^2
site2	378.594	1	378.594	6.426	.014	.110
Name2	58.617	1	58.617	.995	.323	.019
Site2 * Name2	60.838	1	60.838	1.033	.314	.019

Table 4

Univariate Analysis of Variance for Involvement (without outlier) for Hypothesis 3

Source	*Type III Sum of Squares*	*df*	*Mean Square*	*F*	*Sig.*	*Partial* η^2
site2	718.536	1	718.536	11.611	.001	.185
Name2	13.272	1	13.272	.214	.645	.004
Site2 * Name2	34.194	1	34.194	.553	.461	.011

Table 5

Univariate Analysis of Variance for Anger and Aggression (without outlier) for Hypothesis 3

Source	*Type III Sum of Squares*	*df*	*Mean Square*	*F*	*Sig.*	*Partial* η^2
site2	9.259	1	9.259	.146	.704	.003
Name2	100.635	1	100.635	1.584	.214	.030
Site2 * Name2	99.344	1	99.344	1.584	.217	.030

Table 6

Univariate Analysis of Variance for System Maintenance (without outlier) for Hypothesis 4

Source	*Type III Sum of Squares*	*df*	*Mean Square*	*F*	*Sig.*	*Partial* η^2
site2	2563.696	1	2563.696	8.501	.005	.143
Name2	3090.572	1	3090.572	10.248	.002	.167
Site2 * Name2	721.807	1	721.807	2.393	.128	.045

Table 7

Univariate Analysis of Variance for Relationship (without outlier) for Hypothesis 5

Source	*Type III Sum of Squares*	*df*	*Mean Square*	*F*	*Sig.*	*Partial* η^2
site2	6402.216	1	6402.216	18.450	.000	.266
Name2	1340.597	1	1340.597	3.863	.055	.070
Site2 * Name2	708.910	1	708.910	2.043	.159	.039

APPENDIX A

Demographic Questionnaire to Guide Archival Data Collection

The purpose of this questionnaire is to obtain conceptual information on a wide variety of areas. The results of this questionnaire will be used to summarize archival data.

1. Date of birth
2. Age at time of arrest
3. Ethnicity:

___ European American (Caucasian)

___ African American

___ Hispanic American

___ Asian American

___ Native American

___ Pacific Islander

___ Multi-Ethnic

___ Other

4. Arrest charge (original)
5. Adjudicated charge (plea bargain)
6. Number of victims
7. System type involvement (Child protective services, juvenile justice, foster care)
8. Mental health diagnoses prior to juveniles with sexual behavior problems treatment program involvement
9. Mental health diagnosis during incarceration involvement with juveniles with sexual behavior problems treatment program

10. Date of WAS evaluation

11. Discharge date from juveniles with sexual behavior problems treatment program

12. Refuse treatment

13. Mental health treatment provider's interpretation of juveniles IQ

14. Caregiver at home

15. Initial intake site within the juveniles with sexual behavior problems treatment program

16. Discharge site from the juveniles with sexual behavior problems treatment program

APPENDIX B

ABRIDGED MANUSCRIPT

Comparing Social Climate Perceptions of Staff and Juveniles with Sexual Behavior Problems

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Abstract

Increases in research on juvenile sexual behavior problems have created a need for more evidence-based treatment. Furthermore, literature shows that the social climate of a treatment facility is an important variable, yet more empirical data exploring how it impacts juveniles with sexual behavior problems in secure care facilities is needed. This study evaluated the perceived social climate of both staff and juveniles in two secure care facilities; as measured by the Ward Atmosphere Scale (WAS), and was a one-time administration. Subjects were 56 adjudicated male juveniles with sexual behavior problems (n=35) and staff (n=21), respectively. Overall, the staff and juveniles' social climate perceptions were found to be significantly different in the System Maintenance higher order domain of the WAS. Additionally, preliminary data analysis discovered that the two sites were statistically significantly different for the WAS subscales of Order and Organization, Support, Involvement, as well as the higher order domains of System Maintenance and Relationship. Finally, the theoretical and practical implications, strengths and limitations, recommendations for future research and practices for this study are discussed.

Keywords: juveniles with sexual behavior problems, secure care, social climate, Ward Atmosphere Scale

The amount of programs for juveniles with sexual behavior problems has grown in the past 30 years (Walker & McCormick, 2004), and the literature suggests that juveniles with sexual behavior problems who have received treatment have reduced sexual recidivism rates as compared to juveniles who have not (Edwards, Whittaker, Beckett, Bishopp, & Bates, 2012; Karokosta, Underwood, Merino, Williams, Todd, Williams, Fairchild, Dailey, & Crump, 2016; Worling, 1998). While some researchers argue in favor of the positive effects of treatment, there has also been a confluence of research that emphasizes the collateral damage created from the iatrogenic effect of deviancy training created when delinquent peers are placed in confined spaces (Dishion, McCord, & Poulin, 1999; Dodge, Dishion, & Lansford, 2006; Gifford-Smith, Dodge, Dishion, & McCord, 2005; Van Ryzin & Dishion, 2014).

Awareness of juveniles with sexual behavior problems has dramatically intensified based on greater societal consciousness, increased advocacy on behalf of victims, and juveniles becoming more educated about the judicial system (McCamey, 2010). As of 2007, statistics regarding juveniles with sexual behavior problems show that juveniles committed 22 percent of all sex crimes and 15 percent of forcible rapes (Christiansen & Vincent, 2013). In recent years, more information has been gathered to help build knowledge and awareness towards identifying and understanding these juveniles with greater focus; however, the majority of sex offender data resides within the realm of adult offenders. Juveniles have often remained a subset of the population with which researchers and clinicians have historically experienced difficulty (Christiansen & Vincent, 2013; Whittle, Bailey, & Kurtz, 2006; Pratt, 2013) in formulating a clear conceptualization of the origins, characteristics, or consistent treatment that decreases recidivism of their acting out (Edwards, Whittaker, Beckett, Bishopp, & Bates, 2012).

Due to this increased awareness, and subsequent need for rehabilitation treatment, different levels of programs have been established across the country. Furthermore, literature surrounding a common form of care, as well as progression of correction for juveniles with sexual behavior problems has produced contrasting interpretations of their efficacy in reducing recidivism (Abrams, 2006). Pratt (2013) argued for a placement system that takes into consideration the juvenile's risk assessment of their detrimental impact on the community. Several studies have discovered that juveniles who have entered into residential treatment facilities show a reduction in negative symptoms (e.g., aggression, depression, anxiety, suicidality), a rise in daily functioning, and high rates of school completion within the course of treatment as well as post-treatment (Ebesutani, Ale, Luevve, Viana, & Young, 2011; Hair, 2005). Conversely, the newfound structure of a treatment program, in relation to the juvenile's previous experience with chaos, abuse and neglect in their families of origin or ecological context of school, neighborhood, and community (Ward, 2004), may create confusion and discomfort for them. Rates of juveniles with sexual behavior problems who have experienced sexual abuse range from 40 to 80%, and the prominence of physical abuse within this population ranges from 25 to 50% (Righthand & Welch, 2004).

While some research produces data that maintains support for the efficacy of home or community based treatment programs for juvenile offenders of all types (Henggeler & Sheidow, 2012; Ryan & Testa, 2005), other research in the field calls attention to the shifting trend of relying more heavily on the juvenile justice system and secure care facilities to provide treatment for juveniles with sexual behavior problems in particular (Underwood, Robinson, Mosholder, & Warren, 2008). For many with mental health disorders, this is their first line of treatment (Underwood, Warren, Talbott, Jackson, & Dailey, 2014). The result has been an increased need

for these facilities to be able to provide effective treatment to the juveniles that have been placed with them.

Researchers are in agreement that the social environments, and climate of the juvenile while in treatment programs, possess significant implications for juvenile satisfaction, motivation, as well as treatment outcomes (Beazley & Gudjonsson, 2011; Jörgensen, Römma, & Rundmo, 2009; Schjødt, Middelboe, Mortensen, & Gjerris, 2003; Nicholls, Kidd, Threader, & Hungerford, 2015). Specifically, Beech and Hamilton-Giachritsis (2005) conducted research that discovered a correlation between the correctional facility's social climate and treatment success of adult sexual offenders. The iatrogenic effect of deviancy training often experienced in secure care facilities, has been found to be a contributing factor in the treatment effectiveness of these programs (Van Ryzin, & Dishion, 2014). Ultimately, the research related to the social climates of programs for juveniles with sexual behavior problems in secure care remains scarce, with much of it focused on juveniles with non-sexual offenses, (Van der Helm, Stams, Van Genabeek, & Van der Laan, 2012; Van der Helm, Stams, & Van der Laan, 2011; Van Ryzin & Dishion, 2014) even though secure care is the most likely treatment employed for those with the highest risk for recidivism (Abrams, 2006; Underwood, Robinson, Mosholder, & Warren, 2008).

Additionally, Jörgensen, Römma, and Rundmo (2009) utilized the Ward Atmosphere Scale and discovered a correlation between the Ward Atmosphere Scale and juvenile satisfaction, while acknowledging more research was necessary. Social climate has been a concept researched in the previous decades (AL-Sagarat, Moxham, Curtis, & Crooke, 2014; Nicholls, Kidd, Threader, and Hungerford, 2015; Smith, Gross, & Roberts, 1996; Sørlie, Parniakov, Rezvy, & Ponomarev, 2010), and focused on the perspective within a hospital inpatient unit as opposed to correctional centers.

Purpose of the Study

The purpose of this study is to compare the potential differences that may exist between the staff and juveniles' perception of the social climate. Previous research has discovered similarities in certain areas of social climate when comparing staff and resident scores regarding social climate, while there remain specific variables of the social climate in which their respective perceptions diverge (e.g., support, open expression of feelings, practical skills education, open defiance and anger) (Bootsmiller, Davidson, Luke, Mowbray, Ribisil, & Herman, 1997). Therefore, data analysis will be concentrated on particular scores (detailed in the next section) from the administration of the Ward Atmosphere Scale to staff and juveniles.

Methods

The purpose of this section is to provide details germane to this study in order for potential future research to have a methodological framework from which to continually build. Initially, this was accomplished by delineating essential terms within this study to provide a common language, as well as extrapolating upon the rationale found within literature for the particular research questions and hypotheses put forth by this study. Further information will be provided on research methodology and design, population and sampling, and data collection (e.g., instrumentation, procedures, dependent and independent variables). Additionally, a step-by-step description of the statistical analysis, and how it was aligned with the specific design of the research study will be produced.

Definition of Terms

Juveniles with sexual behavior problems and the various factors surrounding this population have, historically, been greatly misunderstood which has subsequently inhibited

research. This section defines the essential terms of this study in order to maintain an objective and cohesive understanding throughout.

Cognitive distortions – "Various thoughts, perceptions, beliefs and ideas that are understood to present obstacles to the offender taking responsibility for his crimes, and that taking responsibility is understood to be essential to effective treatment" (Marshall, Marshall, & Kingston, 2011, p. 118).

Community based treatment programs – Programs where individuals are placed with their natural family, foster or mentor homes, while receiving oversight from probation officers and/or a mental health provider (Crump, Underwood, & Dailey, 2013; Fagan, 1991).

Deviancy training – The process by which juveniles placed within a deviant group will experience an exacerbation and consolidation of their antisocial behaviors (Slatterly et al., 2009).

Iatrogenic effect – The "expressions of the amenable and adaptive human subject adhering or complying with the situational constraints and contexts laid out by the avid and enthusiastic but eventually misguided researcher" (Hancock, 2013, p. 107).

Juveniles with sexual behavior problems – Individuals whose ages range between 12 and 25 that have perpetrated a sexual offense against another person of any age (Underwood, Dailey, Merino, & Crump, 2015).

Secure care facilities – Facilities that detain their youth in-house, have highly structured atmospheres, and maintain separation from the community.

Social climate – The way an individual views their environment; which can encompass contributing variables such as physical space, individuals in a shared setting,

interpersonal relationships, and intrapersonal matters (Bootsmiller, Davidson, Luke, Mowbray, Ribisil, & Herman, 1997).

Staff – Employees of a secure-care facility who are responsible for the supervision, monitoring and care of juveniles with sexual behavior problems.

Research Questions and Hypotheses

The following research questions were identified for this study:

RQ1: Is there a statistically significant difference between the WAS Personal Problem Orientation subscale scores of juveniles, and the WAS Personal Problem Orientation subscale scores of the staff in secure care sites?

RQ2: Is there a statistically significant difference between the WAS Support subscale scores of juveniles, and the WAS Support subscale scores of the staff in secure care sites?

RQ3: Is there a statistically significant difference between the WAS Involvement, and Anger and Aggression subscale scores of juveniles, and the WAS Involvement, and Anger and Aggression subscale scores of the staff in secure care sites?

RQ4: Is there a statistically significant difference between the WAS System Maintenance domain scores of juveniles, and the WAS System Maintenance domain scores of the staff in secure care sites?

RQ5: Is there a statistically significant difference between the WAS Relationship domain scores of juveniles, and the WAS Relationship domain scores of the staff in secure care sites?

The following hypotheses were developed for this study:

H1: There will be a statistically significant difference between the WAS Personal Problem Orientation subscale scores of juveniles, and the WAS Personal Problem Orientation subscale scores of the staff in secure care sites.

H2: There will be a statistically significant difference between the WAS Support subscale scores of juveniles, and the WAS Support subscale scores of the staff in secure care sites.

H3: There will be a statistically significant difference between the WAS Involvement, and Anger and Aggression subscale scores of juveniles, and the WAS Involvement, and Anger and Aggression subscale scores of the staff in secure care sites.

H4: There will be a statistically significant difference between the WAS System Maintenance domain scores of juveniles, and the WAS System Maintenance domain scores of the staff in secure care sites.

H5: There will be a statistically significant difference between the WAS Relationship domain scores of juveniles, and the WAS Relationship domain scores of the staff in secure care sites.

Research Design

"An [important] element of quantitative research relates to a more planned sourcing process in which the researcher has a definitive or clean objective as a basis from which to research" (McCusker & Gunaydin, 2015, p. 539). Therefore, this study used an ex post facto quantitative research methodology to examine the pre-determined, identified questions regarding the differences between social climate of staff and juveniles with sexual behavior problems in secure care settings. This methodology is best suited for the study due to the quantifiable output of the variables being examined. The results of the WAS were utilized to assess the data as

numerical and quantifiable, making a quantitative study an obvious choice (Avgousti, 2013). Data from the subjects was collected at one time, with the instrument previously completed by juveniles and staff, and the results were collated into a database and analyzed by SPSS.

Furthermore, quantitative studies allow for an important and necessary degree of separation between the researcher, the subject(s), and the subject matter of the study (Miller, Poole, Seibold, Myers, Park, Monge, & Shumate, 2011). In the case of the present investigation, this distinction is an essential element to maintain objectivity for the researcher, as well as a protection against skewing the self-report of the participants. Consequently, McCusker and Gunaydin (2015) refer to quantitative research as an "objective light" (p. 541) that affords the researcher the ability to interpret their findings untainted.

Specifically, this investigation will use a correlational study as its primary design because the foundational questions addressed by the study are that of group differences, and quantitative studies are best suited for examining and analyzing complex differences in quantifiable ways (Miller et al., 2011). Lutz and Hill (2009) reiterated this as they noted,

> "Quantitative research methods are helpful tools for achieving these goals because they help us study the complex relationship between the patient [youth], the therapist, the process of therapy, external events in the life of [youth], and in-session progress, postsession progress, and therapy outcome at the end of treatment as well as during the follow-up period; they can also help us aggregate and integrate findings about psychotherapy" (p. 369).

This study asks what difference, if any, exists between social climate perceptions of staff and juveniles in secure care treatment facilities. The research design was selected because the variable was not manipulated for the purposes of research (Fitzgerald, Rumrill, & Schenker,

2004). "Participants in these types of studies are assumed to possess the characteristics of interest prior to the study, and they are measured on those characteristics during the study, no attempt is made by the researchers to change them" (Fitzgerald, Rumrill, & Schenker, 2004, p. 143-144). As such, the researchers will utilize the independent t-test design to quantitatively analyze the difference between these variables so as to better establish and understand their distinction, or connection, with one another. To the knowledge of this author, there has been no other empirical study examining staff and resident perceptions of social climate in secure care facilities for juveniles with sexual behavior problems, which makes this design an appropriate methodology of choice.

Population and Sampling

The current study was designed to explore the differences between perceptions of social climate for staff and juveniles with sexual behavior problems in secure care treatment facilities. In 2008, the Office of Juvenile Justice (OJJ) developed a continuum of services, which involved a three-tiered model treatment: secure care facilities, community based residential nonsecure facilities, and community based outpatient clinics (Crump, Underwood, & Dailey, 2013). In the secure care facility, juveniles are placed in either the general population, or more structured dormitories depending on their assessed risk for recidivism (Crump, Underwood, & Dailey, 2013). The two secure care facilities that housed the research participants are included in this study.

Participants in this study consisted of male juveniles who were adjudicated by a court magistrate to either a secure care program or a non-secure program after committing sexually aggressive crimes. All juveniles completed the Sexual Behavior Problem Treatment Program (SBPTP), were 12-21 years of age (as defined by state legal statutes), and were adjudicated

sometime in between the years of 2008 and 2014. The respondents for the WAS consisted of 56 total respondents, which included juveniles (n=35) as well as staff (n=21). Archived demographic information for respondents of the WAS was incomplete; it did not specify ethnicity for either juveniles or staff, and age was only recorded for 3 SCY staff members (53, 56, 59, respectively). Additionally, the gender for 8 of the 21 staff members was identified as female.

Instrumentation

Ward Atmosphere Scale (WAS)

The Ward Atmosphere Scale (WAS) (Moos, 1996) is a self-report measure consisting of 100 brief statements on the WAS (10 per scale), answering true or false whether the statement was indicative of their ward. Ten subscales tap three higher order domains: (1) Relationships, (2) Personal Growth, and (3) System Maintenance. The Relationship domain includes the subscales: Involvement, Support, and Spontaneity. The Personal Growth domain includes: Autonomy, Practical Orientation, Personal Problem Orientation, and Anger and Aggression. The three System Maintenance scales are: Order and Organization, Program Clarity, and Staff Control (Bootsmiller, Davidson, Luke, Mowbray, Ribisil, & Herman, 1997).

The 10 subscales have displayed respectable internal consistency (.68 to .83), high item-to-subscale correlations, and high test–retest reliability for all subscales (Moos & Houts, 1968). Moreover, previous research has confirmed both the content (Friis, 1986) and criterion validity (Ellsworth & Maroney, 1972) of the WAS. Additionally, it has been implemented in several cross-cultural contexts (AL-Sagarat et al., 2014; Brunt & Rask, 2005; Schjødt et al., 2003; Sørlie et al., 2010).

Table 1

Ward Atmosphere Scale (WAS) three higher order domains and ten subscales (Jörgensen, Römma, & Rundmo, 2009)

Category	Description
Relationship	
1. Involvement	How active and energetic patients are in the ward
2. Support	The extent to which patients help and support each other and how supportive the staff are towards patients
3. Spontaneity	The extent to which the program encourages the open expression of feelings by patients and staff
Personal Growth	
4. Autonomy	How self-sufficient and independent are the patients in making their own decisions
5. Practical Orientation	The extent to which patients learn practical skills and are prepared for discharge from the ward
6. Personal Problems Orientations	The extent to which patients seek to understand their feelings and personal problems
7. Anger and Aggression	The extent to which patients argue with other patients and staff, become openly angry and display other aggressive behavior
System Maintenance	
8. Order and Organization	How important are order and organization in the ward

9. Program Clarity	The extent to which patients know what to expect in their day-to-day routine, and the explicitness of ward rules and procedures
10. Staff Control	The extent to which the staff use measures to keep patients under necessary control

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Subjects

Subjects who had entered into the Sexual Behavior Problem Treatment Program (SBPT) between 2008 and 2014 were chosen from archival data. Data was collected from the subjects' initial intake assessment into the program, as well as their discharge from the program. The assessments were conducted in a classroom setting, or office, after the treatment facility's management team received the state court mandate to assess the juveniles for risk, and sex offender treatment and service needs. Prior to administration, the provider conducted a verbal description of the assessment process and its use to the subject. Following the description, subjects were afforded an opportunity to consent or dissent prior to completing the instruments. All subjects were provided directions and monitoring during the test administration process. Following the administration, the provider collected the data, which was securely stored, and will only be accessible by the researcher for scoring at a later date (Dailey, Underwood, Crump, Williams, Newmeyer, Washburn, Washington, & Poole, 2016).

Statistical Analysis

This study utilizes five separate analyses and these data analyses were conducted by way of SPSS.

There were five analyses identified for this study. They are as follows:

Analysis 1. A 2 x 2 ANOVA was conducted to evaluate the effects of site (Site A versus Site B) and position (juvenile versus staff) on WAS Personal Problem Orientation subscale scores.

Analysis 2. A 2 x 2 ANOVA was conducted to evaluate the effects of site (Site A versus Site B) and position (juvenile versus staff) on WAS Support subscale scores.

Analysis 3. . A set of 2 x 2 ANOVAs were conducted to evaluate the effects of site (Site A versus Site B) and position (juvenile versus staff) on WAS Involvement and WAS Anger and Aggression subscale scores.

Analysis 4. A 2 x 2 ANOVA was conducted to evaluate the effects of site (Site A versus Site B) and position (juvenile versus staff) on WAS System Maintenance domain scores.

Analysis 5. A 2 x 2 ANOVA was conducted to evaluate the effects of site (Site A versus Site B) and position (juvenile versus staff) on WAS Relationships domain scores.

Results

Overall, data from the WAS demonstrated statistically significant differences between the social climate perceptions of staff and juveniles concerning the System Maintenance domain scores. Conversely, the data showed a statistically non-significant difference for the Personal Problem Orientation, Support, Involvement, and Anger and Aggression subscales, as well as the higher order Relationship domain scores. Furthermore, statistical differences were discovered during preliminary analysis between the secure care sites (Site A and Site B).

Hypothesis 1. Hypothesis 1 stated: There will be a statistically significant difference between the WAS Personal Problem Orientation subscale scores of juveniles, and the WAS Personal Problem Orientation subscale scores of the staff in secure care sites. A 2 x 2 ANOVA was conducted to evaluate the effects of site (Site A versus Site B) and position (juvenile versus staff) on WAS Personal Problem Orientation subscale scores. The results for the ANOVA indicated a significant main effect for site, $F(1,51) = 8.90$, $p = .004$, partial $\eta 2 = .15$, a non-significant main effect for position, $F(1,51) = .83$, $p = .37$, partial $\eta 2 = .02$, and a non-significant interaction between site and position, $F(1,51) = 3.18$, $p = .08$, partial $\eta 2 = .06$. The site main effect indicated that BCY scored higher on the WAS Personal Problem Orientation subscale scores than SCY.

Univariate Analysis of Variance for Personal Problem Orientation (without outlier) for Hypothesis 1

Source	*Type III Sum of Squares*	*df*	*Mean Square*	*F*	*Sig.*	*Partial* η^2
site2	738.819	1	738.819	8.895	.004	.149
Name2	68.900	1	68.900	.830	.367	.016
Site2 * Name2	264.294	1	264.294	3.182	.80	.059

Hypothesis 2. Hypothesis 2 stated: There will be a statistically significant difference between the WAS Support subscale scores of juveniles, and the WAS Support subscale scores of the staff in secure care sites. A 2 x 2 ANOVA was conducted to evaluate the effects of site (Site A versus Site B) and position (juvenile versus staff) on WAS Support subscale scores. The results for the ANOVA indicated a significant main effect for site, $F(1,52) = 6.43$, $p = .01$, partial $\eta 2 = .11$, a non-significant main effect for position, $F(1,52) = 1.00$, $p = .32$, partial $\eta 2 = .02$, and

a non-significant interaction between site and position, $F(1,52) = 1.03$, $p = .31$, partial η2 = .02. The site main effect indicated that BCY scored higher on the WAS Support domain scores than SCY.

Table 3

Univariate Analysis of Variance for Support for Hypothesis 2

Source	*Type III Sum of Squares*	*df*	*Mean Square*	*F*	*Sig.*	*Partial* η^2
site2	378.594	1	378.594	6.426	.014	.110
Name2	58.617	1	58.617	.995	.323	.019
Site2 * Name2	60.838	1	60.838	1.033	.314	.019

Hypothesis 3. Hypothesis 3 stated: There will be a statistically significant correlation between the WAS Involvement, and Anger and Aggression subscale scores of juveniles, and the WAS Involvement, and Anger and Aggression subscale scores of the staff in secure care sites. A set of 2 x 2 ANOVAs were conducted to evaluate the effects of site (Site A versus Site B) and position (juvenile versus staff) on WAS Involvement and WAS Anger and Aggression subscale scores. The results for the first ANOVA indicated a significant main effect for site, $F(1,51) = 11.61$, $p = .001$, partial η2 = .19, a non-significant main effect for position, $F(1,51) = .21$, $p = .65$, partial η2 = .004, and a non-significant interaction between site and position, $F(1,51) = .55$, $p = .46$, partial η2 = .01. The site main effect indicated that BCY scored higher on the WAS Involvement domain scores than SCY.

Table 4

Univariate Analysis of Variance for Involvement (without outlier) for Hypothesis 3

Source	*Type III Sum of Squares*	*df*	*Mean Square*	*F*	*Sig.*	*Partial* η^2
site2	718.536	1	718.536	11.611	.001	.185
Name2	13.272	1	13.272	.214	.645	.004
Site2 * Name2	34.194	1	34.194	.553	.461	.011

The results for the second ANOVA indicated a non-significant main effect for site, $F(1,51) = .15$, $p = .70$, partial η2 = .003, a non-significant main effect for position, $F(1,51) = 1.58$, $p = .21$, partial η2 = .03, and a non-significant interaction between site and position, $F(1,51) = 1.56$, $p = .22$, partial η2 = .03. Thus, there did not appear to be significant differences in WAS Anger and Aggression subscale scores based on site or position.

Table 5

Univariate Analysis of Variance for Anger and Aggression (without outlier) for Hypothesis 3

Source	*Type III Sum of Squares*	*df*	*Mean Square*	*F*	*Sig.*	*Partial* η^2
site2	9.259	1	9.259	.146	.704	.003
Name2	100.635	1	100.635	1.584	.214	.030
Site2 * Name2	99.344	1	99.344	1.584	.217	.030

Hypothesis 4. Hypothesis 4 stated: There will be a statistically significant difference between the WAS System Maintenance domain scores of juveniles, and the WAS System Maintenance domain scores of the staff in secure care sites. A 2 x 2 ANOVA was conducted to evaluate the effects of site (Site A versus Site B) and position (juvenile versus staff) on WAS

System Maintenance domain scores. The results for the ANOVA indicated a significant main effect for site, $F(1,51) = 8.50$, $p = .005$, partial $\eta 2 = .14$, a significant main effect for position, $F(1,51) = 10.25$, $p = .002$, partial $\eta 2 = .17$, and a non-significant interaction between site and position, $F(1,51) = 2.39$, $p = .13$, partial $\eta 2 = .05$. The site main effect indicated that BCY scored higher on the WAS System Maintenance domain scores than SCY and that staff scored higher than juveniles.

Table 6

Univariate Analysis of Variance for System Maintenance (without outlier) for Hypothesis 4

Source	*Type III Sum of Squares*	*df*	*Mean Square*	*F*	*Sig.*	*Partial* η^2
site2	2563.696	1	2563.696	8.501	.005	.143
Name2	3090.572	1	3090.572	10.248	.002	.167
Site2 * Name2	721.807	1	721.807	2.393	.128	.045

Hypothesis 5. Hypothesis 5 stated: There will be a statistically significant difference between the WAS Relationship domain scores of juveniles, and the WAS Relationship domain scores of the staff in secure care sites. A 2 x 2 ANOVA was conducted to evaluate the effects of site (Site A versus Site B) and position (juvenile versus staff) on WAS Relationships domain scores. The results for the ANOVA indicated a significant main effect for site, $F(1,51) = 18.45$, $p < .001$, partial $\eta 2 = .27$, a non-significant main effect for position, $F(1,51) = 3.86$, $p = .06$, partial $\eta 2 = .07$, and a non-significant interaction between site and position, $F(1,51) = 2.04$, $p = .16$, partial $\eta 2 = .04$. The site main effect indicated that BCY scored higher on the WAS Relationship domain scores than SCY.

Table 7

Univariate Analysis of Variance for Relationship (without outlier) for Hypothesis 5

Source	*Type III Sum of Squares*	*df*	*Mean Square*	*F*	*Sig.*	*Partial* η^2
site2	6402.216	1	6402.216	18.450	.000	.266
Name2	1340.597	1	1340.597	3.863	.055	.070
Site2 * Name2	708.910	1	708.910	2.043	.159	.039

Discussion

Analysis of the data accepted Hypothesis 4, while the other hypotheses (1, 2, 3, 5) were rejected based on statistically non-significant findings of their corresponding research questions. Data from the WAS demonstrated statistically significant differences between the social climate perceptions of staff and juveniles concerning the System Maintenance domain scores. Conversely, the data showed a statistically non-significant difference for the Personal Problem Orientation, Support, Involvement, and Anger and Aggression subscales, as well as the higher order Relationship domain scores. Moreover, statistical differences were discovered during preliminary analysis between the secure care sites (Site A and Site B). Thus, the differences were addressed within each of the study's hypotheses. What follows are the subsequent findings and conclusions to the study's hypotheses.

The first hypothesis (Hypothesis 1) proposed that there will be a statistically significant difference between the WAS Personal Problem Orientation subscale scores of juveniles, and the WAS Personal Problem Orientation subscale scores of the staff in secure care sites. The hypothesis was rejected indicating that there was not a significant difference between the social climate perceptions of juveniles and staff in secure care facilities; insofar as the archival data demonstrated no statistically significant difference in WAS Personal Problem Orientation

subscale scores. This signifies that the staff and juveniles have a similar perception of the extent to which juveniles in the secure care milieu seek to understand their feelings and personal problems (Jörgensen, Römma, & Rundmo, 2009). Furthermore, there was a statistical difference for this subscale between the sites, with Site A scoring higher. The difference indicates that the staff and juveniles perceive their facility as being better at helping juveniles understand their feelings and personal problems than Site B.

The second hypothesis (Hypothesis 2) proposed that there will be a statistically significant difference between the WAS Support subscale scores of juveniles, and the WAS Support subscale scores of the staff in secure care sites. The hypothesis was rejected indicating that there was not a significant difference between the social climate perceptions of juveniles and staff in secure care facilities; insofar as the archival data demonstrated no statistically significant difference in WAS Support subscale scores. This signifies that the staff and juveniles have a similar perception of the extent to which juveniles in the secure care milieu help and support each other and how supportive the staff is towards the patients (Jörgensen, Römma, & Rundmo, 2009). Furthermore, there was a statistical difference for this subscale between the sites, with Site A scoring higher. The difference indicates that the staff and juveniles perceive their facility as being better at peer-to-peer and staff-to-peer support than Site B.

The third hypothesis (Hypothesis 3) proposed that there will be a statistically significant difference between the WAS Involvement, and Anger and Aggression subscale scores of juveniles, and the WAS Involvement, and Anger and Aggression subscale scores of the staff in secure care sites. The hypothesis was rejected indicating that there was not a significant difference between the social climate perceptions of juveniles and staff in secure care facilities; insofar as the archival data demonstrated no statistically significant difference in WAS

Involvement, and Anger and Aggression subscale scores. The findings concerning the Involvement subscale signifies that the staff and juveniles have a similar perception of the extent to which juveniles in the secure care milieu are active and energetic in the facility (Jörgensen, Römma, & Rundmo, 2009). The lack of difference indicates that the staff and juveniles of both sites perceive their facility in a similar way at helping juveniles understand their feelings and personal problems. Conversely, there was a statistical difference for this subscale between the sites, with Site A scoring higher. The difference indicates that the staff and juveniles perceive the juveniles in their facility as more active and energetic than Site B.

Additionally, the findings for the Anger and Aggression subscale signifies that the staff and juveniles have a similar perception of the extent to which juveniles in the secure care milieu argue with other patients and staff, and become openly angry and display other aggressive behavior (Jörgensen, Römma, & Rundmo, 2009). Furthermore, there was no statistical difference for this subscale between the sites. The lack of difference indicates that the staff and juveniles of both sites perceive their facility similarly in how anger and aggression are expressed.

The fourth hypothesis (Hypothesis 4) proposed that there will be a statistically significant difference between the WAS System Maintenance domain scores of juveniles, and the WAS System Maintenance domain scores of the staff in secure care sites. The hypothesis was accepted indicating that there was a significant difference between the social climate perceptions of juveniles and staff in secure care facilities; insofar as the archival data demonstrated no statistically significant difference in WAS System Maintenance domain scores. The findings concerning the System Maintenance domain score signifies that the staff and juveniles have a different perception of the extent to which both understand the importance of order and organization in the treatment facility, the clarity of the day-to-day routines of the juveniles as

well as the explicitness of rules and procedures, and how the staff use measures to keep patients under necessary control (Jörgensen, Römma, & Rundmo, 2009). Furthermore, there was a statistical difference for this subscale between the sites, with Site A scoring higher. The difference indicates that the staff and juveniles perceive their facility as better at communicating the importance of order and organization in the treatment facility, the clarity of the day-to-day routines of the juveniles as well as the explicitness of rules and procedures, and how the staff use measures to keep patients under necessary control than Site B.

The fifth hypothesis (Hypothesis 5) proposed that there will be a statistically significant difference between the WAS Relationship domain scores of juveniles, and the WAS Relationship domain scores of the staff in secure care sites. The hypothesis was rejected indicating that there was not a significant difference between the social climate perceptions of juveniles and staff in secure care facilities; insofar as the archival data demonstrated no statistically significant difference in WAS Relationship domain scores. The findings concerning the Relationship domain score signifies that the staff and juveniles have a similar perception of the extent to which juveniles in the secure care milieu are active and energetic, help and support one another as well as how supportive the staff are towards the juveniles, and how the treatment facility encourages open expression of feelings by juveniles and staff (Jörgensen, Römma, & Rundmo, 2009). Furthermore, there was a statistical difference for this subscale between the sites, with Site A scoring higher. The difference indicates that the staff and juveniles perceive their facility as better at being active and energetic, helping and supporting one another as well as how supportive the staff are towards the juveniles, and how the treatment facility encourages open expression of feelings by juveniles and staff than Site B.

The overall findings of this study slightly differ from certain literature that indicates the social climate perceptions of staff and patients are often dissimilar (Brunt & Rask, 2005; Bootsmiller et al., 1997; Day, Casey, Vess, & Huisy, 2012; Røssburg, Melle, Oppjordsmoen, & Friss, 2006; Schjødt, Middelboe, Mortensen, & Gjerris, 2003). Research has commonly found that staff tends to view the social climate as more positive than the patients do (Bootsmiller et al., 1997; Jörgensen, Römma, & Rundmo, 2009). However, the data from this study discovered similar responses regarding the perceptions of staff and juveniles for the Personal Problem Orientation, Support, Involvement, and Anger and Aggression subscales, as well as the higher order Relationship domain scores within the secure care facilities. This is likely due to the importance placed on relational and support variables by the facilities within the OJJ (Underwood et al., 2015). Staff are trained to prioritize the relationship with the juveniles; thus, the WAS scores concerning relational variables between the staff and juveniles are similar. Furthermore, structure, emphasis on therapeutic interventions, and respectful, supportive relationships that add to the overall feelings of safety. Group climate literature corroborates the claim that an open climate can aid in overall treatment motivation, as well as feelings of safety (Heynen, Van der Helm, Stams, & Korebrits, 2014; Van der Helm, & Stams, 2012).

On the other hand, Hypothesis 4 involved the comparison of perceptions for the System Maintenance domain and did affirm previous literature, which states that perceptions of social climate vary between staff and patients, with staff often scoring higher than the patients (Bootsmiller et al., 1997; Jörgensen, Römma, & Rundmo, 2009). Furthermore, prior research discovered the most noticeable difference in perceptions for staff and patients were in the aforementioned domain (Brunt & Rask, 2005). This difference is attributed to the three subscales (Order and Organization, Program Clarity, Staff Control), which are a part of the

System Maintenance domain, that are entirely contingent on the work of the staff. The Order and Organization subscale measures how important order and organization are in the program Jörgensen, Römma, & Rundmo, 2009). Also, the Program Clarity subscale measures the extent to which patients know what to expect in their day-to-day routine, and the explicitness of facility rules and procedures Jörgensen, Römma, & Rundmo, 2009). The Staff Control subscale measures the extent to which the staff use measures to keep patients under necessary control Jörgensen, Römma, & Rundmo, 2009).

Thus, the juveniles score lower because there is no responsibility ascribed to them in this domain, and they function strictly as participants. They do not control the organizational structure of the program; rather, they must follow the way in which the OJJ has designed the program. Additionally, there is likely a communication gap between the staff and juveniles, in which the staff believes they are clearly communicating the rules and expectations for the juveniles, while the juveniles do not have a clear sense of their expected roles and rules. Furthermore, the control exerted in a secure care facility is only one-way and the locus of control resides with the staff. Thus, the benefit of skewing positively drastically diminishes for the juvenile. Whereas, the staff would be more apt to perceive their role more positively in light of the responsibility they hold in relation to the maintenance of the facility.

Additionally, while this study did not originally intend to highlight the differences between sites, the statistical difference found in the preliminary analysis made it a point of discussion. Specifically, Hypotheses 1, 2, 4, and 5 all had differences, whereas the Anger and Aggression subscale in Hypothesis 3 did not have a statistically significant difference. The different results between the sites shows the importance of assessing individual treatment milieus in order to accurately measure how the staff and juveniles perceive the social climate of the

facility. Although this study did not research the specific programs within the respective sites, the following sections will articulate implications and potential future research to understand why the site score were statistically different.

In summary, this study found no statistically significant difference in the social climate perceptions of staff and juveniles regarding the Personal Problem Orientation, Support, Involvement, and Anger and Aggression subscales, as well as the higher order Relationship domain scores. Yet, a statistically significant difference was discovered with the System Maintenance domain scores. The findings of this study are different than what previous research has established, and the following sections will explore how this study can add to the knowledge base of social climate perceptions in juveniles with sexual behavior problems in secure care facilities. Moreover, there was a statistical difference in site scores on the subscales of Personal Problem Orientation, Support, Involvement, and the higher order domains of Relationship and System Maintenance.

Implications

Social climate is a variable of secure care facilities that has been recognized as an important piece of the secure care experience (Beazley & Gudjonsson, 2011; Jörgensen, Römma, & Rundmo, 2009; Schjødt, Middelboe, Mortensen, & Gjerris, 2003; Nicholls, Kidd, Threader, & Hungerford, 2015). However, literature on social climate in secure care for juveniles with sexual behavior problems has been minimal (Underwood et al., 2015). Therefore, this study offers empirical research concerning the gaps in knowledge reinforcing the importance the social climate perceptions of staff and juveniles with sexual behavior problems in secure care treatment programs.

This study aligns with previous research in assessing and comparing staff perceptions of social climate are compared with juvenile perceptions in an effort to gain a consistent representation of their relationship (Bootsmiller et al., 1997; Brunt & Rask, 2005; Moos, Shelton, & Petty, 1973). However, several of the findings slightly differ from other literature that indicates the social climate perceptions of staff and patients are often dissimilar (Brunt & Rask, 2005; Bootsmiller et al., 1997; Day et al., 2012; Røssburg, Melle, Oppjordsmoen, & Friss, 2006; Schjødt, Middelboe, Mortensen, & Gjerris, 2003). Only one hypothesis (Hypothesis 4) in this study affirmed dissimilarity in perception. This implies that there could be more agreement between staff and juveniles than previously discovered, and an assumption on a divergence in social climate perceptions may not be entirely appropriate.

Furthermore, a significant difference was found in the perceptions of social climate between the two secure care treatment sites, with only the Anger and Aggression subscale of the Ward Atmosphere Scale (WAS) failing to exhibit a significant difference. The implication is that differences remain in the methods secure care facilities use to develop and manage their social climate, even within similar treatment milieus (e.g., secure care treatment for juveniles with sexual behavior problems). Although secure care facilities have similarities and common modes of operation, the results from this study demonstrate that this does not presuppose that the execution is similar.

This study has practical implications for research and application on the perceptions of social climate in secure care treatment facilities. Prior research has contributed to the understanding of social climate and the positive correlation between juvenile satisfaction and motivation for treatment with the juvenile's perception of the social climate (Beazley & Gudjonsson, 2011; Jörgensen, Römma, & Rundmo, 2009; Røssburg, Melle, Oppjordsmoen, &

Friss, 2006). Therefore, it has become increasingly acknowledged within literature that social climate must be highly considered when working in a secure care setting. These facilities can no longer focus solely on the implementation of a set program; rather, staff and administration must value the different factors within social climate in order to provide overall effective treatment.

Additionally, this study added substantial data in the area of differences between two secure care sites that accommodate juveniles with sexual behavior problems. Before this study, Underwood et al. (2015) conducted a program evaluation for a statewide juveniles with sexual behavior problems program that encompassed eight different treatment sites and used the WAS as one of their outcome measures. However, it was not the main assessment tool used, and the focus was not entirely on the social climate of the sites. Because this study discovered significant differences in social climate perceptions between the two sites, secure care treatment providers have access to more information to aid in the identification of social climate components, as well as improved awareness towards the aspects of social climate that may be affected by dynamic variables (e.g., location, individual staff members).

Also, in an effort to create an effective treatment facility for juveniles with sexual behavior problems, the administration and staff must possess an overarching awareness of how each is experiencing the social climate. Literature does suggest that staff tends to view the social climate as more positive than do the patients (Bootsmiller et al., 1997; Jörgensen, Römma, & Rundmo, 2009). The staff should know what variables contribute towards the social climate perception so their work can be intentionally focused on nurturing and maintaining this type of environment. For example, the higher order System Maintenance domain of the Ward Atmosphere Scale (WAS) was statistically significantly different between the staff and juveniles of the two sites, with staff scoring higher. This finding implies staff should be more cognizant of

the way in which the treatment facility is ordered and organized. Since staff are in charge of order and organization, they are also the ones in charge of the importance placed on it. Moreover, the onus is on the staff to clearly and openly articulate routines, rules, and procedures for the juveniles within the secure care facility. Staff may see a clear program direction; however, clients may not this on a day-to-day basis (Bootsmiller et al., 1997). An overall feeling of safety is developed through structure, emphasis on therapeutic interventions, and respectful, supportive relationships. Group climate literature corroborates the claim that an open climate can aid in overall treatment motivation, as well as feelings of safety (Heynen, Van der Helm, Stams, & Korebrits, 2014; Van der Helm, & Stams, 2012). Finally, this study's results indicate a discrepancy between the perceptions of staff and juveniles concerning the extent to which staff use measures to keep patients under necessary control. The concept of "necessary control" is highly subjective, and how staff views it may be drastically different from juveniles. Thus, it is vital that staff receive proper training and good, on-site supervision for the adult leaders in an effort to increase their ability to manage the juveniles in the facility. Secure care facilities need to emphasize the creation of high-structure environments in order to decrease the amount of time a juvenile is allowed to engage in unstructured and unsupervised activities (Dodge et al., 2006).

Limitations of the Study

A limitation in this study is the size of the sample population, with the scores of 56 participants being analyzed. While the sample size assumption was maintained per overall sites, it was violated once the groups were broken into cells based on position (staff or juveniles). It should be noted that in literature with juveniles with sexual behavior problems, a smaller sample size is not abnormal. Although this research yielded different results in a comparison of perception in social climate between staff and juveniles, which has the potential to add a

different layer to the literature, any steps towards generalizing the results must be done extremely tentatively. An added limitation is connected to the methodology in which the sample was acquired as archival data and was not randomly selected.

Another limitation of this study is found in the WAS and how it was administered. For one, as was previously discussed, this assessment was not expressly developed for juveniles, nor was it validated in this population. It is conceivable that some items within this tool may be difficult for juveniles to fully comprehend their meaning, or gaps may exist when assessing juveniles as opposed to adults. Moreover, there was only a one-time dispensation of the WAS, and no pre or post-test was given. Only gathering data from one WAS administration truncates the ability to determine if the perception of social climate changes over time. Also, it is unknown at what juncture of the juvenile's stay in the secure care facility the WAS was given. These limitations challenge the ability to fully grasp the context and peripheral variables that may have had an impact on the respondents' perception of social climate in secure care. With this in mind, a related limitation is that the WAS was the only assessment administered, with social climate being the sole variable considered.

Recommendations

There are methodological recommendations that can be made based on the limitations and gaps experienced in this study. Future studies must prioritize increasing the number of juveniles with sexual behavior problems that participate in the studies. This study's sample size (n=56) creates an issue as researchers look to extrapolate the results into broader contexts (e.g., juveniles with sexual behavior problems, secure care treatment facilities, social climate perceptions). A potential solution would be for subsequent studies to include other secure care sites that work with juveniles with sexual behavior problems. By incorporating additional sites,

the sample size is improved and the social climates of more milieus can be assessed. Furthermore, the inclusion of more diverse secure care sites (i.e., outside the current study's OJJ region) would allow researchers to study how social climate is developed and perceived in order to gain a more robust understanding of its implications.

The findings of this study, specifically the statistically significant difference between staff and juveniles in their perception of the System Maintenance domain, could be a foundational step for a future study to explore and expound upon the individual subscales of this domain (Order and Organization, Program Clarity, Staff Control). A future study might be a phenomenological qualitative study where the researcher uses the items from the domain to gather a descriptive picture of the lived experience of staff and juveniles in secure care facilities. Because System Maintenance was the only domain or subscale that had a significant difference in positions, it could be valuable to gather a more in-depth representation of staff and juveniles' perceptions and experiences of the System Maintenance. Also, an independent or dependent t-test could be conducted for each subscale based on the responses of the staff and juveniles. A dependent t-test would necessitate a pre and post-testing administration of the System Maintenance domain for each position. Then, an independent t-test analysis could be run to compare the scores of staff and juveniles.

Consequently, another recommendation is that future researchers administer a pre and post-test for staff and juveniles, or intermittently throughout treatment, in order to gauge the presence of treatment progress in regards to social climate perceptions. The addition of at least one more round of WAS assessments opens up a myriad of possibilities for further studies. One such study might be a correlation analysis of the pre and post WAS scores, with the amount of time the juvenile has spent in the secure care facility. Another study that would benefit from pre

and post-test WAS assessments could be a quasi-experimental design in which one facility acted as a control group and would not intentionally manage the different social climate variables. The remaining sites would actively develop the various aspects of social climate, per the WAS subscales, and the data would be analyzed to determine if intentionality within the facility impacts the perception of social climate.

Based on the juveniles with sexual behavior problems literature, there are several factors found within this population that potentially effect their perceptions of social climate. One study could be designed as a correlation study between juveniles' depression scores, as assessed by the Children's Depression Inventory-2, and the WAS. In a study conducted by Becker, Kaplan, Tenke, and Tartaglini (1991), they discovered 42% of the participant offenders confirmed significant depressive symptoms, and had significantly higher self-report of depression than a random sample of juveniles. Similarly, a study might include analysis of the level of anxiety (Children's Manifest Anxiety Scale-2) felt by juveniles in secure care, and how it is correlated with social climate. Maladaptive affect regulation, of which anxiety is a heavy contributor, has been shown to be a precursor towards outward manifestations of behaviors in juveniles with sexual behavior problems (Fanniff & Kimonis, 2014). Another study where adding another variable based on juveniles with sexual behavior problems literature, could be a stepwise multiple regression with depression, anxiety, and trauma history (Trauma Symptom Checklist) serving as the independent variables, and social climate as the dependent variable. This type of study could help determine which independent variable has the largest, or smallest, impact on the dependent variable. Literature has been consistent in connecting a history of trauma and neglect with higher rates of depression and anxiety in juveniles with sexual behavior problems (Apsche, Evile, & Murphy, 2004; Gerardin & Thibaut, 2004; Righthand & Welch, 2004; Seto &

Lalumière, 2010; Stevens, Hutchins, French, & Craissati, 2013; Walters, Hughes, Sutton, Marshall, Crothers, Lehman, Paserba, Talkington, Taormina, & Huang, 2013).

Broadly speaking, this study addresses a gap in the developing literature regarding a juvenile with sexual behavior problems' time in a secure care facility, and the role social climate plays in their experience. Research has revealed that juvenile satisfaction and motivation for treatment are positively correlated with the juvenile's perception of the social climate (Beazley & Gudjonsson, 2011; Jörgensen, Römma, & Rundmo, 2009; Røssburg, Melle, Oppjordsmoen, & Friss, 2006). Therefore, it is incumbent upon the administration and staff in secure care facilities to prioritize education on social climate, and be diligent about implementing programs and procedures in an effort to nurture this concept. In their study on interventions for deviant peer influences, Dodge et al. (2006) identified two factors that can lessen the severity of such effects. The research showed that proper training and good, on-site supervision for the adult leaders were additive factors in their ability to manage the juveniles in such a way that the iatrogenic effect was reduced. The recommendation is that the administration and staff would be trained concerning the subscales and higher order domains of the WAS to incorporate an empirically validated tool to aid in the improvement of social climate. It is a variable that needs to be emphasized within secure care treatment facilities so that staff feels empowered to take an active role in its development.

Furthermore, it is recommended that proper training on social climate would be conducted in order to strengthen the staff's ability to provide effective supervision of the juveniles in the facility. Training is a necessity for those in positions of authority to be on the same page surrounding the importance of the facility's social climate, and they ways in which their supervisory roles will protect it. Supervisors educated in social climate must also be

educated in the detrimental impact that unsupervised groups of high-risk juveniles have on it. Deviant peer clusters often engage in behaviors that are reinforced by peer pressure and modeling (Van Ryzin & Dishion, 2014). Thus, the supervisors can implement the information into the construction of highly structured environments, which decrease the amount of time juveniles are allowed to engage in unstructured and unsupervised activities (Dodge et al., 2006).

Conclusion

This study was able to compare the differences between the perceived social climate of staff and juveniles with sexual behavior problems residing in secure care. Through the course of preliminary data analysis, a statistically significant difference was discovered between the two sites participating in this research study. Overall, this study increased the knowledge base of social climate as an important variable in secure care facilities, the variance of perceptions in social climate between staff and juveniles, the specific components of social climate, as well as differential perceptions between secure care sites.

The data obtained from this study identified the higher order domain of System Maintenance to be statistically significantly different between staff and juveniles. The analysis reveals a discrepancy in the way these two positions perceive the importance of order and organization in the treatment facility, the clarity of the day-to-day routines of the juveniles as well as the explicitness of rules and procedures, and how the staff use measures to keep patients under necessary control (Jörgensen, Römma, & Rundmo, 2009). Additionally, the results of the study noted significant differences in social climate perception between two sites; thus, presenting data that shows a quantifiable difference in treatment perceptions, as well as an opportunity to understand what contributes to these differences. As a result, this study increases the burgeoning foundation of knowledge for a multitude of research areas: juveniles with sexual

behavior problems, secure care, staff attitudes, assessments of social climate, and the influence it has on each of these areas. Moreover, the research conducted for this study provides a picture of social climate as a valuable variable to assess within secure care treatment facilities. Subsequent implications and future recommendations add to the foundation, which can continue to increase and fine-tune a secure care facility's ability to follow best care practices through an educated awareness of their social climate.

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