ONE BIG HAPPY FAMILY: EXAMINING POSITIVE RELATIONSHIPS AT WORK

AS A DEVELOPMENTAL CLIMATE

by

#### HANNAH BURK SPELL

(Under the Direction of Lillian T. Eby)

#### **ABSTRACT**

This research investigates the influence of a work group's developmental climate on individuals' organizational commitment, engagement, and perceived competence and whether these attitudes mediate the relationship between developmental climate and employee turnover and performance. Developmental climate was measured using individual ratings of coworker and mentor support. The two support measures were group mean centered and aggregated for each location and used as latent indicators of the climate construct in a multilevel structural equation model. Developmental climate was positively related to all three individual attitude variables. Both organizational commitment and perceived competence demonstrated a mediating effect between developmental climate and turnover and performance, respectively. Theoretical implications, limitations, and future research are discussed.

INDEX WORDS: Developmental Climate, Positive Work Relationships, Mentoring, Coworker Support

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## HANNAH BURK SPELL

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## HANNAH BURK SPELL

Major Professor: Lillian T. Eby

Committee: Brian J. Hoffman

Robert J. Vandenberg

Electronic Version Approved:

Maureen Grasso Dean of the Graduate School The University of Georgia May 2013

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### CHAPTER 1

#### INTRODUCTION

Arguably, one of the most pervasive influences in one's work life are the relationships with those with which one works. Organizational scholarship has supported this notion in recent years with a focus on the importance of relationships within the work environment (e.g., Chiaburu & Harrison, 2008; Dutton & Heaphy, 2003; Dutton & Ragins, 2007; Eby & Allen, 2012; Ferris, Liden, Munyon, Summer, Basik, & Buckley 2009; Higgins & Kram, 2001; Kahn, 2007). This research underscores the importance of examining relational dynamics in the work environment and the need to put relationships at work in the center of organizational study. Research on positive work relationships, developmental networks, mentoring, and coworker relationships, acknowledges that individuals can receive developmental support from multiple sources, such as mentors, supervisors, and coworkers or peers (Allen & Finklestein, 2003; Chiaburu & Harrison, 2008; Eby, 1997; Higgins, 2000; Higgins & Kram, 2001; Kahn, 2007; Ragins & Dutton, 2007).

Research on work relationships demonstrates that they can influence employee turnover and performance, but the mechanisms by which developmental support at work relates to these outcomes is not well understood. In addition, little research has examined the combined influence of more than one source of developmental support. Further, no research to date has considered the climate that may be present when a work group experiences positive relationships with both their supervisor and coworkers. When

individuals in the same work environment experience positive relationships with their supervisors and coworkers, it may create a developmental climate, which may offer a host of positive outcomes for those involved. Because of the influence that the social environment can have on the individuals within it (O'Reilly & Caldwell, 1979; Salancik & Pfeffer, 1978; White & Mitchell, 1979), a developmental climate may uniquely influence individuals' attitudes and behavior.

This research addresses the need for multilevel research in the areas of positive organizational scholarship and developmental relationships. While there is a breadth of theory and support for the influence of positive relationships on individuals, there is scant theory or research on how the mutual experience of positive relationships within a work group may foster a developmental climate or on the potential impact this type of environment could have on the individuals within it. While this may not necessarily be a limitation of the existing literature, it provides an opportunity to examine these constructs across levels of analysis, allowing for new ideas to be developed and tested. Thus, the purpose of the current research is to addresses these gaps by examining shared perceptions of positive relationships at work and how this developmental climate may influence the individuals within the group. As depicted in Figure 1, it is proposed that two types of developmental support provided by supervisors and coworkers (mentoring support and coworker support) create a developmental climate. Further, as shown in Figure 1, it is proposed that this developmental climate will indirectly predict individual turnover and performance, as mediated by organizational commitment, engagement (Kahn, 2007), and perceived competence (Dutton & Heaphy, 2003).

#### **Influence of the Social Context**

It has been argued that the "people make the place" (Schneider, 1987). An organization is a function of the characteristics of the individuals within it and that these individuals drive organizational behavior. As such, researchers need to take into account the social context in which work occurs and consider how this influences individual attitudes and behaviors (Salancik & Pfeffer, 1978). Salancik and Pfeffer use social information processing theory to assert that people's realities are formed by their beliefs about their past and present actions and that these beliefs are shaped by the information they receive from their social environment. In effect, the social context provides information about how individuals should think and what the norms and expectations are in a given environment. As such, the social environment's norms and expectations may drive an individual's attitudes and behaviors.

Salancik and Pfeffer (1978) put forth two ways in which the social environment affects attitudes and behaviors. First, it provides meaning through guiding socially acceptable beliefs, attitudes, and reasons for actions. Second, it focuses individuals' attention on information that provides expectations for the consequences of behaviors. Put simply, individuals learn the values and behavioral norms of a given environment by interacting with others. In turn, the social context affects individuals' attitudes and behaviors by providing cues and meaning about what is accepted and required. Of particular importance to the present study, Salancik and Pfeffer argue that the social context provides information that is different from that gained from examining individual effects in isolation.

Salancik and Pfeffer (1978) discuss the influence of social context on the study of job attitudes and organizational climate. Early work on the influence of social context on job attitudes found support for the notion that social context (e.g., organizational characteristics, group affiliation) predicted individual outcomes more strongly than individual characteristics alone (Herman & Hulin, 1972; O'Reilly & Roberts, 1975). Although Salancik and Pfeffer note that these studies may not have measured the best organizational or individual level variables to draw specific conclusions regarding job attitudes, as work in this area continued, more support was found for the influence of social contextual factors on individual attitudes about one's work. For instance, researchers found that individual perceptions of tasks and one's job were influenced both directly and indirectly by social affective cues (O'Reilly & Caldwell, 1979, 1985; White & Mitchell, 1979). Related research on social-system factors found that aspects of the social environment including group cohesion and communication climate influenced employees' work attitudes (Steel, Shane, & Kennedy, 1990). More recently, Vissar and Mirabile (2004) demonstrated that individual attitude strength is influenced by social context. They found that when a work group was more attitudinally cohesive (in agreement in their attitudes towards work) individual attitudes were stronger. This is consistent with work on psychological climate which requires agreement among group members to form a climate, which then may influence individual attitudes and behaviors (Clarke, 2006; Naumann & Bennett, 2000; Seibert, Silver, & Randolph, 2004).

### **Organizational Climates**

Even before Schneider's (1987) assertion that it is the people, not the environment or the organizational structure, that shape the way an organization's members behave,

research demonstrated that group influence can be strong enough to make one disregard his or her own judgment and conform to the group expectations (cf. Deutch & Gerard, 1955). Although conformity may be an extreme example of group influence on individuals, it underscores the power that groups have on shaping the attitudes and behaviors of the individuals within them, over and above individual perceptions and beliefs. Research on psychological climate also focuses on the impact shared perceptions can have on an organization, the work group, and most relevant to the present research, individuals.

When a group of individuals have shared experiences at work, it can create a work group climate (James & Jones, 1974; Schneider & Reichers, 1983). One way in which climate is said to form is by social interaction, which leads to shared behavioral norms (Schneider & Reichers, 1983). Schneider (1975) argued that based on Gestalt psychology, individuals seek to make sense of their environments by using cues and inferences from those around them. Gestalt psychology asserts that humans are driven to create order or to make sense of their environments, and they use information or cues from their immediate environments to do so (cf. Schneider, 1975). An organizational climate can provide cues that tell employees what behaviors are expected and appropriate as well as encourage employees to engage in those behaviors (Bowen & Ostroff, 2004). In the work environment, coworkers and supervisors provide much of the basis for these cues and inferences, as these are the individuals with which one most often spends time at work.

Research on psychological climate asserts that organizations may have more than one climate operating at any one time (Schneider, 1975; James & Jones, 1974; Parker,

Baltes, Young, Huff, Altmann, Lacost, & Roberts, 2003). Schneider (1975) suggests that climate researchers should chose dimensions that are salient to each study of interest. In other words, researchers should not assess an arbitrary general climate but a climate that is specific to some aspect of the work environment. For example, if a researcher is interested in a climate for customer service, he or she would determine what dimensions specific to enhancing or supporting customer service would comprise this particular climate. Most recent climate research has advanced in this way; there is research examining safety climates (Clarke, 2006), empowerment climate (Seibert, Silver, & Randolph, 2004), and justice climate (Naumann & Bennett, 2000), to name a few.

For the present research, the climate of interest is a developmental climate.

Because positive relationships with supervisors and coworkers have been shown to offer employees numerous benefits (Allen, Eby, Poteet, Lentz, & Lima, 2004; Dutton & Ragins, 2007; Eby et al., 2012; Higgins & Kram, 2001), these relationships will be examined as indicators of a developmental climate. Specifically, developmental climate is defined as a shared perception among individuals within a work group regarding the extent to which they are receiving mentoring support from their supervisors and coworker support from their peers. It is predicted that a social context where leaders and coworkers are exhibiting developmental support may send cues to work group members about the valued behaviors in the organization and serve to create a developmental climate that fosters positive outcomes for the individuals within it.

### A Positive Psychology Perspective on Relationships at Work

Theories of positive psychology focus on explaining states of abundance rather than explaining states of deficiency for various outcomes or psychological phenomena

(Cameron, Dutton, & Quinn, 2003). Common misconceptions of positive psychology are that this area of study has a "Pollyanna" view of the world and ignores the negative side of life (Gable & Haidt, 2005, p.107); however, this is inaccurate. Positive psychology does not seek to discount the examination of dysfunction, stress, or pathology, but rather to bolster this knowledge with new information about positive human functioning, in a way that can complement existing knowledge. Put another way, "positive psychology is the study of the conditions and processes that contribute to the flourishing or optimal functioning of people, groups, and institutions" (Gable & Haidt, 2005, p.104). Further, positive psychology views relationships as a central source of life satisfaction, enrichment, development, and personal growth (Ragins & Dutton, 2007).

From this focus on positive aspects of psychological research has come positive organizational scholarship, which takes the notions of positive psychology in general, and turns that lens on organizational study. Optimal functioning in terms of an organizational context may include increases in individuals' commitment to the organization or job, high levels of employee engagement, high individual performance, or reduced turnover. Positive organizational scholarship is concerned with the study of especially positive outcomes, processes, and attributes of organizations and their members (Cameron, Dutton, & Quinn, 2003), such as engagement (Kahn, 2007), development, and performance (Ragins & Dutton, 2007). Like positive psychology, positive organizational scholarship does not discount the examination of negative factors in organizational life; rather, it emphasizes examination of factors that lead to positive outcomes (Cameron, et al., 2003). Moreover, positive organizational scholarship aims to "develop rigorous,"

systematic, and theory-based foundations for positive phenomena" at work (Cameron, et al., 2003, p.6).

One stream of positive organizational scholarship takes a positive psychology view of relationships and examines them in the context of organizations (cf. Ragins & Dutton, 2007). Positive relationships at work can exist at the dyadic, team, or organizational levels. A positive sociological lens suggests that certain patterns of relationships are more generative, enriching, and enhancing than others (Ragins & Dutton). Ragins and Dutton posit that consistent performance and individual development are dependent on the quality of relationships between people at work. Moreover, the emerging research on positive work relationships recognizes that any given relationship one has is affected by resources obtained from other relationships (Higgins & Kram, 2001; Kahn, 2007; Ragins & Verbos, 2007). This is important because it emphasizes that relationships do not exist in isolation, they occur within a shared context and even influence other relationships by providing experience or resources that an individual can use in relationships with others (Dutton & Heaphy, 2003). As such, an examination of the potential for these developmental relationships within a work group to create a developmental climate is warranted.

Need for a multilevel examination. Although recent work has begun to examine positive relationships at work, much is left to examine. Specifically, one call made by Cameron and colleagues (2003) is to examine the level of analysis at which these phenomena occur. Higgins and Kram (2001) also note that research on developmental networks needs to employ multilevel analysis to further examine the influences of these types of relationships. Multilevel analysis can provide information on the way constructs

relate to different levels within an organization, such as individuals, groups, and the organization as a whole. As such, it can yield great value to individuals and organizations alike, particularly those organizations that are interested in building a culture that will foster developmental climates.

"The primary goal of a multilevel perspective in organizational sciences is to identify principles that enable a more integrated understanding of phenomena that unfold across levels in organizations" (Kozlowski & Klein, 2000, p. 7). Organizational research can take two different approaches to examine organizational phenomena, a micro or a macro focus. A micro focus hones in on individual-level differences and neglects the impact of contextual factors; whereas a macro focus hones in on organizational-level phenomenon and neglects the influence of individual behavior, affect, and perceptions that often drive higher level phenomena (Kozlowski & Klein). Thus, to get a complete and accurate picture of organizational behavior, both micro and macro level phenomena need to be examined. Moreover, when macro researchers attempt to draw conclusions about individual-level outcomes based on organization level phenomena, or when researchers take individual level findings and attempt to generalize them at the organizational or macro level, they risk making misspecification errors. Even when these cross-level inferences appear reasonable and likely, they are not statistically supported by a single-level analysis and are just speculation of what may likely be occurring at a different level. In order to truly account for cross-level effects, research must take into account phenomena at multiple organizational levels.

Numerous studies have focused on individual-level benefits and outcomes of relationships at work such as mentoring (Allen et al., 2004; Eby et al., 2012) and

coworker support (for a review, see Chiaburu & Harrison, 2008). However, relationships may certainly be impacted by higher level factors such as unit supervisors or organizational policies. Yet, little to no research exists in which mentoring or coworker support is examined as a group-level phenomenon (for an exception, see Allen, Smith, Mael, O'Shea, & Eby, 2009). In fact, several researchers have called for a multilevel examination of mentoring relationships (Cameron et al., 2003; Eby, 2012; Higgins & Kram, 2001) as well as coworker relationships (Chiaburu & Harrison, 2008). Taking this a step further, the present research seeks to examine the influence of both mentoring and coworker support simultaneously at the group level as a developmental climate and the influence of this climate on individual level outcomes (see Figure 1).

Other areas of study have tackled the challenge to conduct research across levels of analysis and their work can inform developmental climate research. Organizational researchers examine climate as a function of aggregate individual perceptions of a work group and assess the influence of these climate constructs on individual-level outcomes. Specifically, research on justice climates (Naumann & Bennett, 2000), positive safety climates (Clarke, 2006), high employee involvement climates (Riordan, Vandenberg, & Richardson, 2005), positive communication climates (Steel, et al., 1990), and positive ethical climates (Jaramillio, Mulki, & Solomon, 2006) can lend insight into the influence of group-level climate perceptions on individual-level outcomes. Coupling this approach with research on positive work relationships at the individual level can inform research on developmental climates.

Several theories on positive relational phenomena have been put forth, including: high-quality connections, developmental networks, relationship constellations, and

positive organizational network analysis. These theories can inform research on developmental climates and offer insights into the potential dynamics that may occur in a work environment when employees are mutually experiencing developmental support from their supervisors and coworkers. Further, these theories on developmental relationships at work can provide the starting point with which to consider what types of individual-level outcomes may be associated with a strong developmental climate.

High quality connections. At the most positive end of the relationship spectrum, developmental relationships have been referred to as High Quality Connections (HQC; Dutton & Heaphy, 2003). Dutton and Heaphy (2003) discuss HQCs as a function of the quality of a connection between people, where connections are defined as the dynamic interaction between two people when there is contact "involving mutual awareness and social interaction" (Dutton & Heaphy, p. 264). Dutton and Heaphy define quality using three indicators: higher emotional carrying capacity, tensility, and degree of connectivity. In short, the quality of a connection between two people is a function of emotional expression, ability to withstand strain, and the generativity of the connection. HQCs can occur between individuals at various levels in an organization, such as within supervisor-subordinate dyads and peer or coworker relationships.

Dutton and Heaphy (2003) discuss HQCs in terms of how they offer opportunity for exchange of resources, development of identity, personal growth and development, and learning. Borrowing from social exchange theory, HQCs are said to flourish through the exchange of resources between members. In the context of a leader-subordinate relationship, an exchange can occur when an individual receives development from a leader, and the leader then receives greater commitment and higher effort from the

subordinate (Dutton & Heaphy). Additionally, HQCs offer connections that allow for developing identities at work that are valued by other organizational members. This suggests that HQCs can provide a psychologically safe space for individuals to feel they can try new things and learn about their own identities at work. When one feels they have an identity at work they may in turn feel more meaningfully connected to their work and organization (Dutton & Heaphy). Being meaningfully connected to work has been discussed in other research as an antecedent to organizational commitment (Mathieu & Hamel, 1989) and engagement at work (Kahn, 1990).

Dutton and Heaphy (2003) posit that connections with others are fundamental to development and growth. They use a mentoring relationship as a prime example of an HQC where growth and development is a central goal. They note that in a mentoring relationship, it is the HQC between a protégé and a mentor that creates an environment where the protégé can grow and develop through the mentoring functions provided by the mentor and where the mentor also benefits from positive experiences with the protégé. It follows that HQCs between coworkers would similarly experience mutual benefit. Moreover, Dutton and Heaphy develop two theoretical explanations to describe how HQCs positively influence learning. First, HQCs serve as conduit to transfer knowledge from one person to another. Second, that knowledge is established through interaction between people. HQCs provide an environment which enable people to learn and enable competence in their work roles. Further, when others have become relationally competent, they can help to create environments where HQCs are fostered and thus create effective learning situations (Dutton & Heaphy). Taken together, these views of HQCs demonstrate how HQCs can provide individuals with developmental support and suggest

that this developmental support may be important to understanding individuals' work attitudes and outcomes.

Developmental networks. Higgins and Kram (2001) brought forth the idea of developmental networks as a new way to examine mentoring. They argue that mentoring can be provided by a variety of sources during one's career—friends, peers, coworkers, supervisors, or even individuals outside one's current organization. Higgins and Kram define a developmental network as "the set of people a protégé names as taking an active interest in and action to advance the protégé's career by providing developmental assistance" (p. 268). Higgins and Kram utilize social network theory to support their idea that mentoring can come from a variety of relationships in one's developmental network. The relationships that make up one's developmental network are those relationships, no matter who they are with, that provide instrumental and psychosocial support. Moreover, these other sources of support may be just as important as a traditional mentor in terms of providing developmental support.

Of Higgins and Kram's (2001) four typologies of developmental relationships, the traditional developmental network is most relevant to the present research. In this type of developmental network, the developers are within one's organization and the connections are strong between relational partners. Further, because the relationships are contained within the same social system, it is likely that they will be interrelated and may provide similar information and support regarding aspects of one's work context (Higgins & Kram). Higgins and Kram propose that traditional networks would positively impact personal learning and organizational commitment. Personal learning is an umbrella term used to describe several aspects of learning including increased competence in one's

work role. In sum, one's developmental network provides resources and support from various developmental partners to positively impact his or her work outcomes. In particular for a traditional developmental network, are the outcomes of learning (which includes perceived competence) and organizational commitment.

Relationship constellations. In line with developmental networks, a similar idea of positive relationships at work is offered by Kahn (2007) regarding relationship constellations at work. Kahn defines relationship constellations as the "entire set of relations that organization members draw on to meet their various needs" (p. 195). Kahn discusses relationship constellations through the examination of positive relationships. He defines positive relationships as those that provide meaningful connections to others that can serve to make one feel supported, helped, and understood.

Kahn offers five dimensions of meaningful connections: task accomplishment, career development, sense making, provision of meaning, and personal support. Some of these dimensions offer more instrumental connections, such as task accomplishment and career development, while others are more affective in nature, such as sense making, provision of meaning, and personal support. This is not unlike mentoring dimensions of instrumental support and psychosocial support. In fact, in Kahn's descriptions of his five dimensions he mentions several of the sub-dimensions of mentoring as comprising the dimensions of meaningful connections. For example, for career development, he notes that when the relationship is a hierarchical one, the superior can offer opportunity for visibility, challenge, and promotion. This aligns with several of the mentoring dimensions that fall under instrumental support – visibility and exposure, and challenging assignments. Kahn (2007) also notes that with each of his five dimensions of meaningful

connections, these can take place in a hierarchical relationship such as with a supervisor, or in a nonhierarchical relationship such as with a peer or coworker.

Kahn argues that an examination of relationship constellations provides insights into positive relationships at work as a fundamental source of people's attachments and engagement at work. Kahn notes that research on satisfaction, commitment, performance, and turnover often find that relationships at work play a role in theses outcomes; however, relationships are often just one of many variables considered and are rarely, if ever, put at the forefront of research on these issues. Kahn argues that this is a mistake because it is relationships at work that shape one's work experiences and should be considered as a primary factor in organizational studies.

Positive organizational network analysis. Positive organizational network analysis (PONA) focuses on how networks of positive relationships influence individual outcomes (Baker, Cross, & Wooten, 2003). Specifically, PONA overlaps positive organizational scholarship's focus on relationships and extraordinary performance with organizational network analysis' theories on social structure and analytical methods. The theory of PONA puts forth some interesting ideas regarding relationships at work. In particular is the suggestion that the network of individuals that one has at work can influence individual and group outcomes over and above other factors, such as organizational or structural characteristics. This is consistent with work on the influence of social context which asserts that the social environment plays a primary role in shaping ones experiences (Salancik & Pfeffer, 1978).

From these four perspectives on positive relationships at work, several important conclusions can be reached. First, when relationships between people are positive, or of

high-quality, the relationship can provide an exchange of valued resources (Dutton & Heaphy, 2003), an environment where one feels safe to express ideas and learn new skills and knowledge (Dutton & Heaphy; Higgins & Kram, 2001), and it may foster a sense of engagement and attachment to work (Kahn, 2007). Second, relationships do not occur in isolation; they exist within a broader social context and can provide resources that are useful in other relationships (Higgins & Kram, 2001; Kahn, 2007; Ragins & Verbos, 2007). In fact, Eby and colleagues (2012) found that the amount of support one had from other individuals (e.g., family, coworkers) was positively related to receipt of mentoring. They posit that perhaps the more relational experience one has, the better able he or she is to leverage other relationships to gain resources and assistance. In other words, being in a positive relationship with one person can provide relational experience that aids in more positive outcomes from other relationships. These ideas form a solid base from which to begin examining how these relationships may function as a developmental climate.

## **Positive Relationships at Work Creating Developmental Climates**

From climate research, we know that if there is agreement among individuals within a work group on certain aspects of their work environment, (e.g., receipt of supervisory mentoring or supportive coworkers), then a climate is present (James & Jones, 1974; Salancik & Pfeffer, 1978; Schneider & Reichers, 1983). Thus, if group members indicate that they are all experiencing positive supervisory behaviors (i.e., receiving mentoring support) and that they are experiencing positive relationships with their coworkers (i.e., have high levels of coworker support), their shared experiences may create a climate of developmental support. In turn, this developmental climate may relate

to individual work attitudes, turnover, and performance over and above individual-level relational experiences.

Two main sources for advice and support in an organization can come from relationships with supervisors and coworkers. One likely spends a majority of his or her working experience with an immediate supervisor and fellow coworkers. As such, it is likely that these relationships have the potential to exert a large influence over one's experiences at work. Further, research suggests that these two types of relationships can provide both psychosocial and instrumental support. Following the notions of Dutton and Ragins (2007), not only would these relationships play an important role in one's work experience, they may be the most influential factor.

Supervisory mentoring. Ferris and colleagues (2009) note that in employee – organization relationship research, the entity with which the employee interacts becomes the referent for their perceptions of the organization as a whole. Most often the immediate supervisor is the entity that employees most frequently interact with and becomes this organizational referent. As such, the immediate supervisor become especially important because they can shape the psychological contract the employee has with the organization, which in turn can influence the individual's commitment and efforts (Ferris et al., 2009). When the supervisor provides mentoring support to a subordinate, the dyadic relationship may be enhanced through the provision of a deeper level of supervisory support (Ferris et al.).

Mentoring research defines mentoring support as having two broad dimensions: instrumental support and psychosocial support (Kram, 1985). Instrumental mentoring support encompasses exposure and visibility, sponsorship, coaching, protection, and

challenging assignments (Ragins & McFarlin, 1990). Instrumental support is aimed at goal attainment though task-related advice and support (Higgins & Kram, 2001; Kram 1985). Psychosocial mentoring support encompasses friendship, counseling, acceptance, and role-modeling (Ragins & McFarlin). Psychosocial support is aimed at personal and emotional development of the protégé (Kram, 1985). Together, these two types of support have been found to offer a host of positive outcomes for protégés (Allen et al., 2004; Eby, et al., 2012).

Coworker support. Peers at work can have similar influences as mentors or leaders via instrumental and psychosocial types of support (Chiaburu & Harrison, 2008; Kram & Isabella, 1985). This is not surprising considering the amount of time spent with coworkers. Research demonstrates that coworkers can influence a range of employee outcomes. For example, greater coworker support is related to lower stress (Viswesvaran, Sanchez, & Fischer, 1999) and burnout (Halbesleben, 2006), and more positive work attitudes (Tepper, Duffy, Hoobler, & Ensley, 2004; Duffy, Ganster, & Pagon 2002).

Chiaburu and Harrison (2008) conducted a meta-analysis and found that coworkers had unique influences on fellow employees even when controlling for the effects of leader influence. Moreover, it was found that coworkers influenced employees' work attitudes which in turn influenced more distal employee outcomes, such as performance. Further, they found that coworker support was more influential on employee attitudes than was coworker antagonism, indicating that positive coworker relationships can exude a powerful influence even over negative relational experiences.

Research demonstrates the positive outcomes of mentoring support and coworker support to individuals (Allen et al., 2004; Chiaburu & Harrison, 2008; Eby et al., 2008,

2012; Halbesleben, 2006; Viswesvaran, et al., 1999). Research also suggests that resources from one relationship can be used as resources in other relationships (Eby et al., 2012; Higgins & Kram, 2001; Kahn, 2007; Ragins & Verbos, 2007). Consequently, when a developmental climate is operating, individuals within the work group may be sharing their relational resources via developmental support, thereby positively impacting individual outcomes. For example, a supervisor or coworker may provide an individual with task-related knowledge that he or she could then relay to a coworker as a resource in the supportive coworker relationship. In line with this idea of shared resources, new lines of research concerning positive relationships at work, such as developmental networks, relationship constellations, and high quality connections, emphasize the need to examine multiple types of relationships simultaneously on individuals' outcomes. Further, a call for multilevel research to more accurately assess the functioning of organizational phenomena within the work context necessitates the examination of these relationships at the group level and the impact of group perceptions on individual-level outcomes.

## **Developmental Climates, Turnover, and Performance**

Consistent with social exchange theory, when an individual receives developmental support from a supervisor or coworker, he or she has a felt obligation to reciprocate (Dutton & Heaphy, 2003). For employees, reciprocation for developmental support may be via job performance and remaining with the organization. Recently, Kraimer and colleagues (2011) examined perceptions of organizational support for developmental on employee turnover and performance and found that while developmental support is associated with turnover and performance, none of the direct effects were significant. Additionally, although research on mentoring (Allen et al., 2004;

Eby, et al., 2012) and coworker relationships (Chiraburu & Harrison, 2008) has shown associations with both turnover and performance, the mechanisms responsible for these effects are not well understood. In fact, recent meta-analyses indicate that there are likely various mediators of these associations (Chiraburu & Harrison, 2008; Eby, et al., 2012). Moreover, almost all existing research is at the individual level and does not consider the influence of group dynamics. Thus, the developmental climate that may be present when a work group experiences these types of relationships should be considered.

In line with the need to examine the mechanisms driving the associations of developmental relationships with turnover and performance, climate research has begun to examine various indirect influences of climate on these outcomes. While considerable climate research shows relationships among climate and employee turnover and performance, these relationships are often not direct. Most often, this research suggests attitudinal variables as the conduit between climate perceptions and outcomes such as turnover and performance (Clarke, 2006; Riordan, Vandenberg, & Richardson, 2005; Naumann & Bennett, 2000; Steel & Shane, 1990; Jaramillio, Mulki, & Solomon, 2006). Although the content of other climate research is not relationships, this research supports climate-outcome models where climate influences attitudes and these attitudes influence turnover and performance (Clarke, 2006; Jaramillo et al., 2006; Riordan et al., 2005). In terms of a developmental climate, research on developmental relationships, even at the individual level, can inform the potential attitudinal mediators of the relationship between a developmental climate and employee turnover and performance.

# Attitudinal Mediators Linking Developmental Climate to Turnover and Performance

A developmental climate provides instrumental and psychosocial support from supervisory mentors and coworkers. It has been suggested that these types of developmental support are associated with increased attachment or commitment to the organization (Graen, Liden, Hoel, 1982; Higgins & Kram, 2001; Kahn, 2007), increased engagement (Kahn, 2007), and greater perceived competence (Higgins & Kram, 2001) at the individual level of analysis. Moreover, these attitudes are related to outcomes such as turnover and performance. As such, these attitudes will be examined as potential mediators of the association between developmental climate and turnover and performance.

Organizational commitment. Researchers assert that the network of positive relationships one has at work serve to attach people to their organization (Graen, Liden, Hoel, 1982; Higgins & Kram, 2001; Kahn, 2007). Kahn states that attachments reflect both a psychological attachment (i.e., felt commitment) and a literal attachment (i.e., staying or leaving the organization). Several researchers suggest that when people experience "being supported, mentored, helped, developed, and invested in by others," they are enabled to feel attachment (e.g., organizational commitment) (Kahn, p. 199). Consistent with these suggestions, Eby and colleagues (2012) found that psychosocial support and instrumental support were related to feelings of affiliation and commitment. They proposed that following social exchange theory, this may be due in part to the support and positive affectivity from the mentoring relationship, which may generate feelings of obligation to reciprocate. This sense of reciprocity may in turn manifest in

feelings of attachment to the social context in which the mentoring relationship takes place (e.g., the organization). Extending this logic to the work group level, in an environment where there is the shared experience of positive developmental relationships with both supervisors and coworkers (i.e., a developmental climate is present) attachment to the organization may be strengthened (Salancik & Pfeffer, 1978). Thus, it is hypothesized that:

H1: Shared perceptions of developmental climate will be positively related to individual-level organizational commitment.

Feelings of attachment, conceptualized as organizational commitment, are related to lower turnover (Meyer, Stanley, Herscovitch, &Toplyntsky, 2001). In fact, although mentoring research has supported a relationship between mentoring and turnover (Lankau & Scandura, 2002), researchers acknowledge that there are likely mediating factors that explain how or why this relationship exists. In one examination of a potential mediator to the mentoring-turnover relationship, research demonstrated that affective commitment partially mediated the relationship between mentoring and actual turnover (Payne & Huffman, 2005). Similarly, Chiaburu and Harrison (2008) demonstrated that coworker support was positively related to organizational commitment and negatively related to turnover. Because research demonstrates that developmental support is associated with attachment (Eby et al., 2012) and that attachment leads to reduced turnover (Meyer, et al., 2001), it follows that attachment, as organizational commitment, operates as a mediating mechanism between developmental climate and turnover. Thus, it is hypothesized that:

H2: Individual-level organizational commitment will fully mediate the negative relationship between shared perceptions of developmental climate and individual voluntary turnover.

Engagement. Kahn (2007) theorizes that one of the main outcomes of relationship constellations at work is the creation of a sense of engagement. Engagement is defined as an affective or "positive, fulfilling state of mind, most commonly characterized by vigor, dedication, and absorption" (Schaufeli, Salanova, Gonzalez-Roma, & Bakker, 2002, p.74). Vigor is high energy that is invested in work performance, dedication is defined as strong involvement in work that creates feelings of pride and inspiration, and absorption is characterized as a state of engrossment in work from which it is difficult to detach (Halbesleben & Wheeler, 2008).

Engagement is often characterized as a relatively stable affective state that can change according to job conditions, such as provision of resources (Christian, Garza, & Slaughter, 2011; Schaufeli & Bakker, 2004). Kahn (2007) proposed that an important resource driving work experiences is the set of relationships one has at work. Consistent with this assertion, engagement is related to social support and leadership behavior (Christen et al., 2011). Moreover, social support from supervisors and colleagues, performance feedback, and supervisory coaching are also positively related to engagement (Bakker, Schaufeli, Leiter, & Teris, 2008; Halbesleben, 2010; Schaufeli & Bakker, 2004). These antecedents to engagement are captured in the provision of supervisory mentoring and coworker support. From research on social environment and climate, it is understood that the shared experiences of a social setting can influence the individuals within that environment (Salancik & Pfeffer, 1978; James & Jones, 1974).

Thus, shared experiences of social support through a developmental climate may be related to individual feelings of engagement. It is hypothesized that:

H3: Shared perceptions of developmental climate will be positively related to individual-level engagement.

Engagement is also negatively related to intentions to leave (Crawford, LePine, Rich, 2010; cf. Halbesleben & Wheeler, 2008; Harter, Schmidt, & Hayes, 2002).

Engagement is theorized as a predictor of intentions to leave because engaged individuals experience positive affective reactions to their organization, such as feelings of investment and dedication to one's work (Halbesleben & Wheeler, 2008). Engagement is theoretically and empirically linked to job performance (Christian et al., 2008; Rich, LePine, & Crawford, 2010) because engaged employees "work hard (vigor), are involved (dedication), and feel happily engrossed (absorbed)" (Bakker, et al., 2008, p. 190).

Finally, engagement may influence performance through the provision of positive feelings regarding one's work. Taken with hypothesis three, this suggests that engagement will mediate the relationships between group-level experiences of developmental climate and the outcomes of turnover and performance. Specifically:

H4: Individual-level engagement will fully mediate the negative relationship between shared perceptions of developmental climate and individual voluntary turnover.

H5: Individual-level engagement will fully mediate the positive relationship between shared perceptions of developmental climate and individual performance.

Perceived competence. Perceived competence is the perception that one has the skills and abilities to perform his or her job and is synonymous with self-efficacy (Spreitzer, 1995). Perceived competence, or self-efficacy, is different from self-esteem in that it is not considered a stable trait, but rather an attitude that can be shaped by work experiences (Thomas & Velthouse, 1990). As such, perceived competence can be positively influenced by several factors, including provision of knowledge and resources as well as perceptions of support (Robins, Crino, & Fredendall, 2002). In Higgins and Kram's (2001) traditional developmental network, they suggest that this type of network may be positively related to personal learning, which encompasses increased perceptions of competence. The level of information sharing and perceptions of support in the organizational context can influence feelings of competence (Robins, et al., 2002). In a developmental climate, there may be a high level of information sharing and support because individuals would have supportive relationships with both supervisors and coworkers.

Psychosocial support is also related to perceptions of competence by providing individuals with a safe space to explore and learn new ideas and skills (Dutton & Heaphy, 2003). Psychosocial support coupled with instrumental support, which directly influences learning new skills and knowledge about one's job, may serve to build a "can-do' spirit in individuals. In other words, if individuals feel they are learning new skills and have adequate support, they may also experience greater confidence in their abilities to perform (Dutton & Heaphy, 2003). Thomas and Velthouse (1990) provide a cognitive model of empowerment in which they discuss environmental events as precursors to individual assessments about the work role. They suggest that supervisors and peers

provide input that impacts individuals' assessments, and could be an important factor in assessments of competence in task roles. When the work group is experiencing shared developmental support, and thus sharing information and knowledge, this newly learned knowledge and skills may increase perceptions of competence in performing one's job. Thus, a developmental climate may influence individual perceived competence in their job by the provision of shared resources among the group. Specifically, it is hypothesized that:

H6: Shared perceptions of developmental climate will be positively related to individual-level perceived competence.

If individuals are receiving developmental support they are likely learning and building competence in their job role. This should translate into enhanced job performance. Research has supported this notion, demonstrating that perceived competence is positively related to higher performance (Locke, Frederick, Lee, Bobko, 1984). This also follows Thomas and Velthouse's (1990) model of empowerment whereby individuals experience environmental events, make assessments, and act on those assessments to drive behavior. For example, environmental events (e.g., input from supervisors and peers) provide individuals with information which influences their assessments, such as perceptions of competence, and in turn, drive subsequent behavior, such as task performance. Additionally, Kraimer and colleagues (2011) note that one potential explanation for the association between developmental support and performance is that developmental support builds skills and competencies that lead to increased job performance. Although they did not test this hypothesis, only controlled for it in their model, it remained a significant variable in all three steps of their analysis, suggesting it

may play an important role in the relationship between developmental support and performance.

Following Bandura's work on self-efficacy, Thomas and Velthouse (1990) suggest that when individuals experience greater perceived competence, or self-efficacy, they may exhibit greater effort and commitment to role tasks, thereby increasing their performance. Moreover, when supervisors have higher expectations about subordinates (as may be the case when they are engaged in mentoring relationships), they instill higher self-expectancy in the subordinates (Eden, 1984). Research on the effects of the selffulfilling prophecy demonstrates that when self-expectancy is high, individual performance is high as well (Eden & Ravid, 1982; Zanna, Sheras, Cooper, & Shaw, 1975). Thomas and Velthouse also discuss the self-fulfilling prophecy in their model as providing the basis of "self-reinforcing cycles" whereby positive assessments, such as high competence leading to higher performance can further enhance the effects of positive perceived competence (p.673). As such, a shared developmental climate may predict individual feelings of competence that may operate by way of the self-fulfilling prophecy to increase performance. Thus, it is hypothesized that perceived competence will mediate the relationship between developmental climate and individual performance. Specifically,

H7: Individual-level perceived competence will fully mediate the positive relationship between shared perceptions of developmental climate and individual performance.

### **METHODS**

# Sample

Data for this study were obtained by paper and pencil surveys administered to counselors and their clinical supervisors in substance abuse treatment facilities across the United States. A subset of a larger sample was selected for the present study. To be selected for the subset, only counselors with performance ratings from their supervisors were selected in order to utilize supervisor-rated performance as the performance outcome metric. Also, counselors in locations that had less than three total counselors were not included because of the multilevel analysis plan, which requires a minimum number of individuals to aggregate group-level constructs. The final sample selected consists of 361 counselor-supervisor dyads, nested with 111 supervisors, within 61 locations from 26 organizations. Counselors averaged 43.6 years of age and supervisors averaged 47.2 years of age. Counselors were 61.9 percent female and 66.5 percent Caucasian. Supervisors were 66.5 percent female and 75.2 percent Caucasian. Counselor education level ranged from 3.6 percent with high school only, 28.3 percent with a bachelor's degree, and 52.1 percent with a master's degree or higher. Supervisor education level ranged from 1.2 percent with high school only, 16.4 percent with a bachelor's degree, and 71.3 percent with a master's degree or higher.

### Measures

Aggregated constructs. The aggregated constructs were measured by group mean centering the ratings from counselors within each location for each of the grouplevel constructs. The group mean centered ratings were then aggregated for each location. The aggregated constructs are overall mentoring (instrumental and psychosocial dimensions) and coworker support (reliable alliance and attachment to coworkers). Both mentoring dimensions were measured using Ragins and McFarlin's (1990) mentoring scale. Instrumental support was measured using a five dimension, 15-item measure and psychosocial support was measured using a four dimension, 12-item measure. An example item for instrumental support is, "My clinical supervisor assigns me tasks that push me into developing new skills." An example item for psychosocial support is, "My clinical supervisor provides support and encouragement." Instrumental and psychosocial support from coworkers was measured with Cutrona and Russell's (1987) six-item measure of coworker support. The two dimensions of coworker support (reliable alliance and attachment; three items each) were combined and used as an overall measure of coworker support. An example item for instrumental support (reliable alliance) is, "I can depend on my coworkers to help me if I really need it." An example item for psychosocial support (coworker attachment) is "I have a feeling of closeness with my coworkers." Items on all aggregated measures are rated on a five-point Likert scale (1= strongly disagree; 2=disagree; 3=neither agree nor disagree; 4=agree; and 5=strongly agree). See Appendix for complete list of measures and their items.

**Individual-level mediators.** Individual-level mediators include affective organizational commitment, engagement, and perceived competence. All scales were

measured on a five-point Likert scale (1= strongly disagree; 2=disagree; 3=neither agree nor disagree; 4=agree; and 5=strongly agree). Affective organizational commitment was measured using Meyer, Allen, and Smith's (1993) six-item measure (e.g., "This treatment center has a great deal of personal meaning to me"). Engagement was measured with Schaufeli, Bakker, and Salanova's (2006) Utrecht Work Engagement scale, a nine-item measure (e.g., "I feel like I am bursting with energey when I am at work"). Perceived competence was measured with Spreitzer's (1995) three-item measure (e.g., "I am confident about my ability to do my job").

Individual-level outcomes. The outcomes of performance and turnover are also measured at the individual level. Performance was rated by the clinical supervisor using a four-point Likert scale (1=very ineffective; 2=ineffective; 3=effective; 4=very effective) on 20 items generated to capture various aspects of counselor job performance. Turnover is reported by the organization one year after initial data collection. Organizations report whether the counselor is still employed or not, and if not, whether turnover was voluntary or involuntary. For the purposes of this study, only voluntary turnover will be examined.

# **Data Analysis**

Means, standard deviations, internal consistency reliability (alpha) coefficients, and correlations among measures are reported in Table 1.

Aggregation. According to Chan (1998) there are five basic types of composition models that can be used to specify relationships among data at different levels: additive model, direct consensus model, referent-shift model, dispersion model, and process model (for an in-depth examination of all five models, see Chan, 1998). The composition model used depends on the nature of the constructs as well as the theoretical

underpinnings, and the functional relationship between lower level constructs to the higher level constructs (Chan). For this research, the direct consensus model is most appropriate because this model takes into account within-group consensus of the lower-level units to justify aggregation to a higher-level variable. In this model, the functional relationship between the lower-level construct and the higher-level construct is dependent on agreement at the lower-level construct. In other words, the model specifies that the meaning of the higher-level construct is in the consensus of the lower-level units. In a climate example, an organizational climate exists because there are shared perceptions of the climate at a lower level (e.g., units, individuals). For this model, there are two components to aggregation. First, there must be an operationalization of the lower- and higher-level constructs; a measure of the construct at each level must be specified. For example, a measure of psychological climate at the individual level and aggregation of this construct to a higher level such as organizational climate. Second, there must be some criteria set as a precondition to combine lower-level measures into a higher-level construct.

For this research, individual-level perceptions of overall mentoring support and overall coworker support were aggregated within each location by taking the mean of the counselors' ratings of each construct within the location. Because this research is using the direct consensus model, demonstrating interrater agreement was necessary to justify aggregation (LeBreton & Senter, 2008). Rwg(j) was conducted on each locations' aggregated measures to assess the level of agreement in ratings of the two aggregated constructs. Rwg(j) is an appropriate measure for determining the interrater agreement on a higher-level construct created by aggregating lower-level ratings (James, Demaree,

&Wolf, 1984; LeBreton & Senter). Rwg(j) is used when there are multiple parallel items being rated. In the present research the measures being aggregated have a minimum of three items, thus Rwg(j) will be calculated. Rwg(j) is a measure of the proportion of variance in rater's scores of a target that is not due to error variance.

LeBreton and Senter (2008) recommend using more than one distribution to assess Rwgs and comparing the results to determine if the Rwgs being assessed change with the distribution tested. A uniform null distribution and a normal distribution were used to assess Rwg(j) for the current data. In a uniform null distribution the raters' scores are distributed equally across all response options. For example, on an item that is scored on a one to five scale, each scale anchor would receive an equal portion, or 20 percent of the ratings. The actual distribution of the sample is then compared to the null distribution to obtain the observed variance in raters' scores. Rwg(j) will be 1.0 when all raters are in perfect agreement, and Rwg(j) will be 0.0 if raters are in perfect disagreement (i.e., the observed variance does not differ from the null distribution). A normal distribution assumes that ratings are distributed along a normal curve. As with a uniform null distribution, the actual distribution is compared to the normal curve to obtain the variance of raters' scores. The resulting Rwg(j)s were compared to assess differences between the two distributions.

Established cut-offs for Rwg(j) provide the basis determining that agreement is high enough to warrant aggregation to a group-level construct (LeBreton & Senter, 2008). Traditionally, a cut-score of .70 has been used to justify aggregation of lower level constructs; however, Rwg(j) is dependent on the number of raters and the number of items being rated (LeBreton & Senter). Thus, a strict cut-off value of .70 may not always

be appropriate. According to LeBreton and Senter, researchers should consider the quality of the measures being used, the consequences of using the aggregated scores, and the composition model being used. Further, as Rwg(j) can vary based on the number of raters and items, these factors must also be taken into consideration when assessing a cut-score value. For assessing the Rwg(j)s for this research, a value of .70 was set as a starting point with which to examine agreement. However, the range of Rwg(j)s for each measure was examined as well as the percentage of Rwg(j)s that fall below this cut-score. Additionally, the pattern of resulting Rwg(j)s for each measure was be taken into account when determining whether there was justification to aggregate the data. This is consistent with suggestions from LeBreton and Senter that researchers should make judgments on aggregation based on the magnitude and patterns of Rwg values for each measure across groups, not on individual Rwg values for each group.

Multilevel structural equation analyses. In order to begin assessing the multilevel structural equation model (MLSEM), the first step was to test the measurement model. For a MLSEM, a measurement model should be assessed at both the within level and the between level. This is because with MLSEM the within and between parts of the variables used in the model are separated allowing the effects at each level to be examined (Preacher, Zyphur, & Zhang, 2010). The separation of within and between effects is one of the advantages of MLSEM over traditional multilevel methods in which the between and within effects are combined and can bias the estimates of the effects.

To test the measurement model, the within model was first tested using the items for each construct as indicators for the latent constructs. However, this model resulted in only moderate fit ( $\chi^2_{781} = 9106.38$ , p = .000; CFI = .81; TLI = .80; RMSEA = .08). This

was likely due to the amount of indicators being used. As such, a more parsimonious measurement model was specified using the means of each construct as a single latent indicator. In order to account for measurement error, the latent indicator loadings were set at the square root of the reliabilities for each construct and the thetas, or residuals, were set to one minus the reliability times the variance of the construct. This measurement model resulted in nearly perfect fit to the data ( $\chi^2_{15} = 206.09$ , p = .000; CFI = 1.0; TLI = 1.0; RMSEA = .00).

Next, the model was expanded to include the measurement of the constructs at the between level. The same single indicator approach used at the within level was used at the between level and new between level variances were calculated to provide correct values for the between level residuals. When both within and between levels were specified the model provided poor fit to the data ( $\chi^2_{12} = 120.44$ , p = .000; CFI = .60; TLI = .00; RMSEA = .16). This indicated that the between level measurement model was not functioning as expected. Thus, the variances of the between level constructs and the ICC values were examined to provide additional insight. While the model was functioning well at the within level, the mediator variables demonstrated little to no between-group variance and low ICC values (organizational commitment = .09, engagement = .01, perceived competence = .02). Despite poor model fit, the structural model was specified to see if the structural relationships among constructs could be tested. All direct paths were specified from developmental climate to organizational commitment, engagement, and perceived competence. In order to create the total paths for the indirect effects, direct paths were also specified from organizational commitment to turnover, engagement to turnover and performance, and from perceived competence to performance. To test the

specified for the indirect path from developmental climate to turnover via organizational commitment and engagement as well as from developmental climate to performance via perceived competence. However, this model would not converge and provided no output for either the direct or indirect paths. Thus, a test of the hypotheses was not possible with a MLSEM approach and a more traditional analysis approach was needed.

Traditional multilevel methods use group means on lower-level variables to represent group-level variables whereas with MLSEM, lower-level variables are treated as latent indicators of higher level constructs thereby correcting for sampling error (Preacher et al., 2011). Additionally, an MLSEM approach strictly separates the between level effects from the within level effects whereas a traditional multilevel analysis may conflate the effects because group means are often used as indicators of between level constructs. Although these provide advantage of MLSEM over traditional multilevel modeling approaches, there are also some limitations to MLSEM. One such limitation is that MLSEM models are vulnerable to non-convergence when group sizes are small or ICC values are low (Ludtke, Marsh, Robitzsch, Trautwein, Asparouhov, & Muthen, 2008; Preacher, Zhang, & Zyphur, 2010). This was the case here – group sizes were small, ranging from 3 to 15, and ICC values on the mediator variables were low. Because of these characteristics of the current data, a MLSEM model would not converge. Thus, a more traditional methodology for testing the multilevel model was conducted.

**Unconflated multilevel model.** One approach to test a multilevel model is using an unconflated multilevel model (UMM). This methodology takes a traditional approach to multilevel model testing, by using group means, but also addresses some of the

disadvantages present in a traditional conflated multilevel model (CMM). In a CMM the within and between effects of the level 2 predictor are combined and thus, the effects are conflated, because simple group means are used as level 2 constructs. This leads to either upward or downward biased estimates of the effects. In a UMM, the within effects of the between level constructs are controlled by group mean centering the level 1 predictor scores. These centered scores are used to create the group means that are used as the level 2 predictors (Preacher, et al., 2011). Here, each counselor's ratings of mentoring and coworker support were group mean centered by calculating a group average of these ratings and subtracting the group mean from each counselor's rating. Next, group level coworker support and mentoring constructs were calculated by taking the average of the group mean centered counselor ratings. The centered group means for coworker support and mentoring were used as latent indicators of an overall developmental climate in the model. This group mean centering procedure accounts for the within effects of developmental climate as a predictor of the level 1 variables in the model.

Once the group level predictor was created the model was specified in Mplus, using the analysis = complex command. This command allows the use of a cluster statement which will control for the between level effects in the level 1 variables in the model. In this case, that includes organizational commitment, engagement, perceived competence, turnover, and performance. The same single indicator approach used in the MLSEM model was retained and used for the UMM. To account for measurement error in the model, the indicator loadings were set to the square root of reliability and the residuals were set at one minus the reliability times the variance.

Next, the structural components of the model were specified. Direct paths were specified from developmental climate to organizational commitment, engagement, and perceived competence; organizational commitment to turnover; engagement to turnover and to performance; and from perceived competence to performance. With Mplus, the use of a categorical statement will tell the program which variable is a categorical variable and will use logistic or probit regression to compute the effects involving that outcome. Turnover was specified as the categorical variable for the analysis and logistic regression was used. As with the MLSEM structural model, although not all of these direct paths were hypothesized, the paths from the attitudinal variables to turnover and performance are necessary to compute the product term to test for the statistical significance of the indirect effects estimates.

Using the model indirect command, the indirect paths from developmental climate to turnover and performance were specified. Specifically, the mediation paths are from developmental climate to turnover via organizational commitment and engagement as well as from developmental climate to performance via perceived competence. The model indirect command in Mplus calculates a product term for the indirect effect of the level 2 predictor on the level 1 outcome and provides a statistical test of the estimate of the indirect effect. See Figure 1 for a diagram of all paths specified.

### **RESULTS**

# Aggregation

Results demonstrate support for aggregating both the mentoring measure and the coworker support measure to the location level. For the mentoring measure, all but four locations, 93.4 percent, had Rwg(j) values above the cut-score of .70 using the uniform distribution. All but nine locations, 85.3 percent, met or exceeded the cut-score value for the coworker support measure also using a uniform distribution. Both of the measures also demonstrated good internal consistency with coefficient alpha values of .97 and .93 for mentoring and coworker support, respectively. Further, while a uniform distribution will almost always provide greater Rwg(j) values than a normal distribution (LeBreton & Senter, 2008), the pattern of results between the distributions was similar, providing further justification to aggregate the constructs. Thus, these two constructs were aggregated to the location level and were used as latent indicators of the developmental climate variable in the structural equation model. See Table 2 for Rwg(j) means and ranges on both aggregated constructs for the uniform distribution.

# **Hypotheses Testing**

The measurement model was specified using the single indicator approach as with the MLSEM model test, setting the loadings to the square root of each construct's reliability and the residuals to one minus reliabilities times the variance. The measurement model demonstrated perfect fit to the data ( $\chi^2_3 = 1.33$ , p = .72; CFI = 1.0;

TLI = 1.0; RMSEA = .00). The full model (single-indicator measurement model, plus the structural paths) demonstrated moderate fit to the data ( $\chi^2_{11}$  = 36.62, p = .00; CFI = .91; TLI = .82; RMSEA = .08).

Support was found for all three of the hypothesized direct effects from group-level developmental climate to individual attitudes including: organizational commitment, engagement, and perceived competence. Specifically, the direct paths from group-level developmental climate to organizational commitment ( $\beta$  = .86, p < .05), engagement ( $\beta$  = .70, p < .05), and perceived competence ( $\beta$  = .24, p < .05) showed statistically significant, positive relationships. These results provide support for hypotheses one, three, and six, respectively.

Two out of three mediation paths provided significant results. The indirect effect of developmental climate on individual turnover via organizational commitment was significant and in the hypothesized direction ( $\beta$  = -.21, p < .05) with a 95% confidence interval (CI) [-.94, -.23], supporting hypothesis two. Hypotheses four and five were not supported. Engagement did not serve as a mediator of the relationship between developmental climate and turnover ( $\beta$  = .01, p = .86) with a 95% CI [-.28, .34] or developmental climate and performance ( $\beta$  = .01, p = .72) with a 95% CI [-.09, .13].Perceived competence mediated the relationship between developmental climate and performance ( $\beta$  = .04, p < .05) with a 95% CI [.00, .09], although the effect size was small, hypothesis seven was supported. See Table 3 for all path estimates and standard errors.

### DISCUSSION

In sum, the results provide partial support for the model. All direct effects from developmental climate to each individual attitude were supported. This provides support for the importance of work group perceptions of developmental climate in mediating individual attitudes. When employees are all experiencing positive relationships with each other and supervisors, it may create a climate in which individual outcomes are bolstered. Further, two of three attitudinal variables demonstrated a mediating effect between developmental climate and individual turnover and performance. These indirect effects demonstrate the mechanisms through which the climate may ultimately impact employee behaviors. This research supports relationships at work as an influential factor in an individual's work attitudes and behaviors. Not only are relationships important on an individual level, but they may create work group climates that can further influence individual outcomes even when individual experiences are considered.

The present study contributes to existing theory in several ways. First, it illustrates that relationships at work are interrelated and may form a work group climate. Although much theoretical work has discussed that relationships in a given network are affected by each other and resources are shared among them, no empirical work has examined how networks of relationship may form climates. Moreover, research on the influence of the social context suggests that work groups will provide cues that in turn shape individual's perceptions. As such, an examination of the way a work group's relationships form a

developmental climate provides new insight into relational dynamics at work. Second, it expands upon prior relationship research focused on how relationships influence individual attitudes and behaviors by taking a multilevel look at these phenomena. Research on the outcomes of mentoring and coworker support is largely at the individual level of analysis and no research to date has looked at the group level effect of developmental climates on individuals. A multilevel analysis provides new insight into how group dynamics may impact individuals. Third, this research establishes a potential model of the mechanisms behind how relational experiences may influence behavioral outcomes. Although research has demonstrated associations between mentoring and coworker support with behavioral outcomes such as turnover and performance, little is known about the mechanisms responsible for these associations. These results are a starting point for establishing the way in which relationships can lead to positive behavioral outcomes. Limitations, future research, and practical implications are discussed.

# **Relationships to Climate**

Researchers have acknowledged that the naturally nested nature of organizations is an important factor to consider when examining any organizational phenomenon (Lance & Vandenberg, 2012). This certainly applies to relationships at work as people can be nested any number of ways within an organization: within supervisors, teams, work units, departments, divisions, and so on. Not only are individuals naturally nested within organizations, but relationships have been discussed as being interrelated in terms of the resources and information that can be shared among them (Dutton & Ragins, 2007; Kahn, 2007; Higgins & Kram, 2001). Both of these factors are addressed in the

examination of a developmental climate. Although not directly hypothesized, obtaining agreement within locations on mentoring and coworker support and examining these as a developmental climate provides insight into how relationships within a work group can jointly influence individual perceptions. Because work groups generally demonstrated agreement on ratings of two types of relationships, this research provides empirical evidence that the social context likely provides cues for individual's assessments of the environment (Salancik & Pfeffer, 1978).

Prior to hypothesis testing, support was found for the developmental climate measure by demonstrating within-group agreement on both the mentor and coworker support measures. Further, the model demonstrated good fit when these measures were used as indicators of the developmental climate construct. By obtaining within group agreement on perceptions of mentor and coworker support it suggests that the nested nature of work groups may influence relational experiences in such a way that work group members form similar perceptions of their relationships. This is in line with climate research in that climate formation occurs when a group has shared perceptions of a phenomenon and thus supports the presence of a developmental climate. The current findings suggest that not only do an individual's own relationships matter, but that the relational experiences of his or her peers can play a role in shaping the work group climate.

In this context, one way in which workplace relationships may become interrelated is through the developmental mentoring support employees are receiving. Mentoring relationships can help individuals achieve developmental tasks in adulthood such as developing competence, learning to build trusting interpersonal relationships,

manage emotions, and develop one's identity, to name a few (Eby, 2012). Through this developmental skill building, employees can use the aforementioned skills as relational resources in their coworker relationships. In this way, the mentoring support and the coworker support are entwined through the resources they can provide to the workgroup and may serve to build a developmental climate. This climate in turn bolsters the influence of these developmental relationships on individual's work attitudes.

# **Climate and Individual Attitudes**

Developmental climate showed positive direct effects with organizational commitment, engagement, and perceived competence. This suggests that the compilation of relationships among a work group relates to individuals' work attitudes. Specifically, when work group supervisors provide mentoring support to employees and when the relationships among coworkers are supportive, it may create an environment that builds positive work attitudes. These effects were present even when the individual ratings of developmental climate were controlled for. Thus, the developmental climate demonstrated a unique influence on individuals' outcomes.

Previous work has demonstrated that positive work relationships can increase affective reactions to one's organization, such as organizational commitment, engagement, and perceived competence. The present findings expand on these associations by demonstrating that positive work relationships at the group level, by way of developmental climate, can have an additional influence on an individual's commitment, engagement, and perceived competence over and above one's individual relational experiences. This suggests that, similar to individual relationships, the social context of a work environment may influence one's work attitudes. That is, one's level of

organizational commitment is a function of one's individual relational experiences, as well as the experiences of the work group. This follows for engagement and perceived competence as well.

## **Attitudes as Mediators**

Researchers have called for work on the mechanisms by which relationships at work may function to influence outcomes (Dutton & Ragins, 2007). In the present research, this call was answered by examining how developmental climate may influence turnover and performance by way of organizational commitment, engagement, and perceived competence. Both organizational commitment and perceived competence functioned as mediators of the relationship between developmental climate and turnover and performance, respectively. These findings suggest that these individual attitudes are effective mechanisms through which developmental climate can influence individual behaviors. These findings also provide support for the importance of the relational dynamics within a work group to influence important outcomes such as turnover and performance. Organizations should not overlook the importance of developmental support from managers as well as among peers. This type of environment may serve to build employee commitment and bolster their self-efficacy in their job roles, which in turn positively impact behavioral outcomes.

These findings are similar to Ajzen's (1985; 1991) theory of planned behavior which suggests that factors such as one's attitudes, subjective norms, and perceived abilities or behavioral control all function to ultimately determine behaviors. Further, one of the main proponents of Ajzen's theory is that attitudes are drivers of behavior. While Ajzen's theory puts norms, attitudes, and control as joint precursors to intentions, which

influence behavior, it still aligns similarly to the present model. Here it is demonstrated that the social norms, through the developmental climate, influence one's attitudes and perceptions of ability, which then drive behavior. Although the current model did not include intentions to turnover (which would address Ajzen's intentions before behavior), including that measure in the model may have provided further support for the match between this model and Ajzen's theory.

This model of climate is also supported in other areas of climate research whereby climate drives attitudes, which influence behaviors (Clarke, 2006; Jaramillo et al., 2006; Riordan et al., 2005). The results further support this model of how climates function to impact outcomes. Additionally, this model can be extended to other variables of interest. In this case, the behaviors of interest were turnover and performance, but there are other behaviors and attitudes that may be influenced by the relationships one has at work. For instance, work stress and burnout are individual outcomes that have been shown to be negatively related to social support (Lee & Ashforth, 1996). Additionally, more recent research has begun to examine the influence of the social context on burnout (Halbesleben & Buckley, 2006). This avenue may provide interesting new ideas about the influence that the social context in terms of a developmental climate may have on individual experiences of burnout. Further, burnout could be examined as both a mediator and as an outcome in the model. As a mediator, burnout may serve as the conduit between developmental climate and physical health symptoms, such that when one experiences a positive developmental climate burnout is diminished, and in turn the experience of negative physical health symptoms is reduced. Alternatively, a positive

developmental climate may influence positive work attitudes, such as job satisfaction and commitment, that may be negatively associated with experiences of burnout.

**Engagement.** Interestingly, engagement did not mediate the relationship between developmental climate and individual turnover or performance. Additionally, although not hypothesized, engagement did not demonstrate significant direct effects with either turnover or performance. This is surprising because of the theoretical and empirical support for the relationship between engagement and turnover and performance (Christian et al., 2008; Halbesleben & Wheeler, 2008; Harter et al., 2002; Rich et al., 2010). Yet, engagement had a strong direct relationship with developmental climate. Thus, although relationships at work may serve to positively influence employee engagement, employee engagement did not seem to be a driver of the outcomes. This is interesting because organizations have become increasingly interested in employee engagement in recent years because of the notions surrounding this construct. Namely, that engaged workers are more committed and put forth more effort into their job roles than those that are not engaged, providing benefits to the organization through reduced turnover and greater performance. Yet, in the present study, engagement did not relate to either of the outcomes in the model. Possible explanations for these findings can be offered.

Although engagement has been found to be associated with turnover and performance (Christian et al., 2008; Crossley, Bennett, Jex, & Burnfield, 2007; Halbesleben & Wheeler, 2008; Harter et al., 2002; Mitchell, Holtom, Lee, Sablynski, & Erez, 2001), there are also studies in which these relationships were not supported. For instance, when Halbesleben (2008) examined the unique contribution of engagement on

turnover intentions, engagement offered no unique variance in predicting turnover. In terms of performance, although Halbesleben (2008) demonstrated a positive relationship between engagement and performance, the effect size was small. In another study of engagement and performance, Rich, Lepine, and Crawford (2010) found support for engagement as a mediator between several attitudes and task performance. But, they created an engagement measure and did not use the Utrecht Work Engagement Scale, most commonly used in engagement research. This makes it difficult to compare their findings to other engagement research. Theory asserts that engaged employees put forth greater efforts and persistence in their task roles (Bakker, et al., 2008). It follows that the increase in performance resulting from these increased efforts may take time to manifest. If this is the case, the current study would not capture this effect because engagement and performance were measured at the same time point.

Another possible explanation for the lack of relationship between engagement and the outcomes in the present model is that the outcomes that would be influenced by engagement were misspecified. While this seems unlikely given the numerous empirical works showing engagement is associated with turnover and performance, engagement may not be directly related to turnover or performance in this sample of workers. Perhaps engagement is associated with attitudes and behaviors that are precursors to turnover and performance, such as intentions to leave, commitment, or effort, but not necessarily to actual turnover or performance. In fact, one study demonstrated that engagement was nearly identical with a higher-order job attitude construct referred to as "A-Factor" that captures the common overlap among job satisfaction, commitment, and involvement (Joseph, Newman, Hulin, 2010). As such, engagement may not add any unique predictive

power when included in a model with these attitudinal constructs, or may be a driver of these related attitudes, not behaviors.

Another possible explanation for the lack of effects for engagement is that mediation may not be the most appropriate type of association among developmental climate, engagement, and employee outcomes. Rather, engagement may function as a moderator of employee attitudes and behaviors rather than as a conduit between relationships and behaviors. In other words, perhaps engagement can bolster the influence of relationships and work attitudes on outcomes such as turnover and performance. For example, when relationship climate is positive and an individual is highly engaged, the multiplicative effect may result in higher performance. Further research is needed on the mechanisms by which engagement functions to improve employee attitudes and behaviors.

### LIMITATIONS AND FUTURE RESEARCH

The area of positive relationships at work is ripe for continued research. Although scholars have an understanding of the importance of interpersonal relationships to individuals generally, within an organizational context there is still work to be done. Organizational scholars continue to examine how these relationships interact, the mechanisms that drive relational outcomes, and what attitudes and behaviors are affected by the relational dynamics at work. The present study begins to tackle some of these questions by demonstrating that relationships at work are interrelated, may form a relational climate, and in turn influence individuals' attitudes and behaviors. As such, relationships should be considered as an important factor in organizational study and practice. As with all research, the findings should be considered against a backdrop of limitations. These limitations as well as extensions of the current research can provide avenues for future research into relational climates at work.

One limitation of this research is the inability to test the hypothesized relationships with a more stringent MLSEM approach. Although a MLSEM approach is advantageous due to the separation of between and within effects, this approach is vulnerable to non-convergence if group sizes are small and ICCs are low, as was the case in the current research. Although the current model was unable to be tested using a more stringent MLSEM approach due to a lack of variance at the between level for the three attitudinal variables, the UMM approach is an appropriate alternative method. The UMM

method allows the within effects of the level 2 predictor to be minimized by group mean centering the level 1 scores before aggregating to a level 2 construct. While this method aids in reducing the conflation and bias in the estimates of the effects, it is not as unbiased of an estimate as a MLSEM approach would provide. Thus, as with all multilevel methods not using a MLSEM approach, the effects must be interpreted with caution as to the potential biases that may be present. Researchers that examine the multilevel nature of work relationships should continue to pursue a MLSEM approach and strictly tease apart the group and individual effects. This approach can provide new knowledge to the area of work relationships by clearly delineating phenomena at each level and eliminating the biases that may be present using traditional multilevel approaches.

The use of cross-sectional data for developmental climate and the attitudinal mediators creates limitations in the interpretation of the associations among those constructs. Because the mediator data was collected at the same time point as the predictors (developmental climate measures) no conclusions about the direction of causality can be made. Following theory, it makes sense that the developmental climate would influence the attitudinal variables, but it cannot be stated for certain with the present data. One strength of the present study is the use of time-lagged turnover data. However, because of the cross-sectional nature of all other data, there are still issues of causality that are present in the majority of field studies such as elimination of all other potential causes. Nonetheless, these results provide good evidence of the hypothesized relationships among constructs.

Another potential limitation of this research is the use of two individual-level relational constructs as indicators of a developmental climate variable. While climate research supports the use of individual ratings of aspects of the work environment as indicators of a particular climate (referred to as psychological climate; Jones & James, 1979), there are advantages to creating a climate measure that specifies the target of interest (e.g., the group level phenomenon). Using the current study as an example, this would mean creating a measure that targets the work group's relational experiences and not one's individual relationship experiences. However, there is value in referencing individual experiences instead of individual opinions of work group experiences. When individuals rate their own experiences they may be more accurate as to what is occurring, whereas they may bias their ratings of a work group's experience based on their own. For example, if an employee has a good relationship with his or her supervisor and receives mentoring support from that supervisor, he or she may incorrectly assume that other members of the work group have similar relational experiences with the supervisor when in fact they do not. This could also occur with ratings of a work groups coworker experiences if an employee fails to see that one or more coworkers are not included or involved with their coworkers in a similar manner.

Although the current research is a good first step in investigating the group-level effect of relationship experiences, future research should investigate the validity of a developmental climate measure. Further, researchers interested in different types of relational climates could tailor their measures to target the climate of interest to their research. Not only could the context of the measures be specific to the researcher's interests, but the target of the items could focus on the work group or the individual. For

example, "in my work group my coworkers and I have a feeling of friendship" versus "I have friendships with my coworkers."

Another possible limitation of the current study is that the present measure of developmental climate could have influenced the magnitude of the effects. The effects from developmental climate to the three attitude variables may be inflated due to the climate variable used because the measure used latent indicators that have been shown to be related to the attitudes of interest in other research. However, the climate measure was not a direct additive measure of the two constructs, and through group mean centering the individual affects were parceled out, providing a group level construct of the two measures contained in the climate variable. Further, although these effects may be inflated, they nonetheless demonstrate the influence of relationships at work on individual's attitudes towards their organization and work. That is, the combined influence of coworker relationships and mentoring experiences with one's supervisor among a work group can increase individual feelings of attachment to the organization, engagement one feels toward the work role, and felt competence in performing his or her job.

Future research should take this model of climate to attitudes to behaviors and expand the model to other types of relational climates, various attitudinal mediators, and behavioral outcomes. This model has found support in other areas of climate research and may be a fruitful avenue for various nomological networks. Taking this model a step further, researchers could investigate the influence one's network of work relationships may have outside of the organizational environment. A strong positive network of relationships at work could be influential in reducing work stress or burnout, reducing

work-family conflict, or even provide organizational benefits by having employees that spread a positive image of the organization to outsiders.

Another extension of the model would be an examination of the influence developmental climates may have on supervisor experiences. Mentoring research has largely examined outcomes for the protégés, but more recent mentoring research has demonstrated positive outcomes for the mentors as well (Allen, Poteet, & Burroughs, 1997; Eby, Durley, Evans, & Ragins, 2006; Eby & Lockwood, 2005). Mentoring has been shown to provide mentors with a feeling of generativity, aid in developing new competencies though mentoring others, increase perceptions of career success, and even give mentors a renewed sense of purpose in their jobs (cf. Eby, 2012). If supervisory mentors are providing mentoring support to multiple protégés in their work group and those employees are sharing and building resources amongst themselves, it may bolster these positive outcomes for the supervisory mentor. These benefits could in turn provide additional gains for not only they mentor, but the employees and the organization as well.

The lack of support for engagement as a mediator of the relationship between developmental climate and turnover or performance warrants additional investigation. Future research on the relationship of engagement among developmental climates and behavioral outcomes should consider different associations among constructs. Perhaps engagement is more apt to moderate relationships among attitudes and behaviors, or may be a first line attitude that can positively influence other attitudes, such as organizational commitment. Additionally, engagement research should focus on determining what behavioral outcomes engagement can truly predict.

### PRACTICAL IMPLICATIONS

Practitioners should take note of the importance that work relationships have on employee experiences. This research supports prior notions of the role positive relationships may play in employee attitudes and behaviors (Dutton & Heaphy, 2003; Higgins & Kram, 2001; Kahn, 2007; Ragins & Dutton, 2007). The relationships among a work group can ultimately influence whether employees choose to remain with the organization and how well they perform. The present study can offer several implications for practitioners. Organizations should take into account relationships at various levels. Not only are supervisor subordinate relationships important, but the relationships among coworkers and the combination of relationships within the work group as a whole are influential to individual outcomes. Thus, organizations should not only focus on mentoring relationships between supervisors and subordinates, but also invest in developing relationships among peers within work groups or teams.

Turnover can be costly for organizations and a focus on relationships among employees could be one avenue for organizations to explore in order to bolster employee attachment to the organization and in turn reduce employee turnover. Performance is another important metric for organizations as a major indicator of organizational effectiveness. If relationships among a work group can increase employees' beliefs that they can perform their role well, they may actually increase their performance.

Consequently, organizations can help employees and leaders develop skills to build more

positive relationships with those in their work group. Organizations can bolster these skills by providing opportunities or resources to support social activities or formal teambuilding activities which may encourage positive social interaction among the work group. Mentoring programs not only between supervisors and subordinates, but peer mentoring programs as well, may encourage more fruitful work relationships. In addition to the individual initiatives that organizations can engage in, they could also work to build a culture that espouses the value of positive and developmental relationships among its employees. Expanding the focus of positive relationships to a broader organizational culture would allow these values to span organizational levels.

Research has consistently demonstrated that provision of resources can increase engagement and organizations have become increasingly interested in bolstering employee engagement. However, organizations should approach with caution before investing resources into initiatives aimed at employee engagement if engagement cannot be consistently linked to outcomes of interest to organizations. Practitioners should set realistic expectations for what engagement may be able to provide in terms of organizational benefits.

## **CONCLUSION**

It is well established that relationships are essential to human development (Levinson, 1986). Further, in an organizational context, positive work relationships are resource producing for individuals and organizations alike (Dutton & Ragins, 2007). If organizations focus on improving and building positive relationships among its members, they could create a unique competitive advantage through the positive outcomes these generative relationships can provide. As people spend more and more of their lives in the work environment, the relationships one shares at work remain an important driver of one's daily experiences. Researchers and organizations alike should remain focused on understanding the dynamics of positive work relationships and harnessing the benefits they may offer.

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Table 1.

Descriptive Statistics and Correlations

	Construct	М	SD	1	2	3	4	5	6	7
1.	Mentoring Support	3.46	.80	.97						
2.	Coworker Support	3.91	.80	.33*	.93					
3.	Organizational	3.32	.80	.41*	.42*	.84				
	Commitment	3.32	.00		. 12	.01				
4.	Engagement	3.62	.66	.25*	.26*	.55*	.89			
5.	Perceived Competence	4.21	.61	.02	.14*	.09	.22*	.78		
6.	Performance	3.27	.51	.16*	.09	.06	04	.12*	.97	
7.	Turnover			04	11*	19*	10	00	14*	

*Note*. Reliability estimates (coefficient alpha) are provided on the diagonal. Turnover is a categorical variable (coded 1= turned over, 0 = no turnover) and therefore mean and standard deviation are not provided.

<sup>\*</sup> *p* < .05.

Table 2.

Rwg(j) Means and Ranges-Uniform Distribution

Construct	Mean	Range – Low	Range – High	Percent above .70
Mentoring Support	.99(.95)	.76(.76)	2.40(1.0)	93.4%
Coworker Support	.80(.92)	-6.0(.70)	2.52(1.0)	85.3%

*Note*. Numbers outside the parentheses are calculated from the total number of locations' Rwg(j) values. Numbers within parentheses are calculated with only the locations with Rwg(j) values over .70.

Table 3.

Path Estimates of the direct and indirect effects of developmental climate

Mediators and Outcomes				
	β	SE		
Organizational Commitment	.86*	.04		
Engagement	.70*	.04		
Perceived Competence	.24*	.04		
Turnover via Organizational Commitment	21*	.06		
Turnover via Engagement	.01	.06		
Performance via Engagement	.01	.04		
Performance via Perceived Competence	.04*	.02		

*Note*. \* p < .05

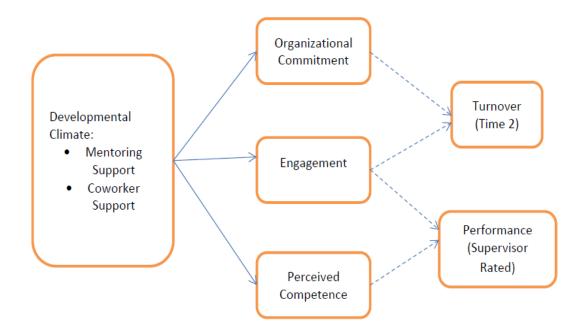


Figure 1. Developmental Climate to Turnover and Performance via Attitudinal Mediators

*Note*. Dashed lines indicate the indirect effects of developmental climate on turnover and performance mediated by the three attitudinal variables.

#### **APPENDIX**

#### List of Measures and Items

### <u>Supervisory Mentoring:</u>

Ragins, B. R., & McFarlin, D. B. (1990). Perceptions of mentor roles in cross-gender mentoring relationships. *Journal of Vocational Behavior*, *37*, 321–339.

My clinical supervisor....

### **Instrumental Support:**

### **Sponsorship**

- 1. ...helps me reach my career goals.
- 2. ...uses his/her influence to support my career goals.
- 3. ...uses his/her influence in the organization for my benefit.

## Coaching

- 4. ...helps me learn about the field of substance abuse.
- 5. ...gives me advice on how to attain my career goals.
- 6. ... suggests specific strategies for achieving my career aspirations.

#### Protection

- 7. ...protects me from those who may be out to get me.
- 8. ... "runs interference" for me in the organization.
- 9. ...shields me from damaging contact with important people in the organization.

## Challenging Assignments

- 10. ...gives me tasks that require me to learn new skills.
- 11. ...provides me with challenging assignments.
- 12. ...assigns me tasks that push me into developing new skills.

# Exposure & Visibility

- 13. ...helps me be more visible in the organization.
- 14. ... creates opportunities for me to impress important people in the organization.
- 15. ...brings my accomplishments to the attention of important people in the organization.

### **Psychosocial Support**

#### Friendship

- 1. ...is someone I can confide in.
- 2. ...provides support and encouragement.
- 3. ...is someone I can trust.

### **Role Modeling**

- 4. ...serves as a role model for me.
- 5. ...is someone I can identify with.
- 6. ...represents who I want to be.

### Counseling

- 7. ...serves as a sounding board for me to develop and understand myself.
- 8. ...guides my professional development.
- 9. ...guides my personal development.

## Acceptance & Confirmation

- 10. ...accepts me as a competent professional.
- 11. ...sees me as being competent.
- 12. ...thinks highly of me.

## **Coworker Support:**

Cutrona, C. E., & Russell, D. (1987). The provisions of social relationships and adaptation to stress. In W. H. Jones and D. Perlman (Eds.). *Advances in personal relationships*, 1, (pp. 36-67). Greenwich, CT: JAI Press.

### Psychosocial support (coworker attachment)

- 1. My co-workers and I have a close relationship that provides me with a sense of emotional well-being.
- 2. I feel a strong emotional bond with my co-workers.
- 3. I have a feeling of closeness with my co-workers.

## <u>Instrumental support (Reliable Alliance)</u>

- 4. I can depend on my co-workers to help me if I really need it.
- 5. If something went wrong, my co-workers would come to my assistance.
- 6. I can count on my co-workers in an emergency.

### Organizational Commitment:

\*note change of language to "treatment center"

Meyer, J. P., Allen, N. J., & Smith, C. A. (1993). Commitment to organizations and occupations: Extension and test of a three-component conceptualization. *Journal of Applied Psychology*, 78, 538-551.

- 1. I would be very happy to spend the rest of my career with this treatment center.
- 2. I really feel as if this treatment center's problems are my own.
- 3. I do not feel a strong sense of "belonging" to my treatment center. (reverse scored)
- 4. I do not feel "emotionally attached" to this treatment center. (reverse scored)
- 5. I do not feel like "part of the family" at my treatment center. (reverse scored)
- 6. This treatment center has a great deal of personal meaning to me.

#### Engagement at Work (UWES-9):

Schaufeli, W. B., Bakker, A. B., & Salanova, M. (2006). The measurement of work engagement with a short questionnaire. *Educational and Psychological Measurement*, 66, 701-716.

- 1. I feel like I'm bursting with energy when I am at work.
- 2. At my job, I feel strong and vigorous.
- 3. I am enthusiastic about my job.

- 4. My job inspires me.
- 5. When I get up in the morning, I feel like going to work.
- 6. I feel happy when I am working intensely.
- 7. I am proud of the work that I do.
- 8. I am immersed in my work.
- 9. I get carried away when I am working.

## Perceived Competence:

Spreitzer, G. M. (1995). Perceived empowerment in the workplace: Dimensions, validation, and measurement. *Academy of Management Journal*, *38*, 1442-1465.

- 1. I am confident about my ability to do my job.
- 2. I am self-assured about my capabilities to perform my work activities.
- 3. I have mastered the skills necessary for doing my job.

## <u>Counselor Job Performance</u> (rated by clinical supervisor):

\*\*These items were developed specifically for the population being sampled and took into consideration the job roles and duties common to substance abuse counselors.

Please rate this counselor's performance on the following performance dimensions, using the scale: 1=Very Ineffective, 2=Ineffective, 3=Effective, 4=Very Effective.

- 1. Facilitates individual counseling sessions with clients.
- 2. Performs assessment and initial diagnostic evaluation of clients.
- 3. Conducts problem-related and objective-driven sessions.
- 4. Educates clients on their disease and/or diagnosis to assist in their understanding of the problem (or to support their recovery).
- 5. Creates therapeutic relationships with clients.
- 6. Facilitates group counseling sessions with clients.
- 7. Effectively facilitates group interaction to bring about recovery.
- 8. Interviews clients, reviews records, and confers with other professionals in order to evaluate individuals' suitability for participation in a particular program.
- 9. Develops client treatment plans based on evidence-based research.
- 10. Develops client treatment plans based on observations, clinical experience, and client histories.
- 11. Reviews and evaluates clients' progress in relation to measurable goals described in treatment and care plans.
- 12. Intervenes as an advocate for clients in crisis situations and other non-routine events.
- 13. Provides clients or family members with information about available services and programs.
- 14. Coordinates counseling efforts with mental health professionals.
- 15. Coordinates counseling efforts with other health care professionals such as doctors, nurses, and physician assistants.
- 16. Coordinates activities with courts, probation officers, community services, and other post-treatment agencies.

- 17. Maintains accurate records and reports regarding clients' histories and progress, services provided, and other relevant information.
- 18. Participates in treatment center meetings to facilitate patient care (e.g., case conferences).
- 19. Follows rules and regulations of treatment center in terms of personal and professional conduct.
- 20. Contributes to a positive team environment by working well with other counselors.

#### Turnover:

Turnover is provided by the organization one year after initial data collection. They are coded as 1/0 - yes/no. In most cases, organizations also provided whether the turnover was voluntary or involuntary.