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Leadership, Organizational Climate, and Working Alliance in a Children's Mental Health Service System

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Abstract

The goal of this study was to examine the relationships of transformational leadership and organizational climate with working alliance, in a children's mental health service system. Using multilevel structural equation modeling, the effect of leadership on working alliance was mediated by organizational climate. These results suggest that supervisors may be able to impact quality of care through improving workplace climate. Organizational factors should be considered in efforts to improve public sector services. Understanding these issues is important for program leaders, mental health service providers, and consumers because they can affect both the way services are delivered and ultimately, clinical outcomes.

Keywords

Leadership; Organizational Climate; Working Alliance; Mental Health; Youth

Although studies have identified a number of efficacious treatment practices for youth mental health, it is imperative to consider contextual factors that influence the provision of these services, and ultimately, service outcomes (Aarons, Hurlburt, & Horwitz, 2011; Glisson & Green, 2006; Glisson & Hemmelgarn, 1998; Glisson et al., 2008a). Organizational factors have been understudied in public mental health services. While many studies have examined the relationship of specific treatment characteristics, provider characteristics, and client characteristics to clinical outcomes, there is much less work focusing on organizational characteristics that lead to improved working alliance between clinicians and clients. Within community mental health settings, organizational factors such as leadership and organizational climate have been found to influence provider attitudes and work perceptions (Aarons, 2006). Additionally, leadership, organizational culture, and organizational climate have been found to significantly influence client outcomes and client access to care (Aarons, Hurlburt, et al., 2011; Glisson & Green, 2006; Glisson & Hemmelgarn, 1998; Glisson et al., 2008a). The current study investigates whether organizational factors such as climate and leadership can also influence the quality of interactions between providers and clients.

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Prior research supports the role of leadership in many aspects of an organization's environment, which may subsequently influence mental health services (Aarons, Sommerfeld, & Willging, 2011; Corrigan, Diwan, Campion, & Rashid, 2002; Glisson, 1989). Past leadership research has focused on a number of theoretical and applied approaches including autocratic (strict control over followers) verses democratic (shared decision making) leadership styles (Lewin & Lippitt, 1938). Leadership has also been examined as a trait determined by situations or contingencies, or as an exchange process between leader and follower (Northouse, 2013). The full-range model is currently one of the most comprehensively researched and validated approaches to leadership for individual and organizational development and incorporates dimensions of transformational, transactional, and laissez-faire styles or behaviors (Bass, 1997; Judge & Piccolo, 2004). A laissez-faire leadership style demonstrates an inactive form of leadership, characterized by a reluctance to become actively involved. Transactional leadership focuses on managing incentives and rewards, and meeting quality standards (Avolio, Bass, & Jung, 1999). Transformational leadership is charismatic in nature and is the degree to which a leader can inspire and motivate staff to follow an ideal or a particular course of action. Transformational leadership is composed of four factors associated with effective organizational functioning (Avolio, Gardner, Walumbwa, Luthans, & May, 2004). Individualized Consideration (appreciation of each staff member's individual contributions and needs), Intellectual Stimulation (ability to stimulate thinking and accept different perspectives), Inspirational Motivation (ability to inspire and motivate staff), and Idealized Influence (degree to which the leader acts confidently, instills pride and respect, and instills values, beliefs, a strong sense of purpose, and collective sense of mission).

Recent research in mental health service provision has found transformational leadership to be related to a number of positive outcomes. Green and colleagues (2011) examined the moderating effect of transformational leadership on the relationship between emotional exhaustion and turnover intentions. Results from this study suggest that transformational leadership can diminish turnover intentions by mitigating the toll of emotional exhaustion. This finding supports previous research indicating that positive leadership is associated with greater organizational commitment and job satisfaction, which may thereby impact service quality (Glisson & Durick, 1988). The effect of leadership on service quality has also been examined by comparing full range leadership model scores on the Multifactor Leadership Questionnaire (MLQ) to self-reported consumer satisfaction and quality of life measures. For example, one study found that both consumer satisfaction and quality of life were higher when team leaders engaged in more transformational leadership behaviors (Corrigan, Lickey, & Campion, 2000). Transformational leadership can also influence organizational climate. Aarons and colleagues (2011) found that transformational leadership is particularly important during times of systemic change and stress, when climate is likely to degrade. Thus, the influence of transformational leadership extends the direct relationship between and leader and his/her followers and has been demonstrated to affect service quality as well as organizational climate in clinical settings.

Although culture and climate are often discussed simultaneously, extant literature has established these two concepts as distinct constructs (Glisson & James, 2002). Organizational culture has been defined as a set of norms and expectations for individuals

within an organization. By contrast, organizational climate is defined as aggregated worker attitudes and perceptions of the work environment including role and job characteristics such as fairness, role clarity, growth and advancement, role overload, and role conflict (James & Sells, 1981). For the purposes of the current investigation, we will focus on organizational climate. Organizational climate has been associated with work attitudes (Glisson & James, 2002), provider attitudes toward evidence-based practice (Aarons & Sawitzky, 2006), staff turnover (Glisson et al., 2008b), and enhanced treatment outcomes (Glisson & Green, 2011). Positive organizational climates are hypothesized to facilitate service provider delivery of high quality services by fostering job satisfaction, role clarity, and a sense of fairness, while limiting role overload, role conflict, and emotional exhaustion. Glisson and Hemmelgarn (1998) demonstrated that organizational climate significantly and positively impacted service quality and clinical outcomes for youth in publicly funded social services. However, although organizational climate has been found to have a significant relationship with youth treatment outcomes and service quality, the relationship between service quality and youth outcomes has received mixed support (Glisson & Green, 2011; Glisson & Hemmelgarn, 1998).

These mixed results may be explained by the operationalization of service quality that each study used. Measures of service quality including “availability” (the average number of personal contacts with a client per month), “responsiveness” (changes in residential settings made to improve the fit between the child and placement) and “continuity of services” (the average number of contacts to other service providers related to the child that a caseworker makes in a month to measure) were not found to be related to improved youth outcomes (Glisson & Hemmelgarn, 1998). In a more recent study, a six item caseworker self-report scale used to measure perception of the quality of services provided was associated with improved youth outcomes at 18 months (Glisson & Green, 2011). However, this measure was not related to long term outcomes or organizational climate. One important aspect of service quality with previously demonstrated relationships to client outcomes not examined in these studies was working alliance.

Working alliance has been operationalized as the relationship between mental health professionals and their clients (e.g., Noser & Bickman, 2000) and has been discussed broadly under labels such as *therapeutic alliance, therapeutic relationship, therapeutic bond, and helping alliance*. For the purposes of this paper, this general construct will be referred to using the term *working alliance.* The research literature supports the contention that alliance is of paramount importance in effective service delivery (Abrahamson, 1999; Norcross, 1999; Strupp & Anderson, 1997). There is considerable empirical support for this belief given that working alliance is a consistent and robust predictor of treatment outcome across different clinical interventions in the adult psychotherapy literature (Horvath & Luborsky, 1993; Margison et al., 2000). The extant literature supports the positive association between working alliance and client outcomes in adult psychotherapy (Abrahamson, 1999; Horvath & Symonds, 1991; Martin, Garske, & Davis, 2000; Norcross, 1999; Strupp & Anderson, 1997). While less work has been done investigating working alliance in youth populations, a number of studies do address this issue.

Shirk and Karver's (2003) meta-analysis included 23 clinical studies of the relationship between youth treatment outcome and relationship variables. Results showed a significant relationship between working alliance and youth treatment outcome that mirrored the associations found in adult meta-analyses (Horvath & Symonds, 1991; Martin et al., 2000). A second meta-analysis of working alliance in youth populations provided additional support regarding directions of effects and magnitude of effects between alliance and outcomes (Karver, Handelsman, Fields, & Bickman, 2006). The alliance-outcome relationship among youth clients also appears to remain stable across treatment type and method of delivery (Shirk & Karver, 2003). This suggests that working alliance can be construed as a stable and consistent measure of service quality.

However, youth working alliance literature differs from its adult counterpart on one important dimension. Among adult clients, patient report of alliance is a better predictor of treatment outcome (Horvath & Symonds, 1991). In contrast, Shirk and Karver's (2003) meta-analysis indicates that among youth clients, provider report of working alliance is a stronger predictor of treatment outcome than youth report. This discrepancy may be related to a bias towards reporting positive relationships among youth, resulting in little variability among youth reports of working alliance (Shirk & Karver, 2003). Finally, parent and provider reports do not differ significantly in predicting youth treatment outcome, lending further support to the validity of provider reported working alliance as a measure of service quality in studies involving youth clients (Shirk & Karver, 2003).

The goal of the current study is to examine the relationships of leadership and organizational climate with an empirically supported aspect of service quality - working alliance. Because leadership can affect organizational climate, and climate can affect job performance, we hypothesize that the effect of leadership on working alliance will be mediated by organizational climate and that greater levels of transformational leadership and positive organizational climate will be associated with more positive levels of working alliance.

Method

Participants

Participants were 322 clinical and case management service providers who participated in a larger study of organizational issues within 49 public-sector mental-health programs providing services for children, adolescents, and their families in San Diego County, CA in 2001 (Aarons, 2004). Programs served from 8 to 2800 clients per year (M = 258, SD = 453). The number of staff at each program ranged from 1 full time equivalent (FTE) employee to 72 FTEs (M = 14.6, SD = 16.2). Programs primarily provided outpatient treatment (49%), day treatment (19.6%), assessment and evaluation (9.8%), case management (7.8%), and residential treatment (5.9%) services. Seventy-six percent of respondents were female and the mean age was 35.57 (SD = 10.16) years. Organizational and individual participation rates were high (94.4% and 96%, respectively).

Measures

Leadership—The Multifactor Leadership Questionnaire-5× (Bass & Avolio, 1995) was used to assess participants' perceptions of their supervisor's transformational leadership behaviors. Providers were asked to report on the extent to which their immediate supervisor engaged in specific behaviors (e.g., spends time teaching and coaching). Each behavior was rated on a 5-point scale ranging from 0 “Not at all,” to 4 “To a very great extent.” Transformational leadership was assessed using the following five subscales: Idealized Influence-Attributed (four items, current sample α =.85), Idealized Influence-Behavior (four items, current sample α =.85), Inspirational Motivation (four items, current sample α = .89), Intellectual Stimulation (four items, current sample α =.81), and Individual Consideration, (four items, current sample α =.85).

Organizational Climate—The Children's Services Survey (Glisson, 2002) was used to measure organizational climate. For the present study, the term “empowering climate” is used to describe climates characterized by high levels of growth and advancement, role clarity, and fairness. Three organizational climate subscales, Growth and Advancement (five items, current sample α =.86), Role Clarity (six items, current sample α =.87), and Fairness (six items, current sample α =.72), were used to assess the latent construct of “Empowering Organizational Climate.” Individual items were scored on a 0 (not at all) to 4 (to a very great extent) Likert scale. Higher scores on these scales indicate more positive organizational climate and lower scores indicate a more negative organizational climate.

Service Quality—Service quality was assessed using the short-form version of the Working Alliance Inventory (WAI; Tracey & Kokotovic, 1989) which comprises both an overall general score and three subscales. Internal consistency estimates of the three subscales based on the validation sample of 124 pairs of therapists and clients range from . 90-.92 for the client version and .83-.91 for the therapist version (Tracey & Kokotovic, 1989). The twelve-item form of the original WAI has been found to have comparable reliability and validity with the original version (Busseri & Tyler, 2003). The three aspects of the working alliance, measured in both the long and short form, include agreement on steps to be taken to reach goals (Task = four items, current sample α =.86), agreement on treatment goals (Goal = four items, current sample α =.55), and liking or affiliation (Bond = four items, current sample α =.70). Individual items were scored on a 0 (not at all) to 4 (to a very great extent) Likert scale. The WAI was modified so that the service provider made a single reference to all of his or her clients as a group. When provided with the prompt *“below are ways that describe ways a therapist might think or feel about his/her clients. Please respond to every item with your first overall impression of your clients,”* providers were asked to respond to a series of questions that included the stem “*my clients and I”* (e.g. *“My clients and I have built a mutual trust”*). While this more generalized adaptation may attenuate individual variability, it gives an indication of the service provider's judgment regarding his or her generalized level of working alliance.

Procedure

A program manager was contacted at each program, and the study was described in detail. Permission was sought to survey service providers who worked directly with youth and

families. Provider survey sessions were scheduled at the program site at a time designated by the program manager and surveys were administered to groups of providers. The project coordinator and/or a trained research assistant administered provider surveys and were available during the survey session to answer any questions that arose. Upon completion, providers handed in the survey packet to the administrator, who then checked the surveys for completeness. The respondent then completed any missing responses, if possible. Extra surveys were left for providers who were not in attendance at the survey sessions. Such surveys were either mailed back in a prepaid envelope or picked up by a research assistant. Participants received a verbal and written description of the study and informed consent was obtained prior to the survey. This study was approved by the appropriate institutional review boards.

Analyses

The influence of leadership on working alliance was estimated both directly and indirectly through organizational climate. As shown in Figure 1, the five MLQ subscales were used as indicators for the leadership latent variable, the three CSS subscales were used as indicators for the organizational climate latent variable, and the three WAI subscales were used as indicators for the working alliance latent variable. Because providers were nested within mental health programs resulting in potential dependency of responses within programs, multilevel SEM analyses were conducted to control for the effects of the nested data structure (Hedeker, Gibbons, & Davis, 1991; Raudenbush & Bryk, 2002; Snijders & Bosker, 1999). Goodness of fit of the overall model was evaluated through multiple approaches (Hu & Bentler, 1999; McDonald & Ho, 2002) including: the ratio of χ^2 to the degrees of freedom (good fit indicated by a ratio of 3 to 1 or smaller), the Comparative Fit Index (CFI; good fit indicated by scores greater than 0.95), and the Standardized Root Mean Squared Residual (SRMR; values less than 0.08 indicated good model fit). Mediation was tested using the distribution of the product of two random variables (MacKinnon, Fritz, Williams, & Lockwood, 2007; MacKinnon, Lockwood, & Williams, 2004). This method of significance testing is superior to non-resampling alternatives in terms of having greater Type I error rate accuracy and higher power (MacKinnon et al., 2007). The 95% two-tailed confidence intervals were estimated using PRODCLIN (MacKinnon et al., 2007). A confidence interval that does not include zero, (lower limit, upper limit), indicates statistically significant mediation. Analyses were conducted using Mplus v. 6 (Muthen & Muthen, 2010).

Results

Race/ethnicity of the 322 clinical and case management service providers was 64.8% Caucasian, 14.8% Hispanic, 7.1% African-American, 5.8% Asian-Pacific Islander, and 7.4% mixed-race or “other.” Eighty percent of respondents were full-time employees, and primary disciplines included marriage and family therapy (33.9%), social work (32.3%), psychology (22.4%), psychiatry (1.6%), and “other” (9.9%; e.g., criminology, drug rehabilitation, education, public health). Interns were less prevalent in the service system (24.9%) relative to fully employed staff (75.1%), and interns represented disciplines of marriage and family therapy (46.8%), social work (24.7%), psychology (20.8%), psychiatry (1.3%), and “other” (6.5%). Mean job-tenure for respondents was 2.58 (*SD* = 3.49) years working at their

present agency. The average caseload size was 16.70 (*SD* = 16.46). There was a wide range of reported caseload size with reports of 1-90 clients in a month. The median caseload size was 10. Table 1 shows the descriptive statistics for each of the variables used in the study out of a potential 0 to 4 scale, with higher mean scores signifying higher levels of each variable.

All indicators loaded significantly on their designated latent variable. Figure 1 shows a significant relationship between leadership and climate (β = .71), but no significant direct path from leadership to working alliance. There was also a significant path from climate to working alliance (β = .28) supporting the mediation hypothesis. The model showed good fit [$X^2(41) = 123.70$, $p < .001$, CFI = .95, SRMR = .04; $X^2/df = 3.0$]. Finally, the 95% two-tailed confidence intervals of the product of two random variables did not include zero, indicating statistically significant mediation.

Discussion

The proposed hypothesis supporting the relationships between transformational leadership, organizational climate, and working alliance was supported in the current study. Transformational leadership had a strong positive association with organizational climate, which in turn was positively associated with higher provider reported working alliance. As predicted, the relationship between transformational leadership and working alliance was fully mediated by organizational climate, suggesting that leaders who engage in transformational leadership behaviors were more likely to create an organizational environment characterized by a sense of fairness, growth and advancement, and role clarity. Positive organizational climate, in turn, supports providers developing a positive working alliance with their clients.

Working alliance as a measure of service quality has been posed in other studies as having a practical and meaningful relationship with outcomes in children's services (e.g., Noser & Bickman, 2000; Shirk & Karver, 2003). While beyond the purview of this study, the link between service quality and outcomes is critical. The data and results presented here add to our understanding of theoretical constraints on effective mental health service delivery for youth and the need to examine contextual factors in addition to treatment (i.e., intervention) and client level factors (e.g. demographics, disorder, etc.). This holistic approach views mental health services as an ecological context in which providers, as well as consumers, do well as a function of having the opportunity to grow and thrive.

Some limitations of the present study should be noted. First, the study was cross-sectional and therefore causality cannot be determined. Second, because the goal of this study was to examine potential mediation of transformational leadership by organizational climate, other variables that might also influence working alliance such as client and family characteristics were not examined. Third, our measure of working alliance was solely from the provider's perspective and constructed as a global construct rather than specific to each of a provider's clients. However, research has shown provider report of alliance to be as predictive as parent report and significantly more predictive than youth report of youth outcomes (Shirk & Karver, 2003). This global assessment technique, while more feasible due to practical

constraints in this study, may have limited variability. However, a provider's assessment of their alliance with clients in general provides key information regarding their impressions of overall relationships with clients. This study also took place in a public sector mental health service system and results may not generalize to other service sectors or workers. However, to the extent that workforce issues are common across service sectors and services types, these results may inform studies in those other sectors (Aarons, Hurlburt, et al., 2011). Finally, the data in these studies were collected during a different time period in mental health care, when requirements for caseload size of both clinician and supervisors may have been decreased from current standards. Such requirements may lead to increased stress and decreased functioning among mental health service workers and leaders. However, recent research has indicated the particular importance of strong leadership during times of change and distress (Aarons et al., 2011). As such, the importance of transformational leadership in creating a more positive, functional organizational climate may be even more relevant during the current mental health service context.

Mental health service organizations have a mission and a consumer base that is clearly different from that of most service industries. In addition, organizations providing services to children and adolescents have a unique consumer base relative to those providing adult services. Often, client resistance to involvement in services can affect the interactions of service providers and their clients. Therefore, it is critical to engage consumers in services and provide a sense of alliance and working together. The hurdles and potential benefits for developing an effective provider-consumer relationship are quite high in these organizations and further research should address additional organizational constraints on provision of effective services for youth.

There are a number of specific organizational interventions that may help to improve the quality of care for youth. For example, in a high stress job where each consumer brings unique challenges, supervisors could provide more intellectual stimulation, individual consideration, and inspirational motivation for clinical staff. Aspects of climate such as opportunities for growth and advancement, role clarity, and fairness could be improved by changes in program structure or process. Leaders can also improve their own skills in providing a workplace climate that will foster the development of provider-consumer relationships to help achieve positive outcomes for youths and families. Our challenge for the future is to determine what elements of leadership and organizational climate may have the greatest impact on service quality and outcomes and to engage organizations in improving leadership in order to enhance outcomes for children and families.

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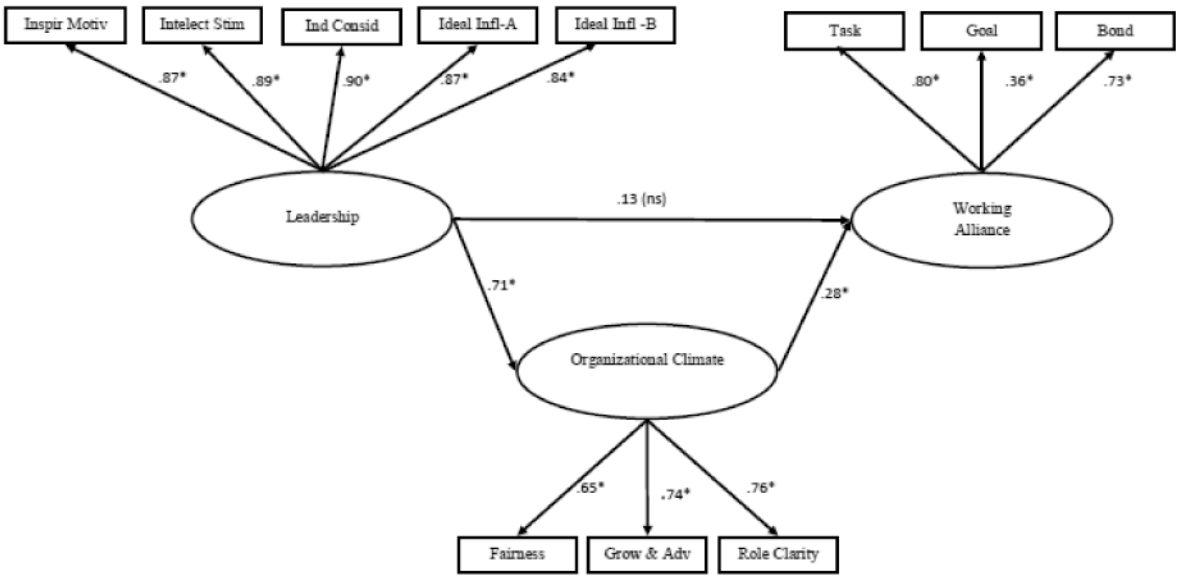

Figure 1. Structural Equation Model of the Mediation Effect of Organizational Climate on the Relationship between Transformational Leadership and Working Alliance

Note: [$X^2(41) = 123.70$, $p < .001$], CFI = .95, SRMR = .04; Inspir Motiv = Inspirational Motivation, Intelect Stim = Intellectual Stimulation, Ind Consid = Individual Consideration, Ideal Infl-A = Idealized Influence-Attributed, Ideal Infl-B = Idealized Influence-Behavioral, Grow & Adv = Growth and Advancement

Table 1

Descriptive statistics

	N	Mean	SD	Range
Transformational Leadership				
Individual Consideration	304	2.50	.95	0.00-4.00
Intellectual Stimulation	304	2.38	.87	0.00-4.00
Inspirational Motivation	304	2.58	.91	0.00-4.00
Idealized Influence - Behavior	304	2.30	.80	0.24-4.00
Idealized Influence - Attributed	304	2.47	.92	0.00-4.00
Organizational Climate				
Fairness	320	2.32	.77	0.00-4.00
Role Clarity	320	2.30	.81	0.00-4.00
Growth and Advancement	319	1.35	.86	0.00-4.00
Working Alliance				
Task	292	2.47	.56	1.00-4.00
Goal	291	2.01	.53	0.50-4.00
Bond	292	3.16	.57	0.67-4.00