The Impact of Race on the Use of Physical Restraint with Adolescent Males with Behavioral Disabilities: An Initial Study

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Abstract — This initial, exploratory study examined the role of racial bias in the use of physical restraint with adolescents with behavioral disabilities. Thirteen months of critical incident data from a residential, rehabilitation counseling agency serving adolescent males was examined to compare the number of physical restraints involving black and white clients and black and white staff. Results indicated the presence of racial bias in that black clients were restrained significantly more often than white clients. Implications for rehabilitation counselors and directions for future research are discussed.

The existence of racial bias in the provision of rehabilitation services to persons with disabilities has not been a secret for some time. The 1992 amendments to the Rehabilitation Act of 1973 acknowledged that clients from racial minorities experienced unfair treatment from state-federal vocational rehabilitation (VR) systems. However, recent studies in the rehabilitation counseling literature suggest inequities still exist, most notably in the areas of acceptance into the VR system (Capella, 2002; Wilson, 2000, 2002; Wilson, Turiel, & Jackson, 2002), as well as outcome studies (Capella, 2002; Moore, Feist-Price, & Alston, 2002; Olney & Kennedy, 2002). The researchers finding these results commonly discuss the possibility of discrimination as one explanation (Wilson, 2002). Specifically, a couple conclusions have been offered in that (a) VR counselors, who are 9 out of 10 times white (Whitney-Thomas, Timmons, Gilmore, & Thomas, 1999), are making judgments and decisions based on negative racial stereotypes of minorities (Middelton et al., 2000; Rosenthal & Bovens, 1999), and (b) these professionals lack cultural competence (Capella, 2002). Of concern is that rehabilitation is not limited to vocational rehabilitation. Clients, in particular children, may be receiving services from rehabilitation counselors in other non-vocational settings. Thus, the possibility of minority clients experiencing inequitable treatment in these settings seems to be a reasonable, albeit under-researched, hypothesis.

A particular concern is the use of physical restraint procedures with adolescents with behavioral disabilities. What is known is that physical restraint is a common (Persi & Pasquali, 1999) and clinically justified (Lutesell, Kane, Torri, & Young, 2000) intervention used with this population. What is also known is that physical restraint is considered to be overused as an intervention (Tixier, 2002), and that physical restraint can be dangerous and fatal, particularly for children (General Accounting Office, 1999). What is not sufficiently known is if race has an impact on the use of physical restraint with adolescents with behavioral disabilities. Having this information would be beneficial to rehabilitation counselors working with this population. Specifically, if the use of physical restraint with adolescents shows evidence of racial bias, then this inequity, as with those mentioned above, would also need to be addressed, particularly during efforts to reduce the use of physical restraint interventions. Thus, examining the impact of race upon the use of physical restraint with a sample of adolescent males with behavioral disabilities was the purpose of this study.

According to a 1998 report in the Hartford Courant, 142 deaths occurred over a 10-year period that were attributed to physical restraint or seclusion (PRS) in human service settings (Weiss, 1998). In 1999, the United States General Accounting Office (GAO) estimated that inappropriate use of PRS with clients in crisis causes 150 deaths each year (GAO, 1999). The GAO went on to state that the number of deaths and injuries related to PRS may be underestimated due to a lack of comprehensive reporting procedures. Additionally, the professional literature also contains reports on deaths related to PRS (Kennedy & Mohr, 2001). This information has not gone unnoticed. Quick to respond have been legislators and health care regulators. Significant policy changes have been initiated to address the practice of PRS as a crisis intervention in health care settings. Regulatory bodies, such as the Health
Care Financing Administration; accrediting bodies, such as the Joint Commission on Accreditation of Healthcare Organizations; and professional organizations, such as the American Academy of Pediatrics have revised standards or promulgated official positions on the use of PRS. Even the courts have seen an increase in rulings related to the use or misuse of PRS (Apelbaum, 1999). In 1999, Senator Joseph Lieberman testified that, "Every day, helpless children are dying from excessive and often cruel restraint. It's a shameful and unacceptable situation." (Joe Lieberman Press Office, 1999, para 5). The priority to establish safe PRS procedures was reinforced with the passage of the Children's Health Act of 2000, which in part, requires non-medical, community based facilities for children to develop regulations for the use of PRS as a crisis intervention. Clearly the use of PRS in health care settings is receiving considerable attention.

However, the empirical research related to PRS is varied and incomplete. The bulk of this research has focused on nursing home settings and the elderly (Groth & Sloane, 1995; Sullivan-Marx, Strumpf, Evans, & Hanrahan, 1999), while other studies have been conducted at health care settings for both adults (Emerson et al., 2003; Jacobson et al., 1992) and children (Kenney & Mohr, 2001; Measham, 1995; Zeltner, 2001), in medical/psychiatric agencies (Fisher, 1994) and non-medical/community based agencies (Mitchell & Varley, 1990). Most studies have been archival and descriptive with variables related to client demographics (Fisher, 1994; Jacobson, 1992). Some investigators examined the effect of specific interventions or specific training on the number of PRSs (Baker & Bismire, 2000), while others explored staff perceptions and clients' perceptions regarding the use of PRS (Steel, 1993). Of importance is that both the Hartford Courant and GAO Report highlighted that children accounted for an over-represented amount of the PRS related deaths. This seems to parallel findings that young age is one of the best predictors of being involved in a PRS (Pers & Pasquaill, 1999), as well as to provide justification for the Department of Health and Human Services (DHHS) to authorize grants to support PRS training in programs that serve children (DHHS, 2004).

Although research designed to capture the demographic profile of clients involved in a PRS provides predictors related to incidence rates, the role of race as a potential contributing factor has not yet been consistently identified. Several studies conducted in the 1980's found racial bias to be a significant factor in that black clients were restrained more often than white clients (Bond, DiCandilo, & MacKinnon, 1988; Kuhlman, Tellireto, & Winiger, 1982). Yet other studies, during the same time period, did not find racial bias to be a significant factor in the use PRS (Carpenito, Hannah, McCleery, Waddington, 1988; Covertino, Piasta, & Vinter, 1980; Oulin, 1985). Of interest is that for the two studies that did find evidence of racial bias, Bond et al. (1988) who studied adolescents only found a stronger effect than Kuhlman et al. (1982), whose sample included adults. More so, all the samples from the studies that did not find evidence of racial bias included adults as well. Lastly, both Bond et al. and Kuhlman et al. concluded that a possible presence of racial bias best explained the results.

Coupling this with the alarming reports of PRS related, deaths of children with behavioral disabilities raises a serious question likely to be encountered by rehabilitation counselors: What leads us to physically restrain adolescents with behavioral disabilities, from various racial backgrounds? Of additional concern is that a racial bias factor in the use of PRS, and the accompanying contradictory findings, have not been further investigated for over 15 years. Therefore, we conducted an initial, exploratory study to re-open this issue. Specifically, we were interested in answering the following research question: Is there evidence of racial bias in the use physical restraint in a sample of adolescent males with behavioral disabilities?

Method

Data Collection

The critical incident logs, for 13 months, from a Midwestern, residential rehabilitation agency, serving dependent and/or delinquent adolescent males (ages 12-18) were the data source. We conducted an archival study by collecting information on the race of clients and staff, staff education level, and associated PRS information. Restraints involving staff and/or clients who were neither black nor white were excluded from the study, due to only a few clients and no staff belonging to these groups. The staff with direct client care responsibilities at this facility, as part of their behavioral management policy and agency license, would physically restrain clients after lesser restrictive techniques (e.g., verbal interventions, non-verbal interventions) failed to: (a) protect others from being harmed by a client, (b) protect a client from harming himself, and/or (c) protect valuable property from damage by a client. The use of isolation was not in the scope of this agency's policy or license.

Results

Demographically, results showed that for the client population during the examined time period, 34.2% were black and 58.6% were white (7.2% were non-black and non-white). Of these clients, all had been diagnosed with at least conduct disorder and a substance related disorder. Out of the 65 staff that had direct client care responsibilities during the examined time period, 39% were black and 71% were white, and 9.2% had a graduate degree, 41.5% had an undergraduate degree and 49.2% had a high-school diploma or equivalent.

To examine our research question, we conducted a one-sample chi-square test. Considering that clients may have been involved in multiple restraint episodes during our observation period, we realized that combining multi-
ple episodes for analysis would have violated the assumption of independence of observations. Therefore, we chronologically ranked each restraint episode a client was involved in during our observation period. Subsequently, we conducted the analyses one episode at a time for the first four episodes during our observation period. Looking at four episodes seemed sufficient considering over half of the total number of restraints (798 of 788) occurred within this first four-episode block. However, with four analyses being conducted, we adjusted our alpha, using the Bonferroni technique, from .05 to .0125 to reduce the chance of committing a Type I error. Lastly, the total population percentages of black clients and white clients (54.2% and 55.8% respectively) established the expected frequencies for the analyses. Due to the presence of non-black and non-white clients being restrained, these percentages were algebraically transferred to apply to the total number of restraints for black clients and white clients only (i.e., removing restraints involving non-black or non-white clients). For staff, this algebraic transfer was not necessary due to all staff being either black or white. Results from the chi-square test showed that black clients were restrained significantly more often than white clients for all four episodes (see Table 1 for frequencies and chi-square values). To further explore these results we descriptively examined the race of the staff involved in the physical restraint of the client. Results showed that both black staff and white staff (a) restrained black clients more often than would be expected, and (b) restrained white clients less often than would be expected (see Table 2 for frequencies). We did not test if these staff differences were statistically significant due to the limitation of the pre-experimental nature of our study. Specifically, the assumption of independent observations for chi-square tests would have been violated in that some of both black and white staff were involved in multiple restraint episodes. However, the same connection that we used for the clients was insufficient. Chronologically ranking each restraint episode a staff member was involved in would have produced episodes in which the same client was restrained by several staff, therefore the independence of observations assumption for the chi-square test would have been violated as well. This limitation is further discussed later in this article.

Discussion

Overall, results from this study are similar to those of Bond et al. (1988) and Kuhrtman et al. (1982) in that black clients were restrained significantly more often than white clients. In interpreting this result, as Bond et al., we will consider two explanations that: (a) black clients may tend to be physically restrained more often that white clients and (b) staff may discriminate in their response to clients. The first explanation would suggest that black clients exhibit the behaviors necessitating physical restraint (i.e., threat to others, threat to self, and/or threat to valuable property) more often than white clients. If accurate then the question becomes why is this so? Perhaps black clients do not feel as safe as white clients, because the staff are predominately white. These feelings of insecurity or mistrust may lead them to "act out" behaviors necessitating physical restraint. This is not implausible especially considering cultural mistrust of minority clients toward white counselors is well documented (Atston & Bell, 1996; Sue, 1992). For example, with many experiences of racism, bias, and prejudice leading to cultural mistrust, black clients may exhibit the behaviors leading to their being physically restrained as negative responses upon interacting with white staff. Bearing in mind that "[o]ne could consider several variables as indicative of cultural mistrust", perhaps behaviors leading to physical restraint is such a variable (Wilson, Harper, McCormick, Juvenes, & Jackson, 2001, p. 30).

Upon further examination, this cultural mistrust argument weakens in favor of a racial bias explanation. First, if cultural mistrust leads black clients to being restrained significantly more often than expected, then one would anticipate white clients, assuming cultural mistrust is not an influence, not being restrained at an amount significantly different than expected. Yet the latter was not the case in our study: white clients were restrained significantly less than expected. Black clients being restrained

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<th>Table 1</th>
<th>Frequencies and Chi-square Values for Restraints of Black Clients and White Client</th>
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<tr>
<td>Black Clients</td>
<td>White Clients</td>
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<th>Table 2</th>
<th>Frequencies of Restraints by Combination of Client Race &amp; Staff Race</th>
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<tr>
<td>Client/Staff</td>
<td>Combination</td>
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<tr>
<td>Black Client/</td>
<td>Black Staff</td>
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<tr>
<td>Black Staff</td>
<td>1</td>
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<td>2</td>
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<td>White Client/</td>
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significantly more often then expected and white clients being restrained significantly less often then expected clearly suggests the presence of racial bias. What further complicates the matter is that both black and white staff's restrained black clients more than expected and (b) restrained white clients less than expected. Thus, reverse discrimination does not seem to be present (i.e., black staff restraining white clients more than expected and black clients less than expected).

If a racial bias explanation is accurate, then again the question becomes why is this so. For white staff the answer may lie in stereotype activation. Specifically, when white staff interact with black clients, negative stereotypes held by white staff of black clients may be activated. If so, then decisions made by the white staff (i.e., to physically restrain or not) would be based on the stereotype rather than sound clinical judgment (Middelton et al., 2000). Thus, the possibility of white staff consciously or unconsciously harboring and responding from a race-based behavioral stereotype of black clients is plausible especially considering that white staff expecting violence from black clients is a notion supported by previous research (Kunda & Thagard, 1996; Sagar & Schofield, 1980; Sue & Sue, 1999) and a conclusion made by Bond et al. (1988) upon interpreting results similar to our study.

More so, stereotype activation may occur rapidly for white staff working in rehabilitation settings for adolescents with behavioral disabilities. Specifically, working in such an environment may lead to anxiety or fear of clients behaving violently: an "on-edge", acute environment where decisions to physically restrain a client must be made quickly. As a result, when a client's behavior escalates, staff may experience their "adrenaline taking over." What may be occurring is that the staff's over-generalized, highly rigid beliefs (i.e., stereotypes; Abreu, 2001; Sue & Sue, 1999) are activated (Hoff, 1995) and they behave accordingly (i.e., use physical restraint; Bargh et al., 1996), particularly when the client's behavior is ambiguous. The classic studies by Duncan (1976) and Sagar and Schofield (1980) demonstrated that when both black and white clients' behavior is ambiguous, white staff interpret the black clients' behavior as deviant (e.g., aggressive) and the white clients' behavior as innocent (e.g., horseplay). Thus, this interpretation of white client's behavior as innocent may explain, in our study, why white staff restrained white clients less than would be expected. This notion of stereotype activation is further supported by the conclusion made by Kuhlman et al. (1982):

"...where the decision the restrain or not restrain is relatively easy to make, the black/white client ratios reflect the racial distribution of the population as a whole. In the context where the decision is complex is not clear...racial disparity becomes an important variable affecting the decision to restrain..." (p. 346).

The influence of racial bias upon stereotype activation seems to make sense for white staff, but not necessarily for black staff. Again, in our study, black staff, as white staff, physically restrained (a) black clients more often than would be expected and (b) white clients less often than would be expected. Concluding that black staff harbor and react from similar negative stereotypes of black clients as white staff seems counter-intuitive. Perhaps black staff are trained in what Wilson et al. (2001) referred to as "monocultural norms...strongly embedded in counseling and human service organizations" (p. 28). In our study, the agency seems to have what Sue (1992) described as a "narrow band of acceptable...behaviors" toward black clients (p. 8). Thus, with training in "interventions and theories learned on the dominant culture" black staff would be trained to interpret client behavior similarly as their white counterparts (Wilson et al., 2001, p. 28), and thus, utilize physical restraint similarly. More so, this "Eurocentric" or "one-dimensional" worldview seems to hold for staff even in the face of contradictory evidence (Butcher & Schofield, 1984; Jackson, Shin, & Wilson, 2000, as cited in Wilson et al., 2001). For black staff this contradictory evidence may even include their experience as a black person. Thus, the training and pressure to interpret black clients' behavior as violent may overcome their own intuition, based on experience, that the behavior is not violent.

Several limitations must accompany the above interpretations of the results. First, this study employed a pre-experimental design to conduct an initial, exploratory of the research question. With this direction taken, the trade-off was having a minimal amount of control of the data (i.e., archival data was analyzed), thereby making a sophisticated data analysis impossible due to potential violations of statistical assumptions. More so, collecting data from record archives limited the amount of information to be examined. Although all clients were diagnosed as having at least conduct disorder and a subsample related disorder, they may have experienced other psychopathologies that may have influenced their interaction with staff. Second, the sample consists of black and white adolescent males in a residential rehabilitation agency. Generalizing beyond this population should be done with caution. The stereotypes and accompanying behavior of clients and staff may be different for younger children, for females, children from other racial backgrounds and/or with other presenting problems. Yet, even with the above limitations, the results suggest implications for future research and counseling practice.

Summary and Future Research

In summary, our data suggests that racial bias does influence the use of physical restraint with adolescents with behavioral disabilities. This possibility seems to be due to the stereotypes that both black and white staff hold, are trained in, conform to, and/or act upon in dealing with clients. If these conclusions are accurate, several questions can be deduced. How can the presence of staff held stereotypes be identified? Who is more prone to act upon these stereotypes? And, ultimately, how will this information...
lead to the reduction of PRS? Considering these questions, future research should continue to look at the role racial bias in the use of PRS with adolescents with behavioral disabilities. Specifically, the presence and saliency of stereotypes held by staff could be established with conceptual expansion. This expansion could incorporate, at least, the additional perspective of (a) staff education level and (b) racial identity development.

Staff education level may add to the explanation of our results and therefore, warrant further study. Specifically, the influence of racial bias on physical restraints may reflect that fact that almost half of the staff in our study had no more than a high school education, two-fifths had an undergraduate degree, leaving about 10% with training at the graduate level. Thus, seemingly a vast majority of staff did not have graduate level training in multicultural sensitivity, which may partially explain the results. Considering graduate level training in rehabilitation counseling and other counseling disciplines often require a course in multicultural counseling, particularly if the program is accredited (i.e., Council on Rehabilitation Education, Council for Accreditation of Counseling and Related Educational Programs), one may hypothesize that such staff would be less involved in PRS because of their increased cultural sensitivity. However, studies have shown that even graduate level counseling students may keep their stereotypes after cultural sensitivity training because they excuse low levels of racial identity development (Burkard, Ponterotto, Reynolds, & Alfonso, 1999; Gushe & Carter, 2000).

Racial identity development (RID) research, in combination with education level, may provide a clearer platform for explaining and possibly predicting the role of racial bias in PRS. Several RID models (i.e., Helms, 1995; Scott & Robinson, 2001; Sue & Sue, 1999) exist and all delineate racial identity into stages, statuses, or types. Furthermore, studies have shown that the RID type a counselor exudes predicts their ability to form counseling relationships and a working alliance (Burkard et al., 1999) as well as how they process information about clients (Gushe & Carter, 2001). Considering the present study, perhaps the current RID stage at which a staff member exists is theoretically predictive of their involvement in PRS. For example, white staff who hold the aforementioned stereotypes (i.e., black clients are violent and deviant), may exist at a level of RID indicative of seeing themselves as dominants and black clients as deviant, a stage that may parallel the Conformity stage of Sue and Sue’s model (1999), the Reintegration status of Helms’s model (1995), and the Claustrophobic Type of the Key Model (Scott & Robinson, 2001). Therefore, future research could account for the RID staff as a possible framework for prediction: staff at a particular level of racial identity development are more prone to be involved in PRS. Moreover, potential interactions of RID and education may be of interest. For example, in relation to PRS, one may consider the impact of RID on mediating graduate level cultural sensitivity training.

Regardless of research direction, the seriousness of the use of PRS and influence of racial bias is apparent. Eliminating deaths due to PRS and reducing the need for any use of PRS are reasonable goals that need addressed in an expeditious manner. Along with future research, perhaps rehabilitation agencies, serving adolescents with behavioral disabilities, that use PRS should at minimum consider adding performance improvement measures in regard to this issue. Another suggestion would be to incorporate RID measures to agency’s training needs analyses. Moreover, any training specific to PRS should address issues of racial bias. As rehabilitation counselors, our ethics demand that we constantly appraise our skills. This seems particularly crucial if we work with adolescents with behavioral disabilities from various racial backgrounds.

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