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Adult Attachment Style, Spirituality, and Religiosity among Individuals in Treatment for Substance Use Disorders

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ABSTRACT

Spirituality and religiosity are considered to be protective factors in the treatment of substance abuse. Little is known, however, about how adult attachment style may be associated with levels of spirituality and religiosity. This study explored adult attachment styles among individuals in inpatient treatment for substance abuse and dependence and determined if there were significant differences between spirituality and/or religiosity variables by adult attachment style within the sample. Results indicated that neither of the religiosity variables varied by attachment style, but that one of two subscales in the spirituality measure, existential purpose and meaning, did vary significantly. Specifically, differences between the Secure attachment group and the Fearful group were highly statistically significant, with the Secure group reporting higher levels of existential purpose and meaning. Differences between the Secure group and the Dismissing group approached significance, again with the Secure group's scores being higher. This study has shown that social work and other mental health professionals serving individuals with substance related problems must understand that, in their efforts to increase spirituality in their clients as a protection against relapse, they should recognize the impact that attachment style may have on their clients' spiritual lives.

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Background

Spirituality is an important component of successful treatment for substance use disorders (Chen, 2006; Jarusiewicz, 2000; Koski-Jannes & Turner, 1999; Miller, 1998; O'Connell, 1999; Sandoz, 1999). For example, Koski-Jannes and Turner (1999) found that spirituality was related to improved substance abuse and dependency treatment outcomes and to sustained therapeutic gains achieved during treatment for substance use disorders. Similarly, Jarusiewicz (2000) found that substance abusers who relapsed during or after treatment were more likely to report lower levels of spirituality than those who remained abstinent, suggesting that spirituality may be an essential component of a successful addiction recovery treatment. Religiosity, a concept closely related to spirituality, has been studied in this population and found to be similarly protective (Seidlitz et al., 2002).

Although this positive connection between spirituality and recovery and relapse prevention has been clearly established, recent research has noted that spirituality is a complex and multidimensional concept, suggesting that researchers need to consider which elements of spirituality are more influential in treatment. For example, Diaz, Horton, McIlveen, Weiner, and Williams (2011) utilized the Spiritual Transcendence Index (STI; Seidlitz et al., 2002) to examine the relationship between spirituality and depressive symptoms among substance abusers. The STI has a spirituality subscale that assesses for pur-

pose and meaning in life, and a relational subscale that assesses for the relationship of the respondents with a transcendent being. The authors found that scores on the spirituality subscale were negatively related to depressive symptoms (that is, the *higher* the score on purpose and meaning, the *lower* the level of depression) whereas scores on the relational subscale were *positively* related to depressive symptoms (that is, the *stronger* the relationship with a transcendent being, the *higher* the level of depression). They speculated that this unexpected positive relationship might be due to differences in adult attachment style, a reasonable assumption since there is growing evidence that the insecure adult attachment styles are strongly related to depression (Conradi & de Jonge, 2009; Patrick, Hobson, Castle, Howard, & Maughan, 1994; Rosenstein & Horowitz, 1996; Shaver, Schachner, & Mikulincer, 2005).

Unfortunately, little research has been conducted concerning adult attachment style among individuals in inpatient treatment for substance abuse issues, and none at all concerning the relationships between attachment style and levels of spirituality in this population. This is a serious gap in the literature since attachment style is a primary factor that influences a person's ability to relate to others throughout his or her lifetime (Ainsworth, 1982, 1989; Bowlby, 1977, 1980, 1982), including relating to a transcendent being (Miner, 2007). The purpose of this study, then, is to address this gap in the knowledge base by exploring adult attachment

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styles in this population and examining the relationships between spirituality and adult attachment style among a sample of individuals attending an inpatient treatment center for substance-related disorders. Before discussing the study itself, an explanation of the multidimensional nature of spirituality will be provided. Then a brief review of adult attachment theory and of the literature concerning the relationships between adult attachment style and substance abuse and relationships between adult attachment style and spirituality will be presented.

Multidimensional Aspects of Spirituality

Religion and spirituality have been defined in the literature as being closely related but distinctly different concepts involving both individual and social/communal aspects (Elsass, 2008; Diarmuid, 1994; Larson, Swyers, & McCullough, 1998; Russinova & Cash, 2007; Seidlitz et al., 2002; Walsh, 1998). While religion involves a structured system of values, rituals, and worship which an individual practices within a community of specific organizations (Russinova & Cash, 2007; Walsh, 1998), spirituality involves the search for individual meaning and/or purpose in life (Diarmuid, 1994). Elsass (2008) holds that spirituality can be understood only as “something tied to an individual experience within a specific context” (p. 76), while religion is a social institution that is often “preoccupied with spirituality” (p. 76). Early research by Corrington (1989) noted that the protective influence of connectedness to others may provide substance dependent individuals with an effective way of dealing with stress, while Warfield and Goldstein (1996) suggested that a sense of connection and meaning in life appears to buffer individuals suffering from substance use disorders against negative emotions. More recently, Adams and Bezner (2000) broadened the idea of connectedness associated with spirituality to include a sense of connection to oneself, to the broader environment, and to a higher power as conceptualized by the 12-step programs.

Two widely used instruments that measure spirituality, the Spiritual Well-Being Scale (SWB; Ellison, 1983) and the STI, are divided into subscales that assess two different aspects of the concept. Ellison (1983) developed the Spiritual Well-being Scale (SWB) in which an *Existential* subscale focuses on subjective well-being and a *Religious* subscale focuses on religious well-being. Then Seidlitz et al. (2002) developed the Spiritual Transcendence Index (STI) in which a *Spiritual* subscale focuses on experiences that involve respondents’ perceptions of their own spirituality, while a *God* subscale focuses on experiences deriving from the respondent’s perceived relationship with God. Items on both the SWB Existential subscale and the STI Spiritual subscale refer to respondents’ feelings of purpose and meaning in

life, while items on the SWB Religious subscale and the STI God subscale focus on respondents’ relationship with a transcendent being. Thus, these two instruments have conceptualized spirituality into two distinct elements: (1) purpose and meaning, and (2) relationship.

Adult Attachment Theory

Attachment theory is one of the most widely accepted theories that explain the social and developmental aspects of humans within a relational perspective. According to Bowlby (1977, 1980, 1982), attachment behaviors in infancy and early childhood are biologically driven in an instinctual effort to maximize survivability. The child instinctively engages in proximity-seeking behaviors (such as crying and reaching out) in an effort to remain as close to the caregiver as possible. Attachment behaviors are adaptive in that they increase the probability that the child’s caregiver will provide the safety that the child needs to survive until he or she can care for him- or herself. Proximity to the caregiver results in a sense of security that allows the child to freely explore his or her environment and thus learn about the world without fear of damage. Because of the life and death quality of this early relationship, children learn through trial and error in their interactions with their caregivers how they must behave in order to stay in proximity with their caregivers and get their needs both for general safety and for safe exploration of their environments met. These lessons in how to behave to receive needed attention are internalized into implicit memory as an internal working model of self (IWM) that determines expectations for acceptance/rejection in future relationships throughout the lifespan.

Using Bowlby’s research on childhood attachment processes, Bartholomew and Horowitz (1991) developed a four-category model of adult attachment styles: secure, preoccupied, dismissive, and fearful. These attachment styles are related to Ainsworth and colleagues’ (1978) childhood attachment styles such that individuals who had secure attachment in childhood have a *secure* style in adulthood; individuals who had an anxious attachment style in childhood have a *preoccupied* attachment style in adulthood; individuals with avoidant attachment in childhood have a *dismissive* style in adulthood; and individuals with a disorganized/disoriented style in childhood have a *fearful* style in adulthood.

According to Bartholomew and Horowitz (1991) adults with a secure attachment style tend to have a positive view of both self and other, and to have a balance between a healthy connectedness with others and self-reliance. Because of their early experiences with their primary caregivers, they tend to feel worthy of love and to expect that other people will generally be accepting of and responsive to

them, allowing them to seek social support to cope with emotional distress. In contrast, individuals with a preoccupied style tend to have a negative view of self and a positive view of others resulting in feelings of low self-worth and extreme anxiety concerning abandonment by others. They tend to rely on the approval and acceptance by others for their own acceptance of themselves and frequently engage in attention-seeking, clinging behaviors in an effort to maintain proximity to the attachment figure. Persons with a dismissive style tend to have a positive view of self and a negative view of others; they tend to avoid close relationships, preferring to protect themselves from disappointment and rejection by maintaining a sense of invulnerability and independence through emotional distancing. Finally, individuals with a fearful style tend to have a negative view of both self and others that may result in counterproductive and chaotic approach-avoidance behaviors due to their intense fear of abandonment conflicting with intense need for intimacy.

Adult Attachment and Substance-related Disorders

The attachment style that individuals bring with them into treatment will inevitably affect how they interact with their peers and with staff since it is based on unconscious assumptions about the acceptability of self and the probable reactions to self by others. In addition, the requirement of abstinence in treatment may remove the only effective means that those with insecure attachment styles have been able to devise to gain relief from the pain they have been experiencing since very early in life. Flores (2003) has argued that addiction is in reality an attachment disorder in which the individual's ability to regulate his or her emotions is compromised by inadequate parental availability and/or responsiveness during infancy and early childhood. He goes on to say that addiction is "both a consequence of and a solution to the absence of satisfying relationships" (p. 50). He holds that substance abuse and dependency stem from an attempt to repair the damage of these early parental inconsistencies and failures by helping the addict to regulate his or her emotions, reducing psychic pain and/or providing distractive stimulation.

Only a few studies have explored attachment style among individuals with substance abuse or dependency problems. Schindler et al. (2005) compared the attachment styles of 39 non-clinical control participants with 71 drug dependent adolescents and found that a fearful attachment style was predominant among the drug dependent youth while a secure attachment style was predominant among the non-clinical controls. In addition, they found that severity of use was positively correlated with a fearful style but negatively related to a dismissive style.

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In a later study, Schindler, Thomasius, Petersen and Sack (2009) reported significant differences in attachment representations of users of different drugs – opioids, ecstasy, and cannabis – and a group of non-clinical, non-drug using controls. Results indicated that the control group respondents were much more likely than any of the drug-using respondents to report secure attachment. More than three-quarters of the opioid abusers had a fearful attachment style, the highest proportion of any group. Ecstasy abusers were more likely than other groups to report a preoccupied style. However within the insecure group itself, there were no significant differences among preoccupied, fearful and dismissing. Cannabis abusers, on the other hand, tended to report dismissing or secure styles, making them the group with the highest proportion of secure attachment styles other than the controls. The authors suggested that their results indicate that "substances seem to be selected to create specific emotional effects, and that this choice is related to attachment strategies" (p. 324).

Caspers et al. (2006) explored associations between attachment representations, lifetime substance abuse and dependence, and the likelihood of participation in treatment among a sample of 208 adoptees in adulthood. They found that participants who had a history of continuously secure attachment in childhood were significantly less likely to exhibit substance use problems than the participants with histories of insecure attachment, and thus were less likely to enter treatment for substance use problems. In addition, they discovered that participants classified as dismissive had an increased likelihood of substance abuse/dependence, but decreased likelihood of entering treatment for those problems. In contrast, participants classified as preoccupied had both an increased likelihood of substance abuse/dependence and an increased likelihood of attending treatment for those problems.

Thornberg and Lyvers (2006) surveyed a group of 99 clients attending treatment for substance use disorders (though they did not indicate if respondents were receiving inpatient or outpatient treatment) and 59 non-clinical controls concerning their adult attachment style, degree of fear related to intimacy, and their differentiation of self. They found that the clients attending treatment reported significantly higher levels of insecure attachment and fear of intimacy as well as significantly lower levels of self-differentiation than controls.

De Rick, Vanheule, and Verhaeghe (2009) investigated relationships between alexithymia, psychiatric disorders, and attachment style among a sample of 101 individuals in inpatient treatment for alcoholism. Their results prompted them to distinguish three subgroups of clients. One subgroup consisting of a little more than half of the participants mani-

fested an impaired attachment system so that they had difficulty in both effectively regulating their affect and establishing secure interpersonal relationships; a second subgroup consisting of over a third of the respondents showed moderate attachment impairment so that they had difficulty in either regulating their affect effectively or in establishing relationships. The remainder of the respondents (only about 14%) fell into a third subgroup in which individuals had well-established attachment systems and were able to both regulate their affects and establish good interpersonal relationships. Thus, approximately 86% of their subjects showed moderate to severe impairment in affect regulation and/or initiating and maintaining relationships.

Adult Attachment and Spirituality and Religiosity

Although attachment behavior tends to be directed towards one or two primary care givers in infancy, other relationships may form throughout life that are not part of that early attachment hierarchy. For example, some important attachments can form during adulthood, such with a romantic partner, a close friend, a therapist, or even God/Higher Power (Kirkpatrick, 1992; Rowatt & Kirkpatrick, 2002; Kirkpatrick, 2005). In a review of the literature for the current study, it was found that none of the studies currently in the literature focuses on individuals with substance use disorders. In addition, the literature on attachment and spirituality tends to utilize measures of religiosity and relationship with God rather than the purpose and meaning aspects of spirituality. For example, Kirkpatrick (2005) has suggested that God may function as an attachment figure because of the tendency of monotheistic religions to hold the belief that God's loving qualities are similar to those of an ideal parent who provides a safe haven and secure base. In addition, Hall (2004; 2007) has argued that individuals are motivated for religious attachments by their desire for a felt security, and that they tend to display attachment styles in their relationship with God or a transcendent being similar to those displayed with primary caregivers. That is, because of their internalized early experiences and insecure styles with attachment figures, they will employ the same hyperactivating or deactivating strategies towards their relationship with God just as they have in past relationships. Those with a preoccupied style will tend to engage in help-seeking prayer and cling to their spiritual communities in an effort to regulate their emotions; those with a dismissing style will tend to minimize their reliance on God, rarely asking for help and engaging in prayers that place distance between them and God; individuals with fearful attachment are desperate for a relationship with God but expect rejection so that although they may join a

spiritual community they will remain on the periphery of the group.

Several studies have explored associations between adult attachment style and religiosity. They have found that individuals with a secure attachment style tend to have higher levels of religiosity, more positive images of God, and greater feelings of closeness to God than those with insecure styles (Byrd & Boe, 2001; Eurelings-Bontekoe, Hekman-Van Steeg, & Verschuur, 2005; Grandqvist & Hagekull, 2000; Kirkpatrick, 1998; Kirkpatrick & Shaver, 1992). Individuals with more positive images of self (secure and dismissive attachment styles) tended to have more positive images of God, while those with more negative images of self (preoccupied and fearful) tended to have more negative images of God. This was particularly true if respondents also reported that they were under particular psychological stress (Eurelings-Bontekoe et al., 2005). Preoccupied and fearful adults also reported having more experiential and highly emotional religious experiences, such as speaking in tongues, becoming born-again, or finding a new relationship with God than the other styles (Kirkpatrick, 1998; Kirkpatrick & Shaver, 1992). Participants identifying themselves as having avoidant romantic relationships tended to report being agnostic (Kirkpatrick & Shaver, 1992).

The studies mentioned above have focused on religiosity rather than spirituality and thus have not explored the purpose and meaning aspect of spirituality. In addition, they have not explored the relationship between spirituality and attachment style. Therefore, there is a serious gap in the literature that if filled could provide information critical to the treatment of substance abuse and dependency. The current study was designed to explore both the purpose and meaning and the relational aspects of spirituality as they relate to adult attachment style among individuals attending inpatient substance abuse treatment.

Methods

Participants

This is a cross-sectional study involving individuals receiving voluntary substance abuse treatment at a residential treatment facility located in the southeastern region of Florida. Upon obtaining Institutional Review Board approval, clients were recruited from two different sites of the treatment facility, both of which are located within the same county. Clients were asked to fill out a questionnaire packet during one of their morning group sessions at the agency. All clients attending the group on that date filled out the study questionnaires that contained an informed consent form that was explained by the first and second authors of this manuscript. Seventy seven clients volunteered to participate in the study: 52 from site 1 and 25 from site 2. No

monetary incentives were given to the clients. Inclusion criteria included clients who were 18 year old or older who volunteered to participate in the study.

Measures

The Spiritual Well Being Scale (SWB). The SWB (Ellison, 1983) was utilized to measure spiritual well-being. The SWB is a 20 item scale that yield a Total spiritual well-being score (TO) as well as scores on two subscales: 1) the Existential Well Being subscale (EWB) (“I feel good about my future”); and 2) the Religious Well Being subscale (RWB) (“I have a personally meaningful relationship with God”). Response categories include a 6-point Likert-type scale ranging from 1 = strongly disagree, 2 = mostly agree, 3 = disagree, 4 = agree, 5 = moderately agree, and 6 = strongly agree. The SWB has shown strong psychometric properties. Saunders, Lucas and Kuras (2007) reported a coefficient alpha of .97 and a test-retest coefficient of .93 for the RWB while the EWB obtained .90 and .80 respectively. In this sample, the Cronbach alphas for the SWB TO, RWB, and EWB were .91, .94, and .86 respectively.

Relationship Questionnaire. The Relationship Questionnaire (RQ) by Bartholomew and Horowitz (1991) employs both categorical and dimensional measurements of attachment. First, respondents identify one of four possible vignettes (one each adult attachment style: secure, fearful, preoccupied, and dismissing) that best describes their close relationships. Then they indicate on a 7-point Likert-like scale how accurately each vignette describes them. From this measure, two dimensions of attachment are calculated – view of self and view of others – that convey attachment anxiety and attachment avoidance. An individual with secure attachment would have a positive view of both self and others; an individual with fearful attachment would have a negative view of both self and others; an individual with preoccupied attachment would have a negative view of self and a positive view of others; an individual with dismissing attachment would have a positive view of self and a negative view of others. The RQ attachment ratings show convergent validity with adult attachment ratings (Bartholomew & Horowitz, 1991). In addition, it has shown moderately high stability over an 8-month period (Scharfe & Bartholomew, 1998), and has moderate, though acceptable, test-retest reliability (Griffin & Bartholomew, 1994). It has been utilized to measure attachment among individuals with drinking problems (McNally, Palfai, Levine, & Moore, 2003) and in clinical populations (Dutton, Saunders, Starzomski, & Bartholomew, 1994; Haaga et al., 2002; Pistole & Tarrant, 1993).

The Religious Background and Behavior Questionnaire. The Religious Background and Behavior Questionnaire (RBBQ) by Connors, Tonnigan, and

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Miller (1996) is a 13-item instrument that assesses how frequently respondents engage in certain behaviors related to practicing and thinking about religion within the past year as well as respondents' religious identity. The first item asks respondents to choose a religious description that best describes them (atheist, agnostic, unsure, spiritual, or religious). The next 6 items assess Formal Practices (prayed, meditated) utilized in the past year and are answered on an 8-point Likert scale ranging from 1 (*never*), 2 (*rarely*), 3 (*once a month*), 4 (*twice a month*), 5 (*once a week*), 6 (*twice a week*), 7 (*almost daily*), to 8 (*more than once a day*). The last 6 items assess the lifetime frequency of God Consciousness (believe in God, attend worship services regularly) and are answered on a 3-point Likert scale with responses ranging from 1 (*never*), 2 (*yes, in the past but not now*) to 3 (*yes, and still do*). Recent research has utilized this scale with substance users (Connors et al., 1996; Goggin, Murray, Malcarne, Brown, & Wallston, 2007). A study with a sample of alcohol abusers demonstrated exceptionally high test-retest reliability (r equal .94 or higher) as well as acceptable to good internal consistency with a Cronbach's alpha of .86 (Connors et al., 1996). In this sample, the Cronbach alpha was .85.

Loving and Controlling God Scales. The Loving and Controlling God Scales (LCGS) by Benson and Spilka (1973) was used to measure patients' perception of God. This semantic differential scale provides 10 pairs of opposites that describe God as *rejecting – accepting*, *hating – loving*, or *strict – lenient*. Possible responses range from 0 to 6 with zero being the most negative image and six being the most positive. The LCGS has been used to determine perceptions of the nature of God in recent research with alcohol dependent populations (Robinson, Cranford, Webb, & Brower, 2007). The Cronbach alpha for this sample was .92.

Other Variables. Demographic information was gathered using self-report. Respondents were asked their age in years, and their gender (male or female). Categories for Race/ethnicity included White non-Hispanic, Hispanic, African American, and Other categories. Marital status categories included: Single Never Married, Legally Married, Cohabiting Not Married, Separated Married, Divorced, Widowed, and Other. Categories for Pre-treatment Employment Status included: Work 40 Hrs/wk, Work <40 Hrs/Wk, Homemaker, Retired, and Unemployed. Religious affiliation categories included: Catholic, Adventist, Jehovah Witness, Mormon, Jewish, Muslim, Buddhist, Protestant, Other, and None.

Data Analysis

Frequencies, means, and standard deviations for demographic variables were analyzed for both of the sites, and independent samples t-tests were conducted to determine significant differences between

participants by site location. There were no statistically significant differences in demographics between clients attending the two treatment sites, and thus, all other analyses were conducted using the entire sample.

Percentages for the categorical attachment styles were calculated. A one-way ANOVA was conducted to evaluate differences in the means of the attachment styles for the religiosity and spirituality variables (LCGS, RBBQ Formal Practices and God Consciousness scores, and scores on the EWB and RWB subscales of the SWB). After statistically significant results were obtained for the EWB subscale, post-hoc analysis utilizing the Bonferroni method was utilized to determine between group differences in the existential spirituality scores.

Results

Results indicated that the mean age of the sample was 31.66 ($SD = 11.68$). Over half of the respondents were males (55.8%, $n = 43$). The large majority (89.6%, $n=69$) of respondents reported White non-Hispanic as their race/ethnicity. More than half of the sample reported being single and never having been married (53.2%, $n = 41$), while another 22.1% ($n=17$) reported being currently married. Smaller proportions reported being divorced (10.4%, $n = 8$), separated (5.2%, $n = 4$), and cohabitating with an unmarried partner (7.8%, $n = 6$). Most participants reported full time (50.0%, $n = 38$) or part time (17.1%, $n = 13$) employment while others indicated they were unemployed (26.3%, $n = 20$), retired (2.6%, $n = 2$), or a homemaker (3.9%, $n = 3$). In terms of religious affiliation, most respondents identified themselves as either Catholic (44.2%, $n = 34$), or as having no religious affiliation (28.9%, $n = 22$), while smaller proportions identified as Protestant (7.8%, $n = 6$) and other (18.4%, $n = 14$).

Seven of the 77 respondents did not provide data on the attachment style question, leaving a total of 70 respondents for the analyses. These analyses indicated that 62.9% ($n=44$) of respondents reported an insecure adult attachment style while 37.1% ($n=26$) reported a secure style. Specifically, 38.5% ($n=27$) of respondents reported a fearful attachment style while 18.6% ($n=13$) reported having a preoccupied style. Only 5.7% ($n=4$) reported having a dismissing style.

A one-way ANOVA was conducted to determine if there were statistically significant differences between the LCGS, RBBQ, and SWB means by attachment group. Only the EWB subscale varied significantly by attachment style, $F(3, 68) = 7.99$, $p < .001$. That is, neither of the religiosity variables (the RBBQ or the LCGS) was related to attachment style. In addition, the RWB did not vary significantly by attachment group. Post hoc Bonferroni

comparisons were then conducted to determine which of attachment styles varied significantly on the EWB subscale. Table 1 shows the results of this analysis. Those participants reporting a Secure attachment style differed significantly from the Fearful group ($p < .001$), and approached significance with the Dismissing group ($p = .056$).

Means and standard deviations for the four attachment style groups were calculated for the SWB TO, EWB, and RWB subscales. Table 2 shows these calculations. The Secure attachment style had the highest mean scores on the TO ($m = 32.96$, $SD = 12.19$) and both subscales EWB ($m = 74.42$, $SD = 17.03$), and RWB ($m = 37.5$, $SD = 7.12$). The Preoccupied attachment group had the next highest mean scores ($m = 64.69$ [$SD = 23.52$], $m = 31.15$ [$SD = 10.44$, $n = 13$], and $m = 29.85$ [$SD = 14.66$, $n = 13$] for the TO, EWB, and RWB subscales, respectively, followed by the Fearful group ($m = 55.58$ [$SD = 21.50$, $m = 26.31$ [$SD = 9.58$, $n = 26$], and $m = 25.70$ [$SD = 12.31$, $n = 27$] for the TO, EWB, and RWB subscales, respectively. The lowest mean was found in the Dismissing attachment group ($m = 51.25$ [$SD = 7.04$], $m = 25.00$ [$SD = 3.56$, $n = 4$], and $m = 21.75$ [$SD = 6.65$, $n = 4$] for the TO, EQWB, and RWB subscales, respectively.

Discussion

The purpose of this study was to explore adult attachment styles among individuals in inpatient treatment for substance abuse and dependence and to determine if there were significant differences between spirituality and/or religiosity variables by adult attachment style within the sample. Results indicated that, congruent with research by Schindler et al. (2005), individuals with substance abuse problems are more likely to report an insecure adult attachment than a secure style. In addition, as in Schindler's research, the most prevalent attachment style in this sample was the fearful style (38.5%, $n = 27$). However, the fearful group was only very slightly more prevalent than the secure group (37.1%, $n = 26$). The third most prevalent style was preoccupied (18.6%, $n = 13$). Interestingly, a total of only four participants (5.7%) reported a dismissing attachment style. This finding lends credence to the research by Caspers et al. (2006) that found that the dismissing style was least likely to enter treatment.

Table 1. Bonferroni Comparisons of Existential Spirituality Subscale Means

Relationship style	Mean difference	Standard error	Significance	95% Confidence interval	
Secure					
Fearful	11.19	2.41	.000	4.64,	7.74
Preoccupied	6.35	2.95	.211	-1.68,	14.37
Dismissing	2.50	4.66	.056	-0.19,	25.19
Fearful					
Secure	1.92	2.41	.000	-17.74,	-4.64
Preoccupied	4.85	2.95	.631	-12.87,	3.18
Dismissing	1.31	4.66	1.000	-11.38,	14.00
Preoccupied					
Secure	6.35	2.95	.211	-14.37,	1.68
Fearful	.85	2.95	.631	-3.18,	12.87
Dismissing	6.15	4.96	1.000	-7.35,	19.66
Dismissing					
Secure	12.50	4.66	.056	-25.19,	0.19
Fearful	-1.31	4.66	1.000	-14.00,	11.38
Preoccupied	-6.15	4.96	1.000	-19.66,	7.35

Table 2. Spirituality Mean Scores by Attachment Style

			<i>Spiritual Wellbeing Scale</i>		
			<i>Existential</i>	<i>Relational</i>	<i>Total</i>
Attachment Style	%	(n)	M (SD)	M (SD)	M (SD)
Secure	37.0%	(26)	37.50 (7.12)	32.96 (12.19)	74.42 (17.03)
Fearful	38.5%	(27)	26.31 (9.58)	25.70 (12.31)	55.58 (21.50)
Preoccupied	18.6%	(13)	31.15 (10.40)	29.85 (14.66)	64.69 (23.52)
Dismissing	5.71%	(4)	25.00 (3.56)	21.75 (6.65)	51.25 (7.04)

Results concerning attachment style and the religion and spirituality variables indicated that neither of the religiosity variables (the RBBQ or the LCGS) varied by attachment style. In addition, attachment style groups did not vary significantly in their RWB mean scores. Even though attachment style did not vary significantly in RWB scores, it is interesting to note that the Dismissing group had the lowest RWB mean score (the SWB subscale that measures relationship with God). This makes sense since research has suggested that God may function as an attachment figure for individuals with an insecure attachment style in the same way as teachers, older siblings, and other significant adults do (Kirkpatrick, 1998). Given the avoidant nature of this group's adult attachments, it should not be a surprise that they would not report a relationship with God as being important to them. It should be noted, however, that these individuals also scored lowest on the EWB (the SWB subscale that measures existential purpose and meaning), although this information must be viewed with caution since there were so few Dismissing individuals in the sample.

Attachment groups did vary significantly in their EWB scores. That is, differences between the Secure attachment group and the Fearful group were highly statistically significant, and the difference between the Secure group and the Dismissing group approached significance. It should be pointed out, however, that the Dismissing group actually had a lower mean EWB score than the Fearful group. It is likely that the statistical significance for the Dismissing group only approached significance due to the very small number of participants in this group ($n=4$) compared to the Fearful group ($n=27$). Since there are no studies in the literature to date exploring the effects of existential purpose and meaning on the recovery processes among individuals reporting insecure attachment styles, it is clear that more research needs to be conducted to determine what kinds of effects this lack of purpose and meaning may be having on individuals in this attachment group.

Clinical Implications

Professionals working with individuals with substance abuse problems must first recognize that attachment issues will inevitably affect clients' decisions to enter treatment and their expectations for the treatment provided. In addition, attachment issues are likely to affect their relationship with peers, both in and out of treatment, their therapist and other treatment staff, and with their family and work relationships when they return to the community. Because our research has shown that approximately two-thirds of clients entering treatment come in with an insecure adult attachment style, it is essen-

tial that clients be assessed for attachment style and for current relationship problems that could affect treatment retention and relapse potential.

In addition, it should be realized that attachment style is associated with level of spirituality and that to maximize the protective qualities of spirituality treatment programs must recognize the multidimensional nature of spirituality so that they can target deficits in an individual client's spirituality as they relate to his or her attachment style. For example, if a client with a dismissing attachment style indicates low levels of existential purpose and meaning in his or her life, ways will need to be identified to give that client experiences that might help him or her to be more comfortable in close relationships with others.

It is particularly important that treatment programs identify ways to provide the protective benefits of spirituality to those clients who enter treatment resistant to the concept of spirituality, for example those who have been abused by religious personnel or perhaps raised as atheists or with no religious beliefs. Although no empirical research has yet been conducted concerning interventions with spirituality resistant clients, it is possible that utilizing creative processes such as art and play therapies, mindfulness meditation practices, and service to others could help these clients to better connect to self and others, and perhaps have an experience of the transcendent without the language associated with spirituality (see, for example, thoughts on creativity and spirituality by Leonard (1989) and McNiff (2004); mindfulness meditation by Fernandez, Wood, Stein, and Rossi (2010); and service by Piliavin and Siegl (2007).

One important point concerning the levels of spirituality seen in these attachment groups should not be overlooked: although the Dismissing and Fearful groups were significantly lower in their EWB scores compared to the Secure and Preoccupied groups, this does not necessarily mean that the secure and preoccupied groups would not benefit from increased existential purpose and meaning. Although our research clearly suggests the need for interventions to target the Dismissing and Fearful groups specifically, this does not mean that the spiritual needs of the other groups should be ignored. However, further research is needed to explore their specific needs.

It should also be noted that it is not only clients who enter treatment with a given attachment style; therapists and other staff members in the treatment center also have their own styles that will inevitably interact with the client's style and act as a factor that can either interfere with or encourage recovery. Treatment staff will also inevitably have their own level of spirituality consisting of a level of existential

purpose and meaning as well as a level of relatedness to the transcendent. Therapists often provide a corrective attachment experience for their clients by providing a secure base in the therapeutic relationship (Black, Hardy, Turpin, & Parry, 2005; Conners, 2011), and they can also consciously provide a role model for existential spirituality that could increase their clients' ability to find purpose and meaning in their own lives.

Limitations and Strengths

Some caution should be used when viewing the results of this study because of several methodological issues. First, the sample used for this study came from a single, private-for-profit SUD treatment agency located in southeastern Florida; generalizability of the results may therefore be limited. Generalizability may be further limited due to the racial and ethnic characteristics of this sample in which the vast majority of clients were White non-Hispanics. Samples in which a more diverse group of clients can be assessed might produce different results. In addition, the categorical structure of the Bartholomew and Horowitz (1991) Relationship Questionnaire did not allow for the study of attachment style dimensions. Future research should utilize a more comprehensive instrument such as The Experiences of Close Relationship scale (Fraley, Waller, & Brennan, 2000) which could offer more sophisticated statistical comparisons than this exploratory study required. Another limitation is that this study did not include a control group of non-clinical subjects, and so there is no way to make direct comparisons with a higher functioning group for spirituality levels by attachment style. This is a gap in the knowledge base that should be addressed in future research. Lastly, analyses were also limited by the very small number of respondents reporting a Dismissing attachment style. Future studies should take into consideration the probability that relatively few clients with a dismissing style will be found in treatment, and so a larger sample size will be required to ensure that sufficient numbers are available.

Despite the above-mentioned limitations, this study has several strengths. First, to our knowledge, this is the first study to explore attachment style and spirituality among individuals with substance abuse problems in in-patient treatment. Therefore, this study represents a valuable contribution to the knowledge base concerning risk and protective factors that influence this population. It provides mental health, substance abuse, and social work practitioners with important information about the relationship between attachment style and spirituality that may help them to intervene with this group of clients more effectively.

Conclusion

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<http://health.usf.edu/publichealth/fphr/index.htm>

This study has shown that social work and other mental health professionals serving individuals with substance related problems must understand that, in their efforts to increase spirituality in their clients as a protection against relapse, they should recognize the impact that attachment style may have on their clients' spiritual lives. Those clients with fearful or dismissing styles may need more intensive intervention to increase their sense of existential purpose and meaning in their lives. However, it should be noted that although these attachment style groups are similar to the Secure group in their levels of relatedness to God/Higher Power, it may be that improving their ability to relate to others in their current relationships may work to increase their sense of existential purpose and meaning. In addition, future research needs to gain a better understanding of how to target spiritual interventions for clients with secure or preoccupied attachment styles so that they are comparable to levels of spirituality normally seen in the general population. Understanding the nuances of attachment and spirituality as they manifest within both client and treatment staff should act to improve treatment retention, outcome, and maintenance among inpatient clients.

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