Identity at Work: Balancing Demographic-related Identity in the Workplace and the Impact on Extra-role Behaviors and Turnover Intentions

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ABSTRACT

People simultaneously hold a multitude of social identifications while at work, some of which are work-related and some of which transcend the workplace. To date, the vast majority of studies on social identities focus on these identities in isolation. Two important identities that transcend the work domain are those associated with gender and ethnicity. These attributes have been widely studied in the workplace, however, there is a lack of understanding in how the identities associated with these attributes (demographic-related identities) have implications for identification in the workplace and work-related outcomes. In this paper, I examine the relationship between perceived threats to these demographic-related identities and work-related attitudes and behavior, specifically turnover intentions, and extra-role behaviors. I also explore moderating (degree of demographic-related identity centrality) and mediating (organizational and workgroup identification) mechanisms in this relationship. Data were collected across two studies. The results demonstrate that perceived threats to demographic-related identities have severe ramifications for work-related identification. The supplemental analysis indicated a direct relationship between demographic-related identity centrality and turnover intentions. Furthermore, demographic-related identity centrality moderated the relationship between perceived threats to demographic-related identity by both the organization and the workgroup on work-related outcomes.

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GENERAL ABSTRACT

This research examined the relationship between perceived threats to gender and ethnic identities in the workplace and the impact these threats have on work-related identification and outcomes. Results suggest that perceived threats to these identities have important implications for both extra-role behaviors and turnover intentions, regardless of how important these identities are to the individual.

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Chapter 1: Introduction

Scholars and practitioners have sought to understand the factors that contribute to the underrepresentation of minorities in the workplace and to devise management practices to reduce bias and discrimination (Ely, 1995; Blau & Khan, 2007; Joshi, Son, & Roh, 2015). Much research has focused on the impact of gender and ethnic diversity within workgroups and the organization. While these attributes have been found to relate to a variety of work-related outcomes, the results have demonstrated variations in strength and even direction with these outcomes (Williams & O'Reilly, 1998; Carter, Simkins, & Simpson, 2003; Tsui, Egan, & O'Reilly, 1992; Ely, 1995). The incongruities in these findings suggest that the impact of these demographic attributes is not fully understood.

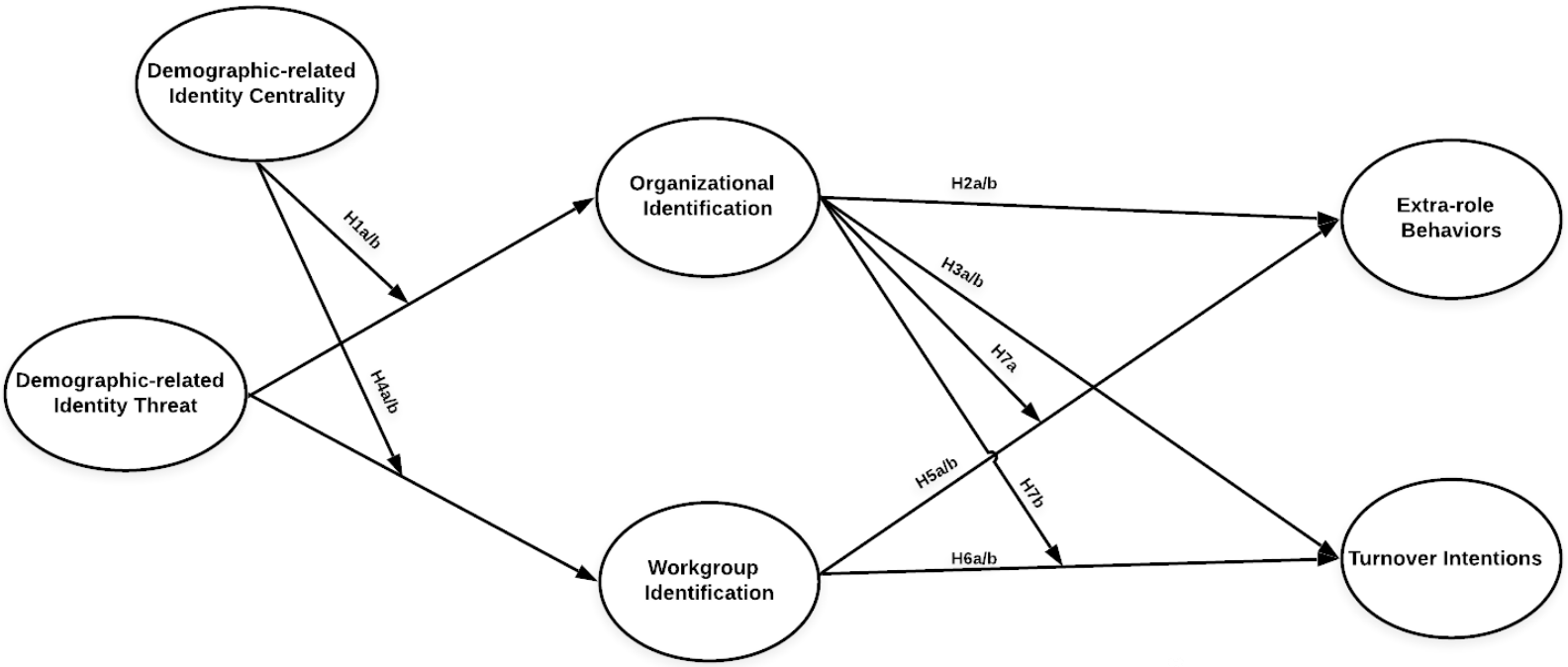
For this research, I draw on social identity theory to investigate the social identities associated with demographic attributes within the context of work. Social identities represent an essential aspect of the self. They reflect the human need to belong to valued social groups (Tajfel & Turner, 1985). Two important core demographic identities are gender and ethnicity. Gender and ethnic identity are based on the physical attributes, values, social norms, and feelings associated with one's gender or ethnic group. While individuals typically identify most strongly with their own gender or ethnic group, they may differ in how important this identity is to the self; some may even identify more strongly with the opposite gender or another ethnicity (Deaux & Major, 1987).

As individuals join the workforce, they develop new, work-related social identities (Ashforth & Mael, 1989; Ashforth, Harrison, & Corley, 2008), especially as they identify with the values and characteristics of prototypical members of the workgroup or organization (Hogg & Terry, 2000). They must then manage and balance these emerging work-related identities as they interact with preexisting social identities. When the organization enhances a central social identity, identity motives will encourage stronger identification with that work-related identification. Conversely, threats to, or lack of enhancement of, a central identity will challenge the needs for self-esteem (self-enhancement) and consistency, and thereby limit identification with the organization by (Ethier & Deaux, 1994). Therefore, to the extent that one's demographic-related identity is a central social identity, Work-related identities that enhance demographic identities, especially those that are central social identities, will be more easily integrated into one's self-concept than those that threaten it. Given that work-related identities are associated with important work-related outcomes (Ashforth et al., 2008), I predict that tensions will occur when individuals remain in an organization that threatens their valued demographic-related identity, ultimately resulting in adverse effects on work-related attitudes and behavior. The conceptual model that depicts these relationships is shown in Figure 1.

Although literature on organizational diversity has noted the role of social identity, there remains a need to better understand the organizational factors that influence the relationship between demographic-related identity and work-related outcomes (Ely, 1995; Chattopadhyay, Tluchowska, & George, 2004). I test my arguments across two studies, with the objective of advancing the understanding of non-work identity, specifically demographic-related identity, in the workplace in three unique ways.

First, my arguments incorporate important universal motives of social identification, providing a more complete picture of the relationship between demographic characteristics, like gender and ethnicity, and work-related outcomes. My data provide insight and clarify ambiguities in the existing literature concerning the empirical relationships between diversity and work-related outcomes. Second, my research and findings may also promote and influence future research on management of non-work and work-related identities. Specifically, this research has the potential to shed light on how individuals balance and manage multiple non-work and work-related identities in the workplace, an area where empirical data are scarce. (Thatcher & Greer, 2007; Ramarajan & Reid, 2013). Finally, this research provides practical guidance for understanding organizational diversity efforts in proposing that diversity management practices should better embrace demographic-related identities, rather than merely demographic characteristics, at multiple levels throughout organizations.

Figure 1: Conceptual Model with Hypotheses



Chapter 2: Theory and Hypotheses

In this chapter, I will review theoretical and empirical literature in order develop the hypotheses of this study. I will begin by providing a review of social identity theory, and the understanding of the construct of social identity, as this is the theoretical underpinning of my proposed framework. Following this review, I discuss specific social identities of interest. Then, I provide an overview of organizational identification by introducing the construct and key antecedents and outcomes. Next, I provide a similar overview of workgroup identification. Finally, I conclude by discussing the relationship between organizational identification and workgroup identification.

Social Identity

Identity, or the concept of self, is a central construct in human psychology. It is the self-definition that is developed through an individual's unique experiences, interactions with others, and perceived social norms and structures, and the knowledge, experiences, and relationships that define an individual (Erickson, 1968; Brewer, 1991). Simply put, identity is the essence of how we view ourselves as individuals, with repercussions for how we feel, what goals we pursue in life, and how we present ourselves to others (Ellemers, Van Nunspect, & Scheepers 2014). The concept of self is a multidimensional one, embracing who one is as an individual (i.e., personal self) and who one is together or as a group (i.e., social self) (Tajfel & Turner, 1986; Brewer, 1991, Brewer & Gardner, 1996). Both dimensions, the personal and social selves, influence individual thoughts, emotions, and actions (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987).

The personal self, or individuated self, is who one is as an individual and is the answer to the question, "Who am I?". The personal self is the unitary and continuous consciousness of

oneself as an individual (Brewer & Gardner, 1996; Baumeister, 1998; Ellemers, Spears, & Doosje, 2002) and is based upon an understanding of characteristics that combine uniquely in each individual. These characteristics may include personality, abilities, interests, memories, and other unique identifiers. The personal self is the self-definition derived from an individual's values and attributes, competencies, or lack thereof, likes and dislikes, and even aspirations (Ellemers, et al., 2002; Van Kippenberg, Van Kippenberg, De Cremer, & Hogg, 2004).

Whereas the personal self is unitary, the social self is derived from one's myriad relationships and memberships. Social identity theory (SIT) (Tajfel & Turner, 1979) argues that the social self is understood to be that aspect of self that is derived from the integration with others (Brewer & Gardner, 1996) and that reflects a fundamental human need to belong (Tajfel & Turner, 1986; Baumeister & Leary, 1995). The individual formally conceptualizes this integration in two ways: first, with an understanding of being part of the same relationship or group, and second, by feeling psychologically connected as a member. The group or relationship ultimately becomes an aspect of the social self-concept (Hogg & Tuner, 1986). Social identity has been defined as ''…that part of an individual's self-concept which derives from his [or her] knowledge of his [or her] membership of a social group (or groups) together with the value and emotional significance attached to that membership'' (Tajfel, 1978, p. 63). It is a self-description associated with a group or relationship, and has both evaluative (i.e., "how much do I value my membership?") and affective (i.e., "how does belonging to this group make me feel?") components, (Tajfel & Turner, 1979).

Mere membership in a group does not equate to social identification. For social identification to occur, the individual must value and have an emotional association with membership in the group. (Tajfel, 1982). While most individuals are part of many relationships

and groups, not all result in a social identity. Social identification occurs only when one adopts the perceived defining essence of the group as self-defining. There is a shift of perception, in which a unique person becomes an interchangeable exemplar of some human aggregate (Turner et al., 1987). The individuated self is depersonalized, and "I" becomes "we". The interests of the collective attain priority beyond their consequences for the individual (Brewer, 1991).

Social identity theory posits social identification as the result of interactions and relationships between perceived aspects of the self and social contextual elements that ultimately enhance or reduce the meaningfulness of those different aspects of the self (Brewer, 1995; Ellemers et al., 2002). Social identities thus serve as an important means for self-evaluation (Brewer & Gardner, 1996). Two motives serve to advance social identification: self-enhancement and self-consistency.

As the personal self is articulated through experiences and interactions with others, individuals will seek to view themselves in a positive way, particularly in relation to others of importance (Hogg & Turner, 1985; Hogg, Terry, & White, 1995). This search reflects the need for a positive self-understanding, or self-esteem (Sedikides & Strube, 1997). The enhancement of self-esteem is a central motive in the adoption of social identities. Also known as self-enhancement, it is a drive toward a positive sense of self and for protection from threatening or negative experiences. This drive stems in turn from the fundamental drives of pain avoidance and pleasure pursuit (Banaji & Prentice, 1994).

The second important motive that drives social identification is the need for self-consistency. As described by Hogg and Turner (1985), individuals desire consistency and predictability in the relationship between their self-view and the way that others view them. Consistency in self-understanding provides a mechanism for sensemaking and guiding behaviors

(Swann, Rentfrow, & Guinn, 2003). Self-consistency is a powerful driver of behavior because individuals need both continuity in their understanding of self and congruence between self-understanding and behavior (Shamir, 1991; Cooper & Thatcher, 2010).

Central Demographic-related Identities

Some social identities may ultimately become extremely important to one's own self-understanding. Such valued identities have important implications, both for the emergence of new identities and the management of existing identities, because individuals seek to remain consistent with their understanding of self and to affirm valued identities.

The extent to which a social identity is incorporated into the core self-concept is known as the degree of centrality (Settles, 2004). The centrality of a social identity depends upon its value to the individual, i.e., the extent to which the identity forms one's self concept; its distinctiveness (the extent to which it enables the individual to preserve a sense of uniqueness); and its frequent enactment relative to other adopted social identities. (Markus and Kunda, 1986; Cameron, 2004; Sellers, Rowley, Chavous, Shelton, & Smith, 1997). While social identities can be made salient through the social environment, identities that are central have an enduring cognitive prominence within the overall concept of self, such that the salience of the specific social identity endures across social contexts (Gurin & Townsend, 1986; Tajfel, 1978; Brewer, 1991).

Demographic attributes that frequently furnish a basis for categorization tend to develop into central social identities (Tajfel & Turner, 1986; Abrams & Hogg, 1988). Gender and ethnicity, as social categories, obviously have a profound impact on the lives of individuals (Phinney, 2008). From an early age, these characteristics serve a foundational differentiation function. Throughout life, as awareness of sociocultural norms grows, the individual's self-

understanding is fueled by a belief system associated with perceived gender and ethnic-related traits, values, and attitudes (Bussey & Bandura, 1999; Palan, 2001).

As adolescents begin to construct their personal identities, they draw from early attitudes and beliefs about gender and ethnicity (Ruble, Alvarez, Bachman, Cameron, Fuligni, Garcia, & Rhee, 2004, Phinney, 2008). For example, in their qualitative study of adolescents within a school context, Way, Santos, Niwa, and Kim-Gervey (2008) found evidence of the important role of proximal contexts, like one's school, on shaping a social identity. This environment exposes adolescents to group stereotypes, differences among groups, and the implications of these differences (Phinney, 2008), with ultimate impact on their adult lives. Though an individual may be referred to in terms of a certain gender or ethnicity, it is only when the individual accepts this social category as self-defining that it manifests as an identity. Social identities related to groups may be based on gender or ethnicity shared by members of the group, but are also connected to the social norms, beliefs, values, and feeling states associated with a specific gender or ethnic social category (Deaux, 1985; Deaux & Stewart, 2001; Ely & Padavic, 2007).

The implications of both gender and ethnic identity, particularly regarding behavior, are well-established (Banaji & Prentice, 1994). For example, in examining perceptions of masculinity and femininity, Jose and McCarthy (1988) found that those with high gender identity were perceived to engage in behaviors aligned with normative masculine and feminine attributes. Gender differences have been demonstrated in multiple aspects of self-understanding, including the basis for self-esteem (Josephs, Larrick, Steele, & Nisbett, 1987), assessments of self-evaluations (Beyer, 1990), and even overall happiness and life satisfaction (Wood, Rhodes, & Whelan, 1989). Ethnic identity, though often intertwined with gender identity, is also theorized

to be particularly important for individuals (Phinney, 2008) and has been linked to positive well-being and self-esteem. For example, Crocker and her colleagues (1994) found evidence of the moderating influence of ethnicity on the relationship between self-esteem and psychological well-being. In her research on Chinese American students, Yip (2005) found that ethnic identity was associated with positive mood and fewer depressive symptoms.

Taken together, one's gender and ethnic identity will often be a central component of the core self-concept, indicating that identity associated with these demographic attributes is understood to be distinctly important to one's overall self-concept and frequently enacted across social environments (Hogg & Terry, 2000; Ethier & Deaux, 1994). As individuals age and are exposed to new environments with new sets of norms, interactions, and experiences, the potential for new identities emerges. When new aspects of self-identity present themselves, a tension arises between the desire to enhance self-understanding while retaining consistency. (Brewer, 1991). As these competing needs become more complex, the centrality of one's demographic-related identity has significant implications for the acceptance and manifestation of other social identities. Incorporation of a new social identity will occur only if the individual's understanding of that identity's norms, behaviors, and beliefs enhance, or are at least consistent with, existing gender or ethnic identity.

Central Demographic-related Identities and Organizational Identification

As individuals join the workforce, the potential for adoption of new work-related social identities increases (Ashforth & Mael, 1989; Ashforth, et al., 2008). Existing social identities, particularly valued central identities, can support or hinder identification with these new work-related targets. A primary target for identity within the work context is the organization itself. Organizational identification can be viewed as a self-conception in which an individual identifies

with the organization as a whole (Ashforth & Mael, 1989; Ashforth et al., 2008; Hogg & Terry, 2000). It is derived from things like the organization's brand (Battacharya & Sankar Sen, 2003), management's observed interactions with stakeholders (Scott & Lane, 2000), and company culture and values. Identification with the organization enables an individual to make sense of the social landscape at work and to embed oneself in it (Albert, Ashforth, & Dutton, 2000).

When individuals experience enhancement of, or consistency with, their concept of self at work, perceived similarities with the values and characteristics of prototypical members of the organization will emerge (Hogg & Terry, 2000). Social identification management processes will begin to operate. As individuals join an organization, the resulting socialization experiences are filtered through their self-enhancement and self-consistency motives. While association with an organization is likely to enhance self-esteem, the need for self-consistency, particularly with central identities, will also significantly affect the adoption of new work-related identities.

An ability to express oneself at work is likely to advance the core goals of self-consistency and self-enhancement. For example, Thatcher and Greer (2008) found that employees whose non-work identities were recognized by management were more likely to have higher levels of creativity and job satisfaction. Conversely, employees whose non-work identities were dismissed or discounted had higher levels of absenteeism. Unsurprisingly, the harmonious co-existence of one's social identities promotes psychological well-being (Brook, Garcia, & Fleming, 2008), especially within the workplace. Ely and Thomas (2001) saw positive effects when individuals reported that they felt their "whole person" was acknowledged at work. Tiedje, Wortman, Downey, Emmons, Biernat, and Lang (1990) found that women who experience high enhancement and low conflict in their identities reported higher levels of well-being and

satisfaction. As humans we have a fundamental need to belong to important social groups and to have social support (Baumeister & Leary, 1995), especially at work.

Central identities tend to be the frame of reference for whether one's work identity fulfills self-enhancement and self-consistency goals (Albert, Ashforth, Gioia, Godfrey, Reger, & Whetten, 1998). Demographic-related identities are an important consideration in the workplace, given their influence on an individual's thoughts, feelings, and behaviors. There is empirical evidence that these identities are a significant factor influencing behavior related to workplace outcomes. For instance, Barbuleschu and Bidwell (2013) demonstrated that gender identity influenced job preference and ultimately selection. Settles (2004) noted that incompatibility between one's professional identity and gender identity negatively affected work performance. Niemann and Dovidio (1998) demonstrated that salience of ethnic identity in a homogenous work group negatively affected job satisfaction. And Ely (1995) suggested that enactment of behaviors that are not congruent with one's gender identity is positively correlated to turnover. Such findings show both the influence of demographic-related identities on work-related outcomes and the difficulty of integrating one's gender or ethnic identity into the context of work.

Perceived Threats to Central Demographic-related Identities at Work

Perceived threats to a valued core identity will affect the identification process. When a potential devaluing of one's group is perceived, a perceived threat to the associated identity also occurs (Branscombe, Ellemers, Spears, & Doosje, 1999). Within the context of work, experiences that might devalue the meanings or enactment of a social identity are understood to be perceived threats to that identity (Petriglieri, 2011). Van Laar and her colleagues (2019) argued that perception of demographic-related identity threats within the workplace tend to result

from: numerical prevalence of a group; the discrimination or devaluation of one's group; and a perceived preference for characteristics typically associated with a specific group.

Numerical prevalence of a group, particularly as it relates to gender and ethnicity, can serve as a trigger for perceptions of identity threat. Being a member of a minority group along a dimension of categorization, like gender or ethnicity, promotes salience of the identity associated with that dimension. Furthermore, in environments in which one is in the minority group, an expectation that one will be viewed in terms of gender or ethnicity is also likely to increase (Frey & Troop, 2006; Emerson & Murphy, 2014). Relational demography literature has demonstrated the negative impacts of underrepresentation, particularly for gender and ethnicity (Liao, Joshi, & Chaung, 2004).

The direct experience of prejudice and discrimination directed to ingroup members obviously provokes a perceived identity threat. However, devaluation of one's gender or ethnicity may also result from subtle, even unintentional, cues from the organization or its members (Dovidio, 2001; Ellemers & Barreto, 2015). An individual who perceives the potential for devaluation will look to determine the meaning and value of their demographic-related identity within the organizational context (Murphy & Taylor, 2012). In their research of women in academia, Settles, Cortina, Malley, and Steward (2006) found that women who reported discrimination and feelings of identity threat had greater negative job outcomes compared to those that did not.

Finally, perceived threats to identity can be triggered by an organizational emphasis on domains or characteristics associated with a majority group (Derks, Van Laar, & Ellemers, 2007). This can occur within professions or even organizations. For example, the corporate culture of a construction firm may incorporate, even unintentionally, traditionally "masculine"

attributes in a variety of different ways, such as job descriptions and in communication to different stakeholders.

Perceptions of threat to a valued central identity force the employee to face a choice between limiting identification with the group or deemphasizing the prior social identification (Ethier & Deax, 1994). Devaluation of a central identity can frustrate one's needs for a positive sense of self and consistency (Petriglieri, 2011). It is logical that the linkage between central demographic-related identities and perceived threats to these identities will influence the extent to which identification with the organization is advanced or hindered. This, in turn, is likely to determine the extent to which the individual is integrated into the organization. Therefore, I predict

Hypothesis 1a: Perceptions of gender identity threat by the organization will be more negatively related to organizational identification for those with greater gender identity centrality.

Hypothesis 1b: Perceptions of ethnic identity threat by the organization will be more negatively related to organizational identification for those with greater ethnic identity centrality.

Adoption of work-related social identities tends to promote thoughts, feelings, and behaviors in support of the work-related target (i.e., the organization). Work-related identities integrate the work-related target into the employee's self-concept, and the organization's goals become those of the employee (Ellemers et al, 2004). Striving toward and achieving work-related goals benefits the individual, and enhances satisfaction, the sense of belonging, and self-esteem. The resulting behaviors align with the objectives of the organization (Van Knippenberg, 2000).

Significant empirical evidence supports the influence of organizational identification on employee outcomes that support the organization. In their research examining organizational identification of physicians, Dukerich, Golden, and Shortell (2002) found a positive correlation between cooperative behaviors and employees with strong organizational identification. In his meta-analysis of organizational identity, Riketta (2005) found that organizational identity was significantly correlated to extra-role performance, low turnover, and employee perception of organizational prestige. Consistent with those findings, Van Dick, Grojean, Christ, and Wieseke (2006) demonstrated the robust relationship between organizational identification and organizational commitment behaviors over the course of four distinct studies. In their research on effects of team-member exchange, Liu, Loi, and Lam (2011) found that high levels of organizational identification were positively associated with organizational citizenship behaviors. Organizational identity has also been associated with reduced turnover and turnover intentions (e.g., Mael & Ashforth, 1995; Van Dick, Christ, Stellmacher, Wagner, Ahlswede, Grubba, Hauptmeier, Höhfeld, Moltzen, & Tissington, 2004; Conroy, Becker, & Menges, 2017) and job satisfaction (e.g., Carmeli, Gilat, & Waldman, 2007).

While organizational identification has a positive influence on work-related behaviors, it does not operate in a vacuum. Other social identities, particularly valued central identities, will interact with organizational identification given their influence on an individual's thoughts, feelings, and behaviors. I predict that perceived threats to a valued central gender or ethnic identity will hinder the employee's organizational identification and consequently impair extra-role behaviors and job attitudes.

Hypothesis 2a: Organizational identification mediates the relationship between perceptions of gender identity threat and extra-role behaviors.

Hypothesis 2b: Organizational identification mediates the relationship between perceptions of ethnic identity threat and extra-role behaviors.

Hypothesis 3a: Organizational identification mediates the relationship between perceptions of ethnic identity threat and turnover intentions.

Hypothesis 3b: Organizational identification mediates the relationship between perceptions of ethnic identity threat and turnover intentions.

Central Demographic-related Identities and Workgroup Identification

The organization has been the primary focus of much of the empirical work related to identification in the workplace (van Kippenberg & van Schie, 2000). As argued by van Kippenberg and van Schie (2000), depicting an organization as a single amalgamated entity is an oversimplification and does not necessarily recognize the network of groups within an organization that likely elicit feelings of identification. Ashforth and his colleagues (2008) note that due to the uniqueness and complexity of organizations, "A person may be a member of an occupation, department, task force, lunch group, and so on, each of which has its own, more or less distinct identity." (p. 347). Therefore, the workgroup[1] is another important target for identification in the workplace. The workgroup is where day-to-day work tasks are typically conducted and where individuals develop relationships with their co-workers.

Workgroup identity has been argued to be a particular distinguishable and strong work-related target for identification, separate and apart from organizational identification, for two reasons. First, workgroups are smaller, more exclusive, and more concrete than organizations

[1] For the purposes of this research, "workgroup" is used to represent the department, team, or sub-unit with which the employee works.

(Ashforth, et al, 2008; Ashforth & Johnson, 2001; Kramer, 1991). According to self-categorization theory (SCT) (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987), the more insular nature of the workgroup, for example a marketing department, within the larger organization may prompt a comparison with other workgroups, such as research and development (R&D). This can in turn increase the sense of perceived similarity among in-group (workgroup) members. The promotion of similarity with workgroup members makes the workgroup an attractive target for identification (Brewer, 1991; Moreland & Levine, 2001).

Second, workgroups are more proximal than organizations, and thus likely to be more salient (Ashforth, et al, 2008; Ashforth & Johnson, 2001; Kramer, 1991). The workgroup is a more localized unit, in which work life and the feelings that it generates, tend to play out more immediately and directly. Workgroup identification is more relational than organizational identification because the workgroup is the locus of the employee's most frequent interactions with other members of the organization (Kramer, 1991).

Relational identities are those associated with specific relationships; they represent interpersonal connections to other individuals. Prentice Miller, and Lightdale (1994) distinguished social identities, those that are broader in nature and are based on a shared collective, as well as those identities that are more relational in nature and are based on common bonds or attachment to members within a group. Relational identities develop through personal bonds and include intimate groups (Lickel, Hamilton, Wieczowska, Lewis, Sherman, & Uhles, 2000; Brewer & Gardner, 1996; Sluss & Ashforth, 2007). Examples include dyadic relationships, like a parent and child or employee and supervisor, as well as small group relationships, like a sports team or workgroup.

It has been argued that individuals are increasingly vesting their sense of self at the workgroup level (Stroh, Brett, & Reilly, 1994). Given the relational nature of workgroup identification, it stands to reason that perceived threats by one's workgroup to a particularly important identity held by the employee will be felt more deeply and have negative ramifications for workgroup identification. Therefore, I predict that,

Hypothesis 4a: Perceptions of gender identity threat by the workgroup will be more negatively related to workgroup identification for those with greater gender identity centrality.

Hypothesis 4b: Perceptions of ethnic identity threat by the workgroup will be more negatively related to workgroup identification for those with greater ethnic identity centrality

The workgroup is structurally embedded or nested within the organization. Through a means-end relationship (March & Simon, 1958), the organization's goals are pursued through multiple workgroups, each of whose objective is to advance the goals of the organization. As identification with a group is likely to promote feelings and behaviors that support or advance the goals of that entity (Dutton et al., 1994; van Kippenberg & van Schie, 2000), it is reasonable to assume that workgroup identification would promote behaviors in support of the workgroup and, by extension, the organization.

Empirical research has demonstrated associations between workgroup identification and a number of work-related outcomes. In his research examining multiple levels of work-related identification, Scott (1997) found that workgroup identifications were not only greater in nature than organizational identification, but that they predicted ratings of individual performance. Van

Der Vegt and Bunderson (2005) found that at high levels of workgroup (team) identification, a diversity in expertise was related to both team learning and team performance. In their meta-analytic research of workgroup attachment (i.e., work group identification and commitment), Riketta and Van Dick (2005) found that workgroup attachment was positively related to extra-role behaviors and satisfaction with co-workers and supervisors. Workgroup identification has also been associated with reduced levels of absenteeism and social loafing (Ellemers et al., 2004). Finally, in their examination of both organizational and workgroup identification, van Kippenberg and van Schie (2000) found workgroup identification was strongly related to job satisfaction and job motivation.

These findings demonstrate workgroup identification as a predictor of work-related attitudes and behavior. Thus, it is likely that through workgroup identification, perceived threats by the workgroup to gender or ethnic identity, will be related to these work-related attitudes and behaviors.

Hypothesis 5a: Workgroup identification mediates the relationship between perceived threats to gender identity by the workgroup and extra-role behaviors.

Hypothesis 5b: Workgroup identification mediates the relationship between perceived threats to ethnic identity by the workgroup and extra-role behaviors.

Hypothesis 6a: Workgroup identification mediates the relationship between perceived threats to gender identity by the workgroup and turnover intentions.

Hypothesis 6b: Workgroup identification mediates the relationship between perceived threats to ethnic identity by the workgroup and turnover intentions.

Organizational Identification, Workgroup Identification, and Work-related Outcomes

Just as the workgroup exists to advance the goals of the organization, Ashforth and Johnson (2001) posited workgroup identification as a means to the end of organizational identification. Given the nested relationship between the workgroup and the organization, they presumably share the same values and norms, which, in turn, suggests compatibility between the identities associated with these targets. Taking a nested identities approach, Ashforth and Johnson (2001) argued that organizational identities tend to be a more inclusive, abstract version of workgroup identities, with at least some overlap between the two. As a result, identification with one level tends to extend to the other, such that the importance and salience of the nested workgroup identity will be extend to the higher-order organizational identity.

Subsequent empirical research supports the hypothesis of positive correlation between organizational and workgroup identities. For instance, Scott (1997) found that state officials who identified with lower district-related groups did so for higher state and country groups as well. Riketta and Nienaber (2007) demonstrated a similar correlation between store identification and network identification in their research examining German pharmaceutical stores. In further exploring this relationship, van Dick, van Kippenberg, Kerschreiter, Hertel, and Wieske (2008) identified the potential for an interaction between workgroup identification and organizational identification, as specifically related to work-related attitudes and behavior. Across the two studies, they found that the interaction was a significant predictor of job satisfaction and organization citizenship behaviors. Interestingly, the relationship strength between workgroup identification and job satisfaction and citizenship behaviors differed depending on high and low levels of organizational identification across both studies.

Taking into consideration the need for self-consistency, I look to further explore the interactive relationship between workgroup identification and organizational identification, I predict,

Hypothesis 7a: Workgroup identification will have a more positive relationship with extra-role behaviors for those with greater organizational identification.

Hypothesis 7b: Workgroup identification will have a more negative relationship with turnover intentions for those with greater organizational identification

Chapter 3: Research Methodology

Method

Participants and Procedures. To test my hypotheses, I conducted two studies. Each study utilized data from a cross-sectional sample of employees at a specific organization. Study I data were collected at a mid-sized (1000+) chemical manufacturing firm headquartered in the Northern Central United States. Study II data were collected at a small (200+) health services organization headquartered in the Southeastern United States. The participants in each study are described in Chapters 4 and 5.

The procedure for data collection, which was similar across each study, was designed to reduce social desirability bias and common method bias (Podsakoff, MacKenzie, & Podsakoff, 2012). Participants received an e-mail inviting them to participate in the study, with information about the purpose of the research, emphasis on the anonymity of their responses, and instructions for completing the electronic survey. See Appendix I & II. For administration and security purposes, this recruitment email, reminder emails, and the survey battery were distributed using Qualtrics, with access afforded only to the researchers. Data were collected over two time points. At Time 1, participants responded to the measures on the independent variables of interest, including perceived organizational/workgroup demographic-related identity threats, demographic-related identity centrality, and organizational/work group identification. Approximately one month later (Time 2), participants provided feedback on their individual- and organizational-directed citizenship behaviors, as well as their turnover intentions.

Measures

Participants responded to items using a Likert-type response scale, with the exception of the measures of the control variables. The survey instruments, inclusive of the constructs

measured, are found in Appendix III. The measures found in each survey, as well as their sources, are discussed below.

Demographic-related identity centrality. Four items from the Importance to Identity subscale of the Collective Self-Esteem Scale (Luhtanen & Crocker, 1992) were used to measure the importance of one's gender identity and ethnic identity to their overall self-concept. The Importance of Identity subscale is related to collective self-esteem constructs (e.g., membership, public, and private self-esteem; Luhtanen & Crocker, 1992), and has been used as a measure for both gender identity centrality (Cameron & Lalonde, 2001; Settles, 2004) and ethnic identity centrality (Sellers et al., 1997; Kachanoff, Ysseldyk, Taylor, de la Sablonnière, & Crush, 2016). Items from this subscale were adapted to measure gender and ethnic identity centrality. Through its display-logic capability, Qualtrics software inserted the participant's selected gender or ethnicity into the items. A sample of the items include: "Overall, being [male] has very little to do with how I feel about myself." and "Being [Asian] is an important reflection of who I am.". Responses were rated on a 5-point Likert scale ranging from *strongly disagree* (1) to *strongly agree* (5).

Demographic-related identity threat. Three items adapted from the Public subscale of the Collective Self-Esteem Scale (Luhtanen & Crocker, 1992) and three items adapted from Ethier and Deaux (1990) were combined to assess perceptions of both gender and ethnic identity threat by the workgroup and the organization. These scales have been utilized to assess one's judgments of how other people evaluate their ethnicity (Crocker, Luhtanen, Blaine, & Broadnax, 1994; Ethier & Deaux, 1994) and gender (Karelaia & Guillen, 2014). Again, using the display-logic capability, Qualtrics software inserted the participant's selected gender or ethnicity into the adapted items. A sample of items that assess the participants' perception of how their

gender/ethnicity is evaluated by their organization and workgroup includes: “In general, my organization respects [insert gender/ethnicity]”. The question was modified to the referent of interest, workgroup or organization. Responses were rated on a 5-point Likert scale ranging from *strongly disagree* (1) to *strongly agree* (5).

Workgroup/Organizational identification. Organizational and workgroup identification was obtained using a four-item measure adapted from Mael and Ashforth (1992). This measure has been widely adopted for both workgroup and organization identification. In his meta-analysis of organizational identity, Riketta (2005) recommended the use of this scale in the study of work-related identification due to its similarity in the results for studies using other organizational identification measures, but also due to the low correlation variation when compared to the other measures. Participants were asked to assess their workgroup identification: ‘‘When someone praises my team, it feels like a personal compliment.” Participants were also asked to evaluate their organizational identification using similarly adapted items: ‘‘When I talk about [organization], I usually say ‘we’ rather than ‘they’.” Responses were rated on a 5-point Likert scale ranging from *strongly disagree* (1) to *strongly agree* (5).

Extra-role behaviors. An eight-item scale adapted from Lee and Allen (2002) was utilized to measure extra-role behaviors. This scale has been demonstrated in previous research to have consistent and satisfactory reliability (Tse & Chiu, 2014; Norman, Avey, Nimnicht, & Graber Pigeon, 2010; del Triana, Kim, & Garcia, 2011). Sample items include: “Went out of my way to make newer employees feel welcome” (organizational citizenship behaviors-individual) and “Took action to protect the organization from potential problems” (organizational citizenship behaviors-organization). Responses were on a 5-point Likert scale ranging from *never* (1) to *always* (5).

Turnover intentions. A four-item measure was utilized to measure turnover intentions (Hom & Griffeth, 1995). Examples of the items in the scale include "Thoughts about quitting this job cross my mind." Responses were rated on a 5-point Likert scale ranging from *strongly disagree* (1) to *strongly agree* (5). Turnover intentions have been demonstrated to be a strong predictor of actual turnover behavior (for meta-analysis, see Griffeth, Hom, & Gaertner, 2000). They are often used as a proxy for this behavior (Holtom, Mitchell, Lee, & Eberly, 2008). To assess the predictive strength of turnover intentions in this research, the effects of turnover intentions on actual turnover behavior were also analyzed in each study. Actual turnover was provided by the organization approximately one year following Time 1 of each study.

Control variables. Gender and ethnicity were also collected as control variables given the dynamic nature of the primary construct (identity) being examined (Proudford & Smith, 2003). An example of these measures and response options can be found in Appendix III. Upon collection, both gender and ethnicity were re-coded to dichotomous variables, gender as male or female, and ethnicity as Caucasian or Non-Caucasian, as both females and non-Caucasian ethnicities may have lower social status and thus, perceive more threats than majority group members (Goldman, Gutek, Stein and Lewis, 2006). Workgroups were estimated using employee locations provided by the organization. Each organization's structure lent to the development of relationships and bonds by the specific locations, as day-to-day work occurred within the physical locations of the organization.

Data Analysis

The hypotheses were tested across two studies in which I examined the direct, indirect, moderated, and moderated mediated relationships between the variables of interest. The analytic strategy employed in both studies was identical and is described below.

Analysis of Fit. The discriminant validity between constructs was examined through a series of confirmatory factor analyses at each level of analysis (i.e., individual and workgroup) prior to conducting tests of the hypotheses (Wang & Wang, 2012). First, two one-factor models (one for organizational-related variables and one for workgroup-related variables) by the associated level of analysis (i.e., demographic-related identity threat by the organization/workgroup (2-gender/ethnicity), by demographic-related identity centrality (2-gender/ethnicity), by organization/workgroup identification (1), by individual- and organization-directed citizenship behaviors (2), and by turnover intentions (1)) were tested. Then, two seven-factor models, followed by two eight-factor models, were tested. Chi-squared tests were utilized to determine the best fit, and practical fit indices were examined to assess the overall fit of the models (Wang & Wang, 2012). These fit indices included the Tucker-Lewis Index (TLI), Comparative Fit Index (CFI), and Root Mean Square Error of Approximation (RMSEA). Across both studies, the eight-factor models were demonstrated to fit the data better, both at the organization and workgroup level, than the one-factor models. In addition, the practical fit indices were acceptable in both studies, indicating that the measures of each construct were consistent with my hypothesized model.

Tests of Hypotheses. To tests the hypotheses, I explored the proposed relationships between the variables of interest using code from Stride, Gardner, Catley, and Thomas (2015) in Mplus (Muthen & Muthen, 2017). The analytic processes used to examine the effects of these variables are described below.

Tests of Moderation and Mediated Moderation. The moderated effects of the individual (organization-related) level variables (Hypothesis 1a-1b) were tested following Hayes' (2013) approach using a series of path analysis models. The models first examined the direct effects of

the control variables (gender-Hypothesis 1a, and ethnicity-Hypothesis 1b), organizational threats to demographic-related identity, and demographic-related identity centrality on organizational identification (Model 1), and then added the interaction between organizational threats to demographic-related identity and demographic-related identity centrality (Model 2). All variables were grand mean centered. The moderation models, along with the simple slopes, were examined and plotted to determine moderation effects (Hayes, 2013).

To test Hypotheses 2-3 (i.e., moderated mediation effects), I utilized conditional process analysis, as recommended by Hayes (2015), to examine the index of moderated mediation. A bias-corrected bootstrapped-based procedure using 10,000 bootstrap samples was generated (Hayes, 2013; 2015) to estimate the indirect effect of organizational threats to demographic-related identity on individual- and organizational-directed citizenship behaviors and turnover intentions through organizational identification. The bootstrapping methods were also used to examine the significance of the overall conditional indirect effect on the outcome variables (the index of moderated mediation), as well as the difference in simple slopes at different levels (i.e., +1 standard deviation and -1 standard deviation) of demographic-related identity centrality, as recommended by Aiken and West (1991).

Tests of Workgroup Moderation and Mediated Moderation. Due to the nested nature of the data (relating to individuals in work groups within an organization), prior to analyzing Hypotheses 4-6, I examined the proportion of total variance between locations in the perceptions of workgroup demographic-related identity threat and workgroup identification (Bliese, 2000, Kreft & DeLeeuw, 1998) by analyzing the interclass correlation coefficients for each of these variables. The resulting ICC (1) statistics for each of the workgroup-related variables across both studies were extremely low, suggesting that aggregation was not necessary (Hayes, 2013).

Subsequently, the analytic procedures described above to test moderation effects for Hypotheses 1a and 1b were utilized to examine moderation effects of demographic-related identity centrality on the relationship between workgroup demographic-related identity threat and workgroup identification (Hypotheses 4a and 4b). Just as for the tests of Hypotheses 2-3, a bias-corrected bootstrapped-based procedure was utilized to examine the index of moderated mediation for the indirect effect of workgroup threats to demographic-related identity on individual- and organizational-directed citizenship behaviors and turnover intentions through workgroup identification.

Test of Organizational Moderation. I tested the moderation effects of organizational identification on the relationship between workgroup identification and individual- and organizational-directed citizenship behaviors, as well as turnover intentions. As with Hypotheses 1 and 4, all variables were grand mean centered prior to the analysis. The moderation models, along with the simple slopes, were examined and, if necessary, plotted to determine moderation effects (Hayes, 2013).

Chapter 4: Study 1 Results

Sample

Participants were comprised of employees from a mid-sized chemical manufacturing firm headquartered in the North Central United States. The firm has various locations across the country. All employees were invited to take part in this study via a link to an electronic survey. A copy of this recruitment email can be found in Appendix I. At Time 1 (T1), over 1,000 employees were asked to provide feedback on their gender/ethnic identity, gender/ethnic identity centrality, organizational/workgroup (gender/ethnic) identity threat, and organizational/workgroup identity. 221 surveys were completed. 35% of participants were male, with an average age of 46.29 (*SD*=12.62), ranging from 21 years old to 72 years old. 86.6% were Caucasian, 3% were Asian, 5.6% Black or African American, less than 1% Hispanic, and 2.6% were two or more ethnicities. Respondents were distributed across 15 locations, with 34% at Location 3, 14% at Location 9, 7.4% at Location 2, 7% at Location 12 and at Location 14, and 6.6% at Location 11, with the remaining 24% distributed across the other nine locations. At Time 2, one month later, employees received an invitation to a second survey that asked them to provide feedback on their turnover intentions and citizenship behaviors directed at both individuals and the organization. See Appendix III for the items contained in the Time 1 and Time 2 surveys. A total of 97 Time 2 surveys were completed, a 44% response rate.

Data Cleaning & Preparation

Time 1 and Time 2 surveys were matched using an assigned unique identification number. Given the resulting sample, no data were dropped from analysis. To examine normality, histograms and p-plots were reviewed along with metrics of skewness and kurtosis. Table 1 presents both skewness and kurtosis statistics. The shape of the distribution of each variable was

examined to ensure there were no extreme deviations in normality. The histograms revealed that organizational identity and citizenship behaviors-organization was slightly leptokurtic. Organizational and workgroup threat to gender tended to skew positively, whereas gender identity centrality, organizational identification, and citizenship behaviors directed at the organization skewed negatively.

Table 1. Study I Skewness and Kurtosis Statistics

	M	*SD*	*N*	Min	Max	Skewness	*SE*	Skewness (z-score)	Kurtosis	*SE*	Kurtosis (z-score)
Gender	0.65	0.48	221	0.00	1.00						
Ethnicity	0.90	0.35	221	0.00	1.00						
Gender Identity Centrality	3.30	0.81	221	1.00	5.00	-0.53	0.16	-3.21	0.58	0.33	1.78
Ethnic Identity Centrality	2.72	0.87	221	1.00	5.00	0.07	0.16	0.44	0.02	0.33	0.08
Org Gender Identity Threat	3.79	0.60	202	1.40	5.00	0.29	0.17	1.68	0.87	0.34	2.55
Org Ethnic Identity Threat	3.79	0.63	202	2.00	5.00	0.03	0.17	0.17	-0.34	0.34	-1.01
Organizational Identification	3.59	0.68	199	1.00	5.00	-0.74	0.17	-4.29	1.27	0.34	3.69
Workgroup Gender Identity Threat	3.78	0.56	205	1.60	5.00	0.33	0.17	1.95	0.68	0.34	2.00
Workgroup Ethnic Identity Threat	3.82	0.62	205	2.00	5.00	0.20	0.17	1.18	-0.30	0.34	-0.88
Workgroup Identification	3.82	0.61	203	2.00	5.00	-0.20	0.17	-1.19	0.20	0.34	0.60
Turnover Intentions	2.31	1.02	97	1.00	5.00	0.59	0.24	2.40	-0.50	0.49	-1.02
Turnover	0.18	0.38	231	0.00	1.00						
Citizenship Behaviors-Individual	4.03	0.68	97	2.25	5.00	-0.20	0.24	-0.80	-0.69	0.49	-1.42
Citizenship Behaviors-Organization	4.03	0.64	97	1.75	5.00	-0.71	0.24	-2.89	1.13	0.49	2.33

Validation of Scales

While each of the scales was adapted from previous research, it was important to determine whether some of the variables overlapped with constructs similar in nature. For the variables measured, this analysis was conducted for demographic-related identity (gender/ethnic identity) compared to demographic-related identity centrality (gender/ethnic identity centrality),

as these constructs may be similar in nature. Furthermore, demographic-related identity threat was also examined as this variable was measured using items from two validated scales.

Demographic-related identity and demographic-related identity centrality. To ensure that the measures of gender/ethnic identity and gender/ethnic identity centrality were distinct, I estimated two confirmatory measurement models. In an initial review of the items, the intercorrelation of gender identity and gender identity centrality was significant (r=0.34, p<.01), as was that for ethnic identity and ethnic identity centrality (r=0.46, p<.01). I examined each demographic variable separately. I first specified a model in which the two identity measures for gender loaded onto a single factor. As demonstrated in Table 2, the single factor did not fit the data well. When compared to a two-factor model, the model fit the data significantly better (ΔX^2 = 80.68, Δdf = 2, p < .001). The overall fit of the two-factor model was acceptable, *CFI*=0.99, *TLI* =0.97, *RMSEA* =0.06 *90% CI* [0.00-0.13], *SRMR* =0.05.

The findings for ethnicity were similar. The two-factor model (ΔX^2 = 123.98, Δdf = 2, p<.001). fit the data better than the one-factor model, with the overall fit of the two-factor model as acceptable *CFI*=0.99, *TLI* =0.97, *RMSEA* =0.08 *90% CI* [0.03-0.13], *SRMR* =0.04. As a result, demographic-related identity and demographic-related identity centrality were found to factor on distinct constructs and demographic-related identity centrality was utilized in the overall measurement model.

Table 2. Summary of Study I Confirmatory Measurement Model Statistics: Demographic-related Identity Centrality

Model	X^2(*df*)	CFI	TLI	RMSEA	RMSEA CI_{90}	SRMR
Gender Identity Centrality						
One-factor	91.13 (*9*)	0.69	0.47	0.26	0.21-0.31	0.14
Two-factor	10.45 (*7*)	0.99	0.97	0.06	0.00-0.13	0.05

Ethnicity Identity Centrality						
One-factor	141.51 (*9*)	0.72	0.54	0.33	0.28-0.38	0.13
Two-factor	17.53 (*7*)	0.98	0.95	0.10	0.04-0.17	0.06

Demographic-related identity threat. Three items were adapted from the Public subscale of the Collective Self-Esteem Scale (Luhtanen & Crocker, 1992) and three items adapted from Ethier and Deaux (1990) were combined to assess perceptions of both gender and ethnic identity threat within the workgroup or the organization. Given that this measure combined items from two scales, I then conducted a confirmatory factor analysis for the items within each threat variable (i.e., organizational gender identity threat, organizational ethnic identity threat, workgroup gender identity threat, and workgroup ethnic identity threat). I first examined a one-factor model, followed by a two-factor model for each variable with all six items examined in each. As noted in Table 3 below, the two-factor model indicated that the first factor loading (the first item in the combined scale), which was fixed to one, did not estimate close to one or was negative, resulting in non-convergence.

Table 3. Summary of Study I Preliminary Confirmatory Measurement Model Statistics: Demographic-related Identity Threat

Model	X^2(*df*)	CFI	TLI	RMSEA	RMSEA CI_{90}	SRMR
Organizational Gender Identity Threat						
One-Factor	27.05 (*9*)	0.93	0.88	0.12	0.07-0.17	0.06
Two-Factor	26.91 (*8*)	0.93	0.86	0.13	0.08-0.18	0.06
Organizational Ethnic Identity Threat						
One-Factor	33.99 (*9*)	0.92	0.87	0.14	0.09-0.19	0.06
Two-Factor	No convergence					
Workgroup Gender Identity Threat						
One-Factor	46.39 (*9*)	0.89	0.8	0.17	0.13-0.22	0.09
Two-Factor	No convergence					

Workgroup Ethnic Identity Threat						
One-Factor	45.75 (*9*)	0.8	0.67	0.17	0.13-0.22	0.08
Two-Factor	No convergence					

To examine this further, I conducted an initial review of the reliability of the items within each threat variable. The Cronbach's alpha was only moderate for each of the organizational items: organizational gender threat was $\alpha = 0.79$ and organizational ethnicity threat was $\alpha = 0.79$ and insufficient for each of the workgroup threats, such that gender identity threat by the workgroup was $\alpha = 0.66$ and ethnic identity threat by the workgroup was $\alpha = 0.64$ (Nunnally & Bernstein, 1994). Analysis of the intercorrelation of each item within the scales showed that the first item from the Public Scale (Luhtanen & Crocker, 1992) had a much lower correlation with the other items within each of the respective scales. In accordance with DeVellis (2016), this item was dropped from each of the scales. The reliability increased for each scale, with the workgroup-related threats improving to an acceptable reliability for both gender, $\alpha = 0.73$, and ethnicity, $\alpha = 0.77$.

An additional confirmatory factor analysis was then conducted for each threat variable. As indicated in Table 4, the elimination of the first item in the scales did not indicate a significant difference between the one-factor and two-factor models for organizational gender identity threat ($\Delta X^2 = 0.88$, $\Delta df = 1$, $p < ns$), workgroup gender identity threat ($\Delta X^2 = 0.02$, $\Delta df = 1$, $p < ns$), and workgroup ethnic identity threat ($\Delta X^2 = 1.51$, $\Delta df = 1$, $p < ns$). While organizational ethnic identity threat did show a significant difference between the one-factor and two-factor models ($\Delta X^2 = 5.73$, $\Delta df = 1$, $p < .05$), the one-factor still fit the model well. Therefore, I proceeded with five items for the measurement of perceptions of identity threat.

Table 4. Summary of Study I Confirmatory Measurement Model Statistics: Demographic-related Identity Threat

Model	$X^2(df)$	CFI	TFI	RMSEA	RMSEA CI_{90}	SRMR
Organizational Gender Identity Threat						
One-Factor	6.34 (*5*)	0.99	0.99	0.03	0.00-0.13	0.03
Two-Factor	5.46 (*4*)	0.99	0.98	0.03	0.00-0.15	0.03
Organizational Ethnic Identity Threat						
One-Factor	23.07 (*5*)	0.95	0.88	0.16	0.10-0.23	0.04
Two-Factor	17.34 (*4*)	0.96	0.89	0.16	0.09-0.23	0.04
Workgroup Gender Identity Threat						
One-Factor	9.34 (*5*)	0.97	0.94	0.08	0.00-0.16	0.04
Two-Factor	9.32 (*4*)	0.96	0.9	0.10	0.00-0.18	0.04
Workgroup Ethnic Identity Threat						
One-Factor	4.16 (*5*)	1.00	1.01	0.00	0.00-0.11	0.03
Two-Factor	2.65 (*4*)	1.00	1.01	0.00	0.00-0.11	0.02

Turnover Intentions. While the strength of predictive power of turnover intentions is well documented, there has been variability across studies (Allen, Weeks, & Moffitt, 2005), with research suggesting that the relationship between turnover intentions and actual turnover relationship depends on populations and circumstances (Griffeth, et al., 2000; Allen et al., 2005). To analyze the effects of turnover intentions on the likelihood that participants within this study would leave the organization within one year after participating in this study, I performed a binary logistic regression.

Table 5 provides the full model results of this analysis. When controlling for gender and ethnicity, the intent to turnover was significantly related to actual turnover, X^2 (3, N=221) = 9.075, $p < .05$; as turnover intentions increased, so did the likelihood of leaving the organization, Wald X^2 (3, N=221) = 6.98, $p < .01$. Based on these findings, the intent to turnover was

demonstrated to be a strong predictor of actual turnover behavior, and therefore was utilized as a dependent variable in the proposed model.

Table 5. Summary of Study I Logistic Regression Analysis for Turnover

Variable	β	*OR*[a]	X^{2b}	ΔR^2
Block 1			9.08	0.14
Gender	-0.31	0.73	0.27	
Ethnicity	0.52	1.68	0.41	
Turnover Intentions	0.69**	1.99	6.98	

[a]*OR=Odds Ratio*
[b]*Likelihood ratio chi-square test statistics are reported for tests of blocks and models; Wald chi-square tests are reported for tests of predictors*
Note: Voluntary leavers coded as '1', stayers coded as '0'
*†p<.10, *p<.05, **p<.01*

Analysis of Fit

To assess the discriminant validity between constructs, a confirmatory factor analysis was run prior to the analysis of hypotheses (Wang & Wang, 2012). A chi-squared test was utilized to determine the best fit. I began with testing a one-factor model for all of the individual measures by organizational identification. I then tested a seven-factor model with a combination of gender and ethnic identity centrality to determine if the constructs loaded to the corresponding hypothesized constructs. Finally, I tested an eight-factor model. As demonstrated in Table 6 below, the eight-factor model fit the organizational data better than the one factor model (ΔX^2=1570.05, Δdf=28, p<0.01) and seven-factor model (ΔX^2=361.49, Δdf=7, p<0.01).

Expecting the eight-factor model to be the best fit, I then tested the overall fit of these measurement models with the following practical fit indices: Tucker-Lewis Index (TLI), Comparative Fit Index (CFI), and Root Mean Square Error of Approximation (RMSEA) (Wang & Wang, 2012). The eight-factor model was acceptable, *CFI*=0.88, *TLI*=0.86, *RMSEA*=0.06,

RMSEA 90% CI [0.06, 0.07]. Using these indices, I conducted a similar analysis at the workgroup level. The results yielded similar findings, as noted in Table 6, as the eight-factor model fit the data better than the one-factor model (ΔX^2=11418.32, Δdf=28 p<0.01) and seven-factor model (ΔX^2=339.51, Δdf=7, p<0.01).

Table 6. Summary of Study I Confirmatory Factor Analysis Fit Statistics

Model	X^2(*df*)	CFI	TLI	RMSEA	RMSEA CI_{90}	SRMR
Organizational Identification						
Eight-factor Model	822.44 (*436*)	0.88	0.86	0.06	0.06-0.07	0.10
Seven-factor Model	1183.93 (*443*)	0.76	0.73	0.09	0.08-0.09	0.11
One-factor Model	2392.49 (*464*)	0.38	0.34	0.13	0.13-0.14	0.18
Workgroup Identification						
Eight-factor Model	887.07 (*436*)	0.84	0.81	0.07	0.06-0.07	0.11
Seven-factor Model	1226.58 (*443*)	0.71	0.68	0.09	0.08-0.09	0.12
One-factor Model	2305.39 (*464*)	0.33	0.28	0.13	0.13-0.14	0.18

Preliminary Analysis

The means, standard deviations, reliabilities, and intercorrelations for the final aggregated variables utilized are found in Table 7 and were estimated using SPSS version 26. Gender identity centrality was positively related to workgroup identification (r = 0.18, p <0.05). Organizational identification was positively related to workgroup identification (r = 0.41, p <0.01) and negatively related to turnover intentions (r = 0.31, p <0.01).

Table 7. Study I Descriptive Statistics and Intercorrelations

	M	*SD*	*N*	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Gender[a]	0.65	0.48	221	--													
2. Ethnicity[b]	0.87	0.34	221	0.12	--												
3. Gender Identity Centrality	3.30	0.81	221	-0.21**	-0.05	*(0.76)*											
4. Ethnic Identity Centrality	2.72	0.87	221	-0.01	-0.38**	0.39**	*(0.83)*										
5. Organizational Gender Identity Threat	3.79	0.60	202	0.07	-0.05	0.07	0.19**	*(0.85)*									
6. Organizational Ethnic Identity Threat	3.79	0.63	202	0.09	-0.20**	0.04	0.31**	0.75**	*(0.88)*								
7. Organizational Identification	3.59	0.68	199	-0.09	0.02	0.08	0.10	-0.15*	-0.03	*(0.81)*							
8. Workgroup Gender Identity Threat	3.78	0.56	205	0.01	-0.09	-0.01	0.20**	0.59**	0.55**	0.06	*(0.73)*						
9. Workgroup Ethnic Identity Threat	3.82	0.62	205	0.02	-0.20**	0.04	0.20**	0.52**	0.74**	-0.04	0.69**	(0.*77)*					
10. Workgroup Identification	3.82	0.61	203	-0.05	0.03	0.18*	0.04	-0.09	-0.01	0.41**	-0.05	-0.10	*(0.74)*				
11. Turnover Intentions	2.31	1.02	97	0.19	-0.04	-0.02	0.03	0.02	-0.11	-0.31**	-0.03	-0.12	0.02	*(0.86)*			
12. Turnover	0.18	0.38	231	0.03	-0.02	0.08	0.06	0.01	-0.01	-0.17*	-0.05	-0.06	-0.10	0.30**	--		
13. Citizenship Behaviors-Individual	4.03	0.68	97	0.05	0.06	-0.05	-0.16	0.11	0.07	0.02	0.02	-0.01	-0.01	-0.08	0.05	*(0.77)*	
14. Citizenship Behaviors-Organization	4.03	0.64	97	0.03	-0.08	-0.01	-0.19	-0.02	0.02	0.14	0.04	0.02	0.18	-0.09	0.05	0.66**	*(0.71)*

Reliability coefficients are in parentheses along the diagonal.
[a]*Gender was coded as 0=Male, 1=Female.*
[b]*Ethnicity was coded as 0=Caucasian, 1=Non-Caucasian*
**p<0.05, **p<0.01*

Tests of Hypotheses

To test the series of conditional direct and indirect effects, a series of path analyses were conducted using Mplus (Muthen & Muthen, 2017). Table 8. presents a summary of the hypotheses testing results.

Table 8. Study I Summary of Hypotheses Results

Result	Research Hypothesis (H)
Not supported	Hypothesis 1a: Perceptions of gender identity threat by the organization will be more negatively related to organizational identification for those with greater gender identity centrality
Marginally supported	Hypothesis 1b: Perceptions of ethnic identity threat by the organization will be more negatively related to organizational identification for those with greater ethnic identity centrality
Not supported	Hypothesis 2a: Organizational identification mediates the relationship between perceptions of gender identity threat and extra-role behaviors.
Not supported	Hypothesis 2b: Organizational identification mediates the relationship between ethnic identity threat by the organization and extra-role behaviors.
Partially supported	Hypothesis 3a: Organizational identification mediates the relationship between gender identity threat by the organization and turnover intentions.
Not supported	Hypothesis 3b: Organizational identification mediates the relationship between ethnic identity threat by the organization and turnover intentions.
Not supported	Hypothesis 4a: Perceptions of gender identity threat by the workgroup will be more negatively related to workgroup identification for those with greater gender identity centrality
Marginally supported	Hypothesis 4b: Perceptions of ethnic identity threat by the workgroup will be more negatively related to workgroup identification for those with greater ethnic identity centrality
Not supported	Hypothesis 5a: Workgroup identification mediates the relationship between perceptions of gender identity threat by the workgroup and extra-role behaviors.
Not supported	Hypothesis 5b: Workgroup identification mediates the relationship between perceptions of ethnic identity threat by the workgroup and extra-role behaviors.
Not supported	Hypothesis 6a: Workgroup identification mediates the relationship between perceptions of gender identity threat by the workgroup and turnover intentions.

Not supported	Hypothesis 6b: Workgroup identification mediates the relationship between perceptions of ethnic identity threat by the workgroup and turnover intentions.
Not supported	Hypothesis 7a: Workgroup identification will have a more positive relationship with extra-role behaviors for those with greater organizational identification.
Not supported	Hypothesis 7b: Workgroup identification will have a more negative relationship with turnover intentions for those with greater organizational identification.

Tests of Moderation and Moderated Mediation. Hypothesis 1a predicted that gender identity centrality would moderate the relationship between perceptions of gender identity threat and organizational identification. As demonstrated in Table 9, organizational gender identity threat was a significant predictor of organizational identification (β = -0.16, p = .022), but the interaction term was not, (β = -0.10, p = .186). Therefore, Hypothesis 1a was not supported.

Table 9. Results of Study I Path Analysis for Hypothesis 1a

	Organizational Identification			
	Model 1		Model 2	
	Estimate	SE	Estimate	SE
Intercept	5.39	0.29	5.40	0.29
Gender[a]	-0.06	0.07	-0.06	0.07
Gender Org Threat[b]	-0.16**	0.07	-0.16*	0.07
Gender Centrality[c]	0.08	0.07	0.05	0.07
Gender Org Threat x Gender Centrality[d]			-0.06	0.07
R^2	0.03*		0.04	

[a]Gender was coded as 0=Male, 1=Female
[b]Gender Org Threat = Organizational Gender Identity Threat
[c]Gender Centrality = Gender Identity Centrality
[d] Gender Org Threat x Gender Centrality = Organizational Gender Identity Threat x Gender Identity Centrality
*†p<.10, *p<.05, **p<.01*

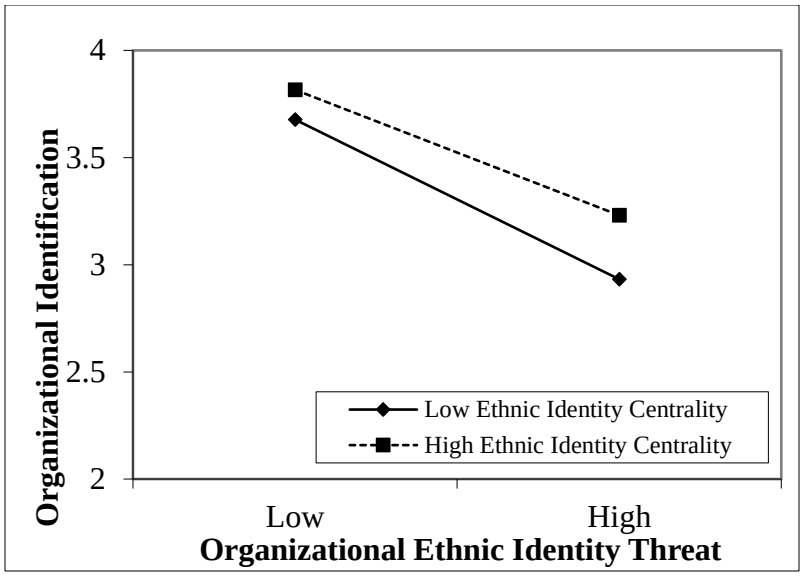
Hypothesis 1b predicted a similar relationship with ethnic identity centrality and perceptions of ethnic identity threat. As demonstrated in Table 10, perceptions of ethnic identity threat by the organization were not a significant predictor of organizational identification, β = -0.08, p = .292). However, the interaction between perceptions of organizational ethnic identity threat and ethnic identity centrality approached significance (β = 0.13, p = .090). The interaction was probed by examining ethnic identity at low (-1 *SD* below the mean) and high levels (+1 *SD* above the mean). Interestingly, as shown in Figure 2, the simple slope analysis (Aiken & West, 1991) demonstrated that the relationship between perceived ethnic identity threats by the organization and organizational identification approached significance and was stronger when ethnic identity centrality was low, b = -0.21, SE=0.12, p = .072, but not when it was high, b = 0.04, SE=0.20, p = .665. Therefore, Hypothesis 1b was marginally supported.

Table 10. Results of Study I Path Analysis for Hypothesis 1b

	Organizational Identification			
	Model 1		Model 2	
	Estimate	SE	Estimate	SE
Intercept	5.17	0.34	5.06	0.35
Ethnicity[a]	0.06	0.07	0.09	0.08
Ethnic Org Threat[b]	-0.06†	0.07	-0.08	0.08
Ethnic Centrality[c]	0.14	0.08	0.18*	0.08
Ethnic Org Threat x Ethnic Centrality[d]			0.13†	0.08
R^2	0.02		0.03	

[a] *Ethnicity was coded as 0=Caucasian, 1=Non-Caucasian*
[b] *Ethnic Org Threat = Organizational Ethnic Identity Threat*
[c] *Ethnic Centrality= Ethnic Identity Centrality*
[d] *Ethnic Org Threat x Ethnic Centrality = Organizational Ethnic Identity Threat x Ethnic Identity Centrality*
*†p<.10, *p<.05, **p<.01*

Figure 2. Interaction of Study I Organizational Threats to Ethnic Identity and Ethnic Identity Centrality on Organizational Identification



Hypothesis 2a predicted that organizational identification would mediate the relationship between perceptions of gender identity threat by the organization and extra-role behaviors. As shown in Model 2 of Table 11, organizational identification did not have a significant direct relationship with extra-role behaviors targeting individuals, (β = 0.05, p = .726). Furthermore, an overall indirect effect observed was not statistically significant, β = -0.01, *SE*=0.02, p = .767, 95% Bootstrap CI [-0.08, 0.02]. Like the relationship with organizational citizenship behaviors targeting the individual, the relationship between organizational identification and organizational citizenship behaviors directed at the organization was not significant, β = 0.15, p = .218. Similarly, bootstrapped analysis revealed no overall indirect effect, β = -0.02, *SE*=0.03, p = .362, 95% Bootstrap CI [-0.11, 0.01]. Taken these results together, Hypothesis 2a was not supported.

Table 11. Results of Study I Path Analysis for Hypothesis 2a and 3a

	Organizational Citizenship Behaviors-Individual				Organizational Citizenship Behaviors-Organization				Turnover Intentions			
	Model 1		Model 2		Model 1		Model 2		Model 1		Model 2	
	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE
Intercept	5.40	0.37	5.67	0.94	5.40	0.37	5.40	1.17	5.40	0.37	3.69	0.62
Gender[a]	-0.06	0.07	0.08	0.12	-0.06	0.07	0.07	0.12	-0.06	0.07	0.15	0.12
Gender Org Threat[b]	-0.16†	0.08	0.12	0.13	-0.16†	0.08	-0.02	0.17	-0.16†	0.08	-0.05	0.12
Gender Centrality[c]	0.05	0.08			0.05	0.08			0.05	0.08		
Gender Org Threat x Gender Centrality	-0.10	0.09			-0.10	0.07			-0.10	0.09		
Organizational Identification			0.05	0.13			0.15	0.12			-0.30**	0.10
R^2	0.21**		0.02		0.04		0.03		0.04		0.12†	
Index of Moderated Mediation			-0,01				-0.02				0.05	

[a] *Gender was coded as 0=Male, 1=Female*
[b] *Gender Org Threat = Organizational Gender Identity Threat*
[c] *Gender Centrality = Gender Identity Centrality*
[d] *Gender Org Threat x Gender Centrality = Organizational Gender Identity Threat x Gender Identity Centrality*
*†p<.10, *p<.05, **p<.01*

Hypothesis 3a predicted that organizational identification would mediate the relationship between perceptions of gender identity threat by the organization and turnover intentions. A direct relationship was observed with organizational identification, $\beta = 0.30$, $p = .004$. Upon further investigating the indirect effect of perceptions of gender identity threat by the organization to turnover intentions, through organizational identifications, bootstrapped results indicated that organization identification mediates the relationship between perceptions of ethnic identity threat and turnover intentions, $\beta = 0.05$, *SE*=0.03, $p = .114$, 95% Bootstrap CI [0.01, 0.13]. However, analysis of the moderation effect on the mediated relationship (the index of moderated mediation) did not yield statistically significant findings, *Estimate* = 0.05, *SE*=0.05, $p = .346$, 95% Bootstrap CI [-0.03, 0.18]. Thus, taken together, Hypothesis 3a was only partially supported.

The results of the analysis for Hypotheses 2b and 3b appear in Table 12. Hypothesis 2b predicted the mediated relationship between perception of threats to ethnic identity by the organization and extra-role behaviors. As shown in Model 2 of Table 12, organizational identification was not a significant predictor of individual-, $\beta = 0.01$, $p = .941$ or organizational-directed citizenship behaviors, $\beta = 0.15$, $p = .210$. No indirect relationship between threats to ethnic identity by the organization and individual-directed extra-role behaviors through organizational identification was observed, $\beta = -0.001$, *SE*=0.02, $p = .961$, 95% Bootstrap CI [-0.03, 0.06], nor were indirect effects observed for the relationship between threats to ethnic identity by the organization and organizational-directed extra-role behaviors, $\beta = -0.01$, *SE*=0.02, $p = .568$, 95% Bootstrap CI [-0.08, 0.01]. Thus, Hypothesis 2b was not supported.

Hypothesis 3b predicted that organizational identification would mediate the relationship between ethnic identity threat and turnover intentions. A direct relationship was observed with

organizational identification, β = -0.32, p = .001, but bootstrapped results indicated organization identification does not mediate this relationship, β= 0.03, *SE*=0.03, p = .40, 95% Bootstrap CI [-0.03, 0.10]. Therefore, Hypothesis 3b was not supported.

Table 12. Results of Study I Path Analysis for Hypothesis 2b and 3b

	Organizational Citizenship Behaviors-Individual				Organizational Citizenship Behaviors-Organization				Turnover Intentions			
	Model 1		Model 2		Model 1		Model 2		Model 1		Model 2	
	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE
Intercept	5.06	0.49	5.55	0.99	5.06	0.49	5.73	1.10	5.06	0.49	4.13	0.56
Ethnicity[a]	0.09	0.08	0.15	0.12	0.09	0.08	-0.10	0.10	0.09	0.08	-0.05	0.15
Ethnic Org Threat[b]	-0.08	0.09	0.10	0.12	-0.08	0.09	0.02	0.15	-0.08	0.09	-0.16	0.11
Ethnic Centrality[c]	0.18†	0.10			0.18†	0.10			0.18†	0.10		
Ethnic Org Threat x Ethnic Centrality[d]	0.13	0.10			0.13	0.10			0.13	0.10		
Organizational Identification			0.01	0.13			0.15	0.12			-0.32**	0.10
R^2	0.03		0.07		0.03		0.03		0.03		0.12†	
Index of Moderated Mediation			0.001				0.02				-0.06	

[a] *Ethnicity was coded as 0=Caucasian, 1=Non-Caucasian*
[b] *Ethnic Org Threat = Organizational Ethnic Identity Threat*
[c] *Ethnic Centrality= Ethnic Identity Centrality*
[d] *Ethnic Org Threat x Ethnic Centrality = Organizational Ethnic Identity Threat x Ethnic Identity Centrality*
*†p<.10, *p<.05, **p<.01*

Tests of Workgroup Moderation and Moderated Mediation. Hypothesis 4 predicted the relationships between perceptions of demographic-related identity threats by the workgroup, demographic-related identity centrality, and workgroup identification. Hypotheses 5 and 6 extended this prediction to posit that workgroup identification mediates the relationship between threats to demographic-related identity by the workgroup and work-related attitudes and outcomes. Given that these workgroups are nested within the organization, it was important to explore the proportion of total variance, between workgroups, in the perceptions of workgroup gender threat, workgroup ethnicity threat, and workgroup identification (Bliese, 2000, Kreft & DeLeeuw, 1998). Therefore, I first examined the interclass correlation coefficients (ICC) to determine whether there was significant variation in the workgroup-related variables (perceptions of gender identity threat by the workgroup, perceptions of ethnic identity threat by the workgroup, and workgroup identification) between workgroups, defined by the locations of employees as provided by the organization. Workgroup gender threat had an ICC (1) of 0.01, workgroup ethnicity identity threat had an ICC (1) of 0.01, and workgroup identification had an ICC (1) of 0.00. These values indicated that the observations between locations were nearly independent. Therefore, aggregation was not necessary and a path analysis similar to that for Hypotheses 1 through 3 was acceptable for analyzing Hypotheses 4 through 6 (Hayes, 2006).

Table 13. Results of Study I Path Analysis for Hypothesis 4a

	Workgroup Identification			
	Model 1		Model 2	
	Estimate	SE	Estimate	SE
Intercept	6.30	0.33	6.29	0.33
Gender[a]	-0.01	0.07	-0.01	0.07
Gender WrkGrp Threat[b]	-0.05	0.07	-0.05	0.07
Gender Centrality[c]	0.17*	0.07	0.16*	0.07

Gender WrkGrp Threat x Gender Centrality[d]			-0.05	0.07
R^2	0.03*		0.04	

[a]Gender was coded as 0=Male, 1=Female
[b]Gender WrkGrp Threat = Workgroup Gender Identity Threat
[c]Gender Centrality = Gender Identity Centrality
[d]Gender WrkGrp Threat x Gender Centrality = Workgroup Gender Identity Threat x Gender Identity Centrality
*†p<.10, *p<.05, **p<.01*

Hypothesis 4a stated that gender identity centrality would moderate the relationship between perceptions of gender identity threat and workgroup identification. As demonstrated in Table 13, gender identity centrality was a significant predictor of workgroup identification, β = 0.16, p = .028. However, gender identity threats by one's workgroup, β = -0.05, p = .496, and the interaction of those threats with gender identity centrality, β = -0.05, p = .505, were not. Hypothesis 4a was not supported.

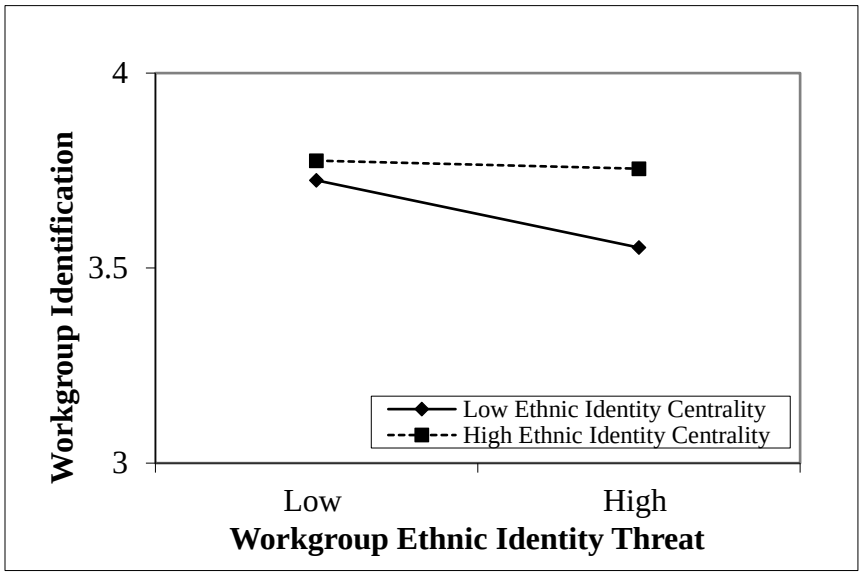
Table 14. Results of Study I Path Analysis for Hypothesis 4b

	Workgroup Identification			
	Model 1		Model 2	
	Estimate	SE	Estimate	SE
Intercept	6.20	0.38	6.10	0.38
Ethnicity[a]	0.03	0.08	0.07	0.08
Ethnic WrkGrp Threat[b]	-0.11†	0.07	-0.13†	0.07
Ethnic Centrality[c]	0.07	0.08	0.12	0.08
Ethnic WrkGrp Threat x Ethnic Centrality[d]			0.13†	0.07
R^2	0.02		0.03	

[a] Ethnicity was coded as 0=Caucasian, 1=Non-Caucasian
[b] Ethnic WrkGrp Threat = Workgroup Ethnic Identity Threat
[c] Ethnic Centrality = Ethnic Identity Centrality
[d] Ethnic WrkGrp Threat x Ethnic Centrality = Workgroup Ethnic Identity Threat x Ethnic Identity Centrality
*†p<.10, *p<.05, **p<.01*

Hypothesis 4b predicted that the relationship between ethnic identity centrality and workgroup identification would be moderated by perceptions of ethnic identity threat by the workgroup. Perceived ethnic identity threats by one's workgroup, β = -0.13, p = .072, and the interaction between ethnic identity centrality and perception of those threats, β = 0.13, p = .086, approached statistical significance, as shown in Table 14. A simple slope analysis suggested that the relationship between perceived ethnic identity threats by the workgroup and workgroup identification was stronger when ethnic identity centrality was low, b = -0.26, SE=0.11, p = .021, rather than when it was high, b = 0.002, SE=0.10, p = .986. Figure 3 demonstrates this relationship graphically. Therefore, Hypothesis 4b was marginally supported.

Figure 3. Interaction of Study I Workgroup Threats to Ethnic Identity and Ethnic Identity Centrality on Workgroup Identification



Hypotheses 5a and 6a predicted that workgroup identification would mediate the relationship between threats to gender identity by the workgroup and extra-role behaviors, as well as turnover intentions. Path models on the outcome variables of interest (individual and organizational directed citizenship behaviors, as well as turnover intentions) yielded non-

significant results in their direct relationships with workgroup threats to gender identity and workgroup identification. These results are presented in Table 15. An overall indirect effect was not statistically significant for either individual directed citizenship behaviors, β = 0.00, *SE*=0.01, p = .974, 95% Bootstrap CI [-0.03, 0.02]. Similarly, bootstrapped analysis revealed no overall indirect effect, β = -0.01, *SE*=0.02, p = .706, 95% Bootstrap CI [-0.07, 0.01], of workgroup identification on the relationship between perceptions of gender identity threat by the workgroup and citizenship behaviors directed at the organization. Thus, Hypotheses 5a was not supported.

Hypothesis 6a demonstrated similar findings in the relationship between perceptions of gender identity threat by the workgroup and turnover intentions. As shown in Table 15, workgroup identification was not a significant predictor of turnover intentions, β = -0.05, p = .688. Therefore, as expected, an indirect effect of workgroup identification to turnover intentions was not observed, β = -0.002, SE=0.01, p = .861, 95% Bootstrap CI [-0.04, 0.01].

Table 15. Results of Study I Path Analysis for Hypothesis 5a and 6a

	Organizational Citizenship Behaviors-Individual				Organizational Citizenship Behaviors-Organization				Turnover Intentions			
	Model 1		Model 2		Model 1		Model 2		Model 1		Model 2	
	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE
Intercept	6.30	0.35	5.88	0.93	6.30	0.35	5.45	1.28	6.30	0.35	1.80	0.71
Gender[a]	-0.01	0.07	0.09	0.12	-0.01	0.07	0.06	0.12	-0.01	0.07	0.20†	0.12
Gender WrkGrp Threat[b]	-0.05	0.08	0.12	0.13	-0.05	0.08	0.05	0.15	-0.05	0.08	-0.05	0.13
Gender Centrality[c]	0.16†	0.09			0.16†	0.09			0.16†	0.09		
Gender WrkGrp Threat x Gender Centrality[d]	-0.05	0.10			-0.05	0.10			-0.05	0.10		
Workgroup Identification			0.01	0.11			0.13	0.12			0.04	0.10
R^2	0.04	0.03	0.01	0.04	0.04	0.04	0.02	0.05	0.04	0.03	0.05	0.07
Index of Moderated Mediation			-0.01				-0.02				-0.01	

[a]*Gender was coded as 0=Male, 1=Female*
[b]*Gender WrkGrp Threat = Workgroup Gender Identity Threat*
[c]*Gender Centrality = Gender Identity Centrality*
[d]*Gender WrkGrp Threat x Gender Centrality = Workgroup Gender Identity Threat x Gender Identity Centrality*
*†p<.10, *p<.05, **p<.01*

Hypotheses 5b and 6b predicted that workgroup identification would mediate the relationship between perceived threats to ethnic identity by the workgroup and extra-role behaviors, as well as turnover intentions. Like Hypotheses 5a and 6a, none of the overall path models yielded significant results, nor were there indications of indirect relationships between ethnic identity centrality and the outcome variables. For example, while the relationship between ethnic identity threat by the workgroup approached significance and workgroup identification, (β = -0.13, p = .094), workgroup identification was not a significant predictor of individual directed citizenship behaviors, (β = 0.01, p = .950). Nor was it a predictor of citizenship behaviors directed at the organization, (β = 0.12, p = .309). Further, workgroup identification did not mediate the relationship between perceived threats to ethnic identity by the workgroup and citizenship behaviors directed at the individual, β = -0.001, SE=0.02, p = .958, 95% Bootstrap CI [-0.04, 0.03], nor citizenship behaviors directed at the organization, β = -0.02, SE=0.02, p = .445, 95% Bootstrap CI [-0.08, 0.01].

Therefore, Hypothesis 5b and 6b were not supported.

Table 16. Results of Study I Path Analysis for Hypotheses 5b and 6b

	Organizational Citizenship Behaviors-Individual				Organizational Citizenship Behaviors-Organization				Turnover Intentions			
	Model 1		Model 2		Model 1		Model 2		Model 1		Model 2	
	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE
Intercept	6.1	0.45	5.62	0.95	6.10	0.45	5.76	1.19	6.10	0.45	2.46	0.74
Ethnicity[a]	0.07	0.09	0.14	0.13	0.07	0.09	-0.07	0.09	0.07	0.09	-0.08	0.15
Ethnicity WrkGrp Threat[b]	-0.13†	0.08	0.00	0.12	-0.13†	0.08	0.02	0.08	-0.13†	0.08	-0.14	0.12
Ethnic Centrality[c]	0.12	0.10			0.12	0.10			0.12	0.10		
Ethnic WrkGrp Threat x Ethnic Centrality[d]	0.13	0.09			0.13	0.09			0.13	0.09		
Workgroup Identification			0.01	0.11			0.12	0.12			0.01	0.10
R^2	0.03	0.03	0.02	0.04	0.03	0.03	0.02	0.04	0.03	0.03	0.02	0.05
Index of Moderated Mediation			0.00				0.02				-0.07	

[a] *Ethnicity was coded as 0=Caucasian, 1=Non-Caucasian*
[b] *Ethnic WrkGrp Threat = Workgroup Ethnic Identity Threat*
[c] *Ethnic Centrality= Ethnic Identity Centrality*
[d] *Ethnic WrkGrp Threat x Ethnic Centrality = Workgroup Ethnic Identity Threat x Ethnic Identity Centrality*
*†p<.10, *p<.05, **p<.01*

Test of Moderation. Hypotheses 7a and 7b predicted that organizational identification would moderate the relationship between workgroup identification and extra-role behaviors, as well as turnover intentions. As demonstrated in Table 17. below, the interaction was not a significant predictor for extra-role behaviors nor turnover intentions. Therefore, Hypotheses 7a and 7b were not supported.

Table 17. Results of Study I Path Analysis for Interaction Between Organizational Identification and Workgroup Identification

	Organizational Citizenship Behaviors-Individual		Organizational Citizenship Behaviors-Organization		Turnover Intentions	
	Estimate	SE	Estimate	SE	Estimate	SE
Intercept	6.00	0.48	6.32	0.50	2.32	0.21
Organizational Identification	0.02	0.13	0.10	0.12	-0.41**	0.11
Workgroup Identification	-0.01	0.12	0.10	0.12	0.20†	0.11
Org Iden x WrkGrp Iden[a]	0.01	0.12	-0.02	0.12	-0.01	0.12
R^2	0.00		0.03		0.14*	

[a]Org Iden x WrkGrp Iden = Organizational Identification x Workgroup Identification
*†p<.10, *p<.05, **p<.01*

Supplemental Analysis

In addition to testing the hypotheses, I explored direct relationships between the independent variables (organizational threats to gender identity, organizational threats to ethnic identity, workgroup threats to gender identity, workgroup threats to ethnic identity, gender identity centrality, and ethnic identity centrality), and the interactions (gender identity centrality and organizational/workgroup threats to gender identity and ethnic identity centrality and organizational/workgroup threats to ethnic identity), to the dependent variables (extra-role behaviors and turnover intentions). I also examined the relationships between organizational threats to demographic-related identity and workgroup identification, as well as the relationship

between workgroup threats to demographic-related identity and organizational identification. The results of this supplemental analysis are detailed below.

Test of direct relationships. Table 18. presents the results of the path analysis of the relationships between gender, organizational threats to gender identity, and organizational identification to each of the outcome variables (citizenship behaviors towards the individual, citizenship behaviors towards the organization, and turnover intentions), moderated by gender identity centrality.

Table 18. Study I Direct Gender Relationships with Outcome Variables: Organization

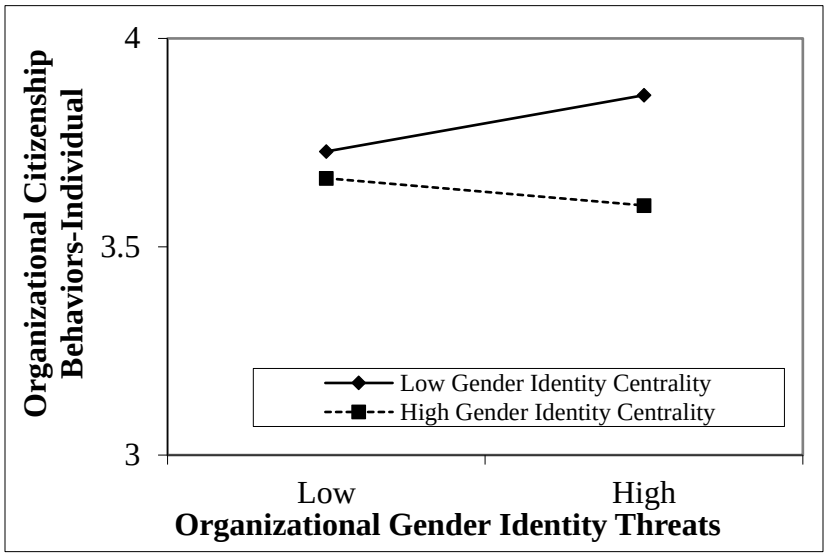
	Organizational Citizenship Behaviors-Individual		Organizational Citizenship Behaviors-Organization		Turnover Intentions	
	Estimate	SE	Estimate	SE	Estimate	SE
Intercept	5.55	0.81	5.37	0.85	3.67	0.60
Gender[a]	0.10	0.11	0.08	0.12	0.15	0.11
Gender Org Threat[b]	0.05	0.11	-0.03	0.11	-0.05	0.11
Gender Centrality[c]	-0.15	0.12	-0.04	0.12	-0.02	0.11
Gender Org Threat x Gender Centrality[d]	-0.24*	0.12	-0.10	0.12	0.04	0.11
Organizational Identification	0.06	0.11	0.15	0.11	-0.29**	0.10
R^2	0.07		0.03		0.32**	

[a] *Gender was coded as 0=Male, 1=Female*
[b] *Gender Org Threat = Organizational Gender Identity Threat*
[c] *Gender Centrality = Gender Identity Centrality*
[d] *Gender Org Threat x Gender Centrality = Organizational Gender Identity Threat x Gender Identity Centrality*
*†p<.10, *p<.05, **p<.01*

The interaction between gender identity centrality and organizational threats to gender identity showed a significant negative relationship with only one of the three dependent variables—individual-directed organizational citizenship behaviors, β = -0.24, p = .040. Examination of the simple slopes indicated perceived gender identity threats by the organization were significant only for those with low gender identity centrality, b = 0.38, SE=0.20, p = .051.

The relationship is graphically plotted in Figure 4. Interestingly, while organizational citizenship behaviors directed toward individuals decreased for those with high gender identity centrality when gender identity threats were perceived, these behaviors increased in the presence of these perceived threats for those with low gender identity centrality.

Figure 4. Interaction of Study I Organizational Threats to Gender Identity and Gender Identity Centrality on Organizational Citizenship Behaviors-Individual



A similar analysis was conducted for the direct relationships of the independent variables related to ethnicity and the organization, to organizational citizenship behaviors toward the individual and the organization, as well as turnover intentions. As Table 19 demonstrates, the interaction term did not reach significance in the relationship with any of the dependent variables.

Table 19. Study I Direct Ethnicity Relationships with Outcome Variables: Organization

	Organizational Citizenship Behaviors-Individual		Organizational Citizenship Behaviors-Organization		Turnover Intentions	
	Estimate	SE	Estimate	SE	Estimate	SE
Intercept	5.82	0.81	6.06	0.81	4.16	0.58
Ethnicity[a]	0.08	0.12	-0.16	0.11	-0.07	0.11

Ethnic Org Threat[b]	0.15	0.12	0.09	0.12	-0.10	0.12
Ethnic Centrality[c]	-0.24**	0.12	-0.30**	0.12	-0.02	0.12
Ethnic Org Threat x Ethnic Centrality[d]	0.05	0.12	0.07	0.12	-0.10	0.10
Organizational Identification	-0.01	0.11	0.12	0.11	-0.30**	0.11
R^2	0.08		0.11†		0.13†	

[a] *Ethnicity was coded as 0=Caucasian, 1=Non-Caucasian*
[b] *Ethnic Org Threat = Organizational Ethnic Identity Threat*
[c] *Ethnic Centrality = Ethnic Identity Centrality*
[d] *Ethnic Org Threat x Ethnic Centrality = Organizational Ethnic Identity Threat x Ethnic Identity Centrality*
*†p<.10, *p<.05, **p<.01*

The direct relationships at the workgroup level related to gender did not yield significant results for any of the independent variables, nor any of the overall models. This information is detailed in Table 20.

Table 20. Study I Direct Gender Relationships with Outcome Variables: Workgroup

	Organizational Citizenship Behaviors-Individual		Organizational Citizenship Behaviors-Organization		Turnover Intentions	
	Estimate	SE	Estimate	SE	Estimate	SE
Intercept	5.77	0.89	5.45	0.88	1.81	0.72
Gender[a]	0.09	0.11	0.05	0.11	0.20†	0.11
Gender WrkGrp Threat[b]	0.01	0.11	0.04	0.11	-0.04	0.11
Gender Centrality[c]	-0.13	0.12	0.01	0.13	-0.01	0.12
Gender WrkGrp Threat x Gender Centrality[d]	-0.14	0.12	0.04	0.12	0.03	0.12
Workgroup Identification	0.03	0.11	0.13	0.11	0.04	0.11
R^2	0.03		0.02		0.04	

[a] *Gender was coded as 0=Male, 1=Female*
[b] *Gender WrkGrp Threat = Workgroup Gender Identity Threat*
[c] *Gender Centrality = Gender Identity Centrality*
[d] *Gender WrkGrp Threat x Gender Centrality = Workgroup Gender Identity Threat x Gender Identity Centrality*
*†p<.10, *p<.05, **p<.01*

Table 21. Study I Direct Ethnicity Relationships with Outcome Variables: Workgroup

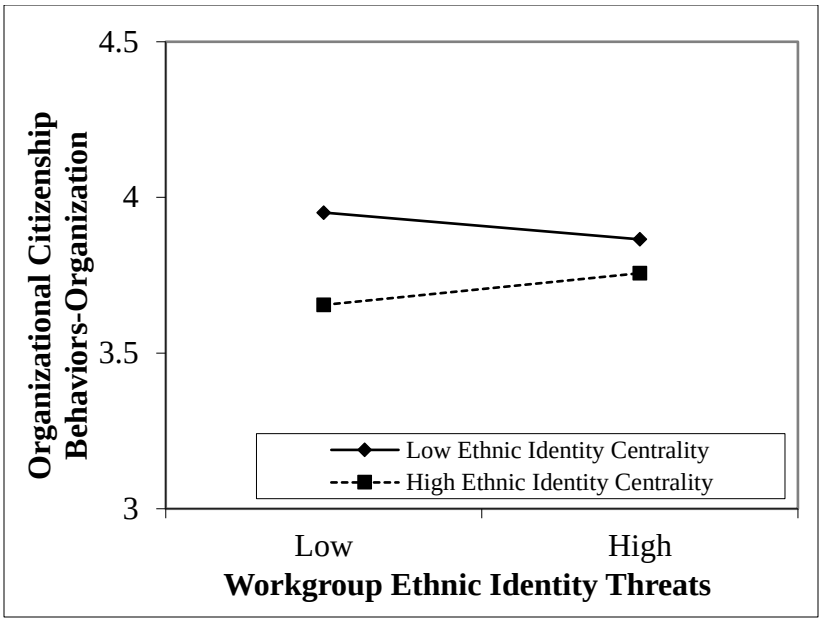
Organizational Citizenship Behaviors-Individual	Organizational Citizenship Behaviors-Organization	Turnover Intentions

	Estimate	SE	Estimate	SE	Estimate	SE
Intercept	5.70	0.90	6.00	0.88	2.31	0.78
Ethnicity[a]	0.08	0.12	-0.10	0.11	-0.11	0.12
Ethnicity WrkGrp Threat[b]	0.04	0.12	0.01	0.12	-0.07	0.12
Ethnic Centrality[c]	-0.18	0.13	-0.21†	0.12	-0.05	0.13
Ethnicity WrkGrp Threat x Ethnic Centrality[d]	0.03	0.13	0.21†	0.12	-0.17	0.12
Workgroup Identification	0.02	0.12	0.09	0.11	0.06	0.12
R2	0.05		0.12†		0.04	

[a] Ethnicity was coded as 0=Caucasian, 1=Non-Caucasian
[b] Ethnic WrkGrp Threat = Workgroup Ethnic Identity Threat
[c] Ethnic Centrality= Ethnic Identity Centrality
[d] Ethnic WrkGrp Threat x Ethnic Centrality = Workgroup Ethnic Identity Threat x Ethnic Identity Centrality
*†p<.10, *p<.05, **p<.01*

The direct relationships related to ethnicity, as shown in Table 21, revealed that the interaction between ethnic identity workgroup threat and ethnic identity centrality approached significance for only one of the outcome variables—organizational citizenship behaviors directed toward the organization, $\beta = 0.21$, $p = .088$. The simple slopes analysis suggested that this relationship was strongest when ethnic identity centrality was high, $b = 0.26$, $SE=0.15$, $p = .090$. Plotting the interaction for further examination, as shown in Figure 5, demonstrated that perceived ethnic identity threats by the workgroup affected those with high ethnic identity centrality, more so than those with low ethnic identity centrality. Interestingly, organization-directed citizenship behaviors increased for those with high ethnic identity centrality, when faced with perceived threats.

Figure 5. Interaction of Study I Workgroup Threats to Ethnic Identity and Ethnic Identity Centrality on Organizational Citizenship Behaviors-Organization



Tests of Threat Relationships. The relationships between demographic-related identity centrality, perceptions of workgroup demographic-identity threat, and organizational identification was explored, as were the relationships between demographic-related identity centrality, perceptions of organizational demographic-identity threat, and workgroup identification.

Table 22. Results of Study I Path Models for Gender Threats on Organizational and Workgroup Identification

	Organizational Identification		Workgroup Identification	
	Estimate	SE	Estimate	SE
Intercept	5.41	0.29	6.32	0.34
Gender[a]	-0.07	0.07	-0.01	0.07
Gender Centrality[b]	0.02	0.07	-0.01	0.34
Gender WrkGrp Threat[c]	0.08	0.07		
Gender Centrality x Gender WrkGrp Threat[d]	-0.16**	0.07		
Gender Org Threat[e]			-0.02	0.07
Gender Centrality x Gender Org Threat[f]			0.18	0.33
R^2	0.04		0.04	

[a] *Gender was coded as 0=Female, 1=Male*

[b] *Gender Centrality = Gender Identity Centrality*
[c] *Gender WrkGrp Threat = Workgroup Gender Identity Threat*
[d] *Gender WrkGrp Threat x Ethnic Centrality = Workgroup Gender Identity Threat x Gender Identity Centrality*
[e] *Gender Org Threat = Organizational Gender Identity Threat*
[f] *Gender Org Threat x Gender Centrality = Organizational Gender Identity Threat x Gender Identity Centrality*
*†p<.10, *p<.05, **p<.01*

The results for gender-related variables appear in Table 22. The interaction between perceptions of gender identity threat by the workgroup and gender identity centrality was a significant predictor of organizational identification, β = -0.16, p = .027. The simple slopes of the interaction were significantly different at low levels of gender identity centrality (b = 0.33, p = .020) than for high gender identity centrality (b = -0.14, p = .277). As shown in Figure 6, the relationship revealed that as perceived gender identity threats by the workgroup increased, organizational identification slightly decreased for those with high gender identity centrality but increased substantially for those with low gender identity centrality.

Figure 6. Interaction of Study I Workgroup Threats to Gender Identity and Gender Identity Centrality on Organizational Identification

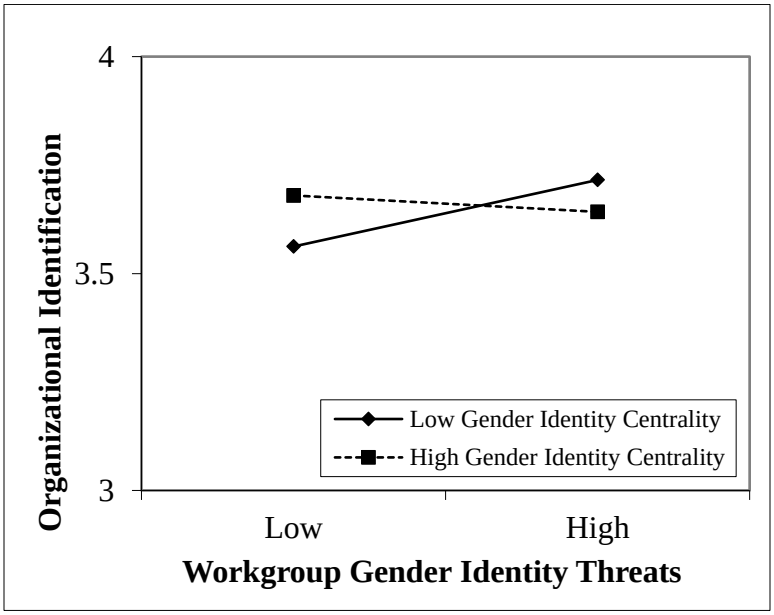


Table 23. presents the results of the analysis of the relationship between ethnic identity threats by the organization and workgroup identification, as well as the relationship between ethnic identity threats by the workgroup and organizational identification. The interaction between perceived ethnic identity threats by the workgroup and ethnic identity centrality was a significant predictor of organizational identification, $\beta = -0.16$, $p = .027$. As was the case with gender, the simple slopes of the interaction were significantly different only for low levels of gender identity centrality ($b = -0.25$, $p = .040$). This relationship, displayed graphically in Figure 7, indicates that, as threats to ethnic identity by the workgroup increased, organizational identification decreased slightly for those with low ethnic identity centrality.

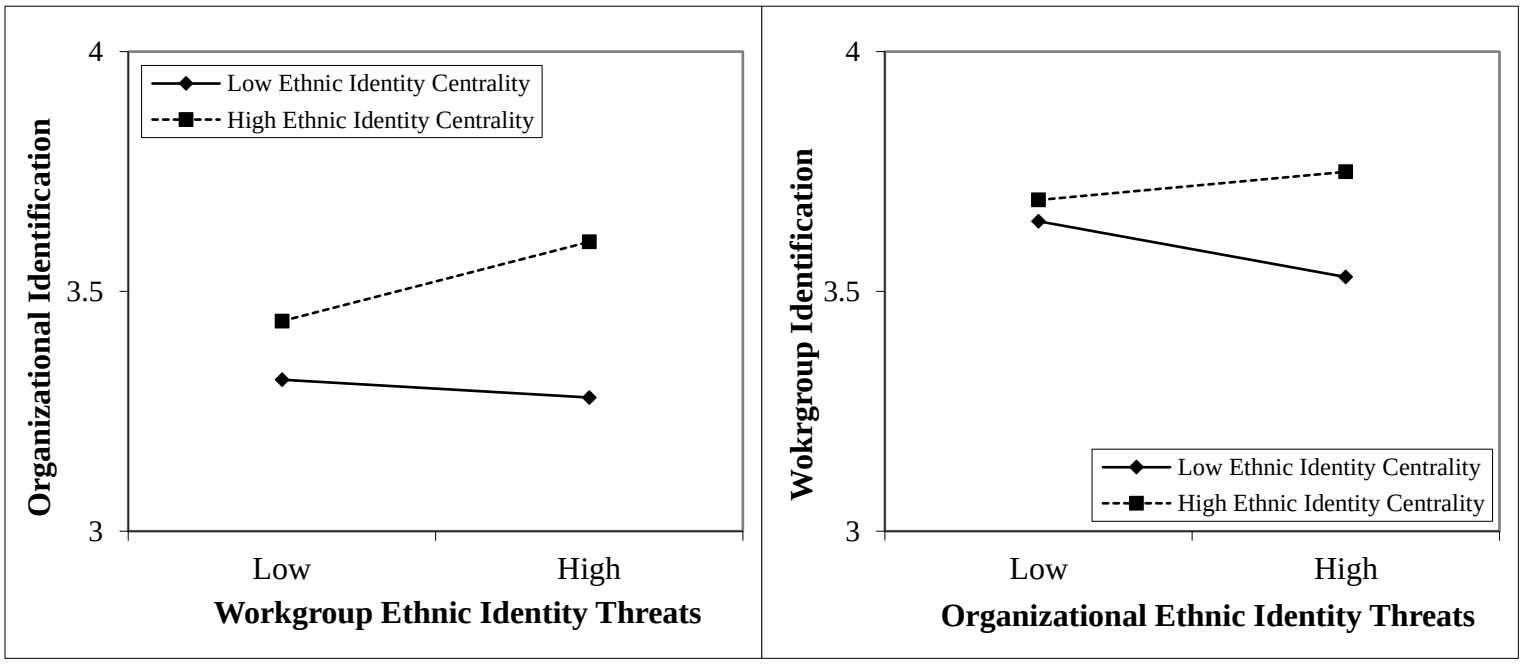
Table 23. Results of Study I Path Models for Ethnic Threats on Organizational and Workgroup Identification

	Organizational Identification		Workgroup Identification	
	Estimate	SE	Estimate	SE
Intercepts	5.05	0.35		
Ethnicity[a]	0.10	0.08	0.09	0.08
Ethic Centrality[b]	0.19	0.08	0.12	0.08
Ethnicity WrkGrp Threat[c]	-0.08	0.07		
Ethnicity WrkGrp Threat x Ethnic Centrality[d]	0.15*	0.07		
Ethnicity Org Threat[e]			-0.04	0.07
Ethnicity Org Threat x Ethnic Centrality[f]			0.15*	0.07
R^2	0.04		0.03	

[a] *Ethnicity was coded as 0=Caucasian, 1=Non-Caucasian*
[b] *Ethnic Centrality = Ethnic Identity Centrality*
[c] *Ethnic WrkGrp Threat = Workgroup Ethnic Identity Threat*
[d] *Ethnic WrkGrp Threat x Ethnic Centrality = Workgroup Ethnic Identity Threat x Ethnic Identity Centrality*
[e] *Ethnic Org Threat = Organizational Ethnic Identity Threat*
[f] *Ethnic Org Threat x Ethnic Centrality = Organizational Ethnic Identity Threat x Ethnic Identity Centrality*
*†p<.10, *p<.05, **p<.01*

Organizational ethnic identity threats had a similar effect on workgroup identification. The interaction between ethnic identity threats by the organization and ethnic identity centrality was a significant predictor of workgroup identification, ($\beta = 0.15$, $p = .036$), with the interaction approaching significance for low levels of gender identity centrality ($b = -0.18$, $p = .104$). Figure 7 presents this relationship and indicates that, as perceived ethnic identity threats by the organization increased, workgroup identification decreased for those with low ethnic identity centrality.

Figure 7. Interaction of Study I Workgroup Threats to Ethnic Identity and Ethnic Identity Centrality on Organizational Identification and Workgroup Identification



Chapter 5: Study II Results

Sample

Participants were recruited from a small health services firm headquarters in the Southeast, with locations throughout Florida and across the United States. A recruitment email, similar to the one sent in Study I, was sent to all 236 employees (see Appendix II). As in Study I, there were two time points at which variables were measured. These items can be found in Appendix III. Following T1, a total of 110 surveys were received. 89% of participants were female, with an average age of 45.82 (*SD*=14.43), ranging from 21 years old to 74 years old. 73% of the participants were Caucasian, 11% were African American, 10% were Latino/a, 3% were Asian, and the remaining participants were other ethnicities, including native Hawaiian or Other Pacific Islander and Middle Eastern. Nearly 28% of the respondents were at Location 2, 13.5% were at Location 6 and Location 9, 10.8% were at Location 5, and 9.9% were at Location 4 and Location 1. The remaining 14% were dispersed across the remaining 3 locations. Approximately a month later, a total of 74 responses were received at T2, a 67% response rate.

Data Cleaning & Preparation

Time 1 and Time 2 surveys were matched using an assigned unique identification number. Due to the small sample, no data was removed from analysis. To examine normality, histograms and p-plots were reviewed along with metrics of skewness and kurtosis. Table 24 presents both skewness and kurtosis statistics. The shape of the distribution of each variable was examined to ensure that there were no extreme deviations in normality. Organizational gender identity threat, workgroup gender identity threat, and turnover intentions skewed positively, whereas gender identity centrality, organizational identification, and workgroup identification skewed negatively.

Table 24. Study II Skewness and Kurtosis Statistics

	M	SD	Min	Max	*N*	Skewness	*SE*	Skewness (z-score)	Kurtosis	*SE*	Kurtosis (z-score)
Gender[a]	0.10	0.3	0.00	1.00	110	2.70	0.20	11.73	5.41	0.46	11.83
Ethnicity[b]	0.26	0.44	0.00	1.00	110	1.09	0.20	4.72	-0.83	0.46	-1.82
Gender Identity Centrality	3.68	0.77	1.00	5.00	104	-1.53	0.20	-6.44	3.83	0.47	8.16
Ethnic Identity Centrality	2.73	0.93	1.00	5.00	105	0.10	0.20	0.41	-0.26	0.47	-0.56
Organizational Gender Identity Threat	1.68	0.57	1.00	3.00	96	0.29	0.30	1.18	-0.90	0.49	-1.84
Organizational Ethnic Identity Threat	1.83	0.6	1.00	3.00	96	0.20	0.30	0.82	-0.81	0.49	-1.67
Organizational Identification	3.86	0.71	1.00	5.00	94	-0.64	0.30	-2.59	1.66	0.49	3.37
Workgroup Gender Identity Threat	1.73	0.55	1.00	3.00	100	0.28	0.20	1.17	-0.65	0.48	-1.37
Workgroup Ethnic Identity Threat	1.90	0.56	1.00	3.40	101	-0.07	0.20	-0.30	-0.65	0.48	-1.36
Workgroup Identification	3.95	0.67	1.33	5.00	94	-0.55	0.30	-2.20	1.33	0.49	2.70
Turnover Intentions	2.01	0.89	1.00	4.75	74	0.97	0.30	3.48	0.91	0.55	1.64
Turnover	0.35	0.48	0.00	1.00	110	0.62	0.20	2.68	-1.65	0.46	-3.61
Citizenship Behaviors-Individual	3.90	0.8	1.75	5.00	73	-0.27	0.30	-0.95	-0.58	0.56	-1.05
Citizenship Behaviors-Organization	3.76	0.75	2.00	5.00	73	-0.05	0.30	-0.19	-0.50	0.56	-0.91

[a]*Gender was coded as 0=Male, 1=Female.*
[b]*Ethnicity was coded as 0=Caucasian, 1=Non-Caucasian*

Validation of Scales

As in Study I, an analysis of specific measures was conducted to ensure that the variables were not overlapping with similar natured constructs. This analysis is detailed below.

Demographic-related identity and demographic-related identity centrality. A confirmatory analysis was performed to ensure the distinctiveness of demographic-related identity and demographic-related identity centrality. The results of this analysis appear in Table 25 and reveal that the two-factor model fit the model significantly better than the one-factor model for gender (ΔX^2=36.16, Δdf=1, p<0.01) and ethnicity (ΔX^2=24.43, Δdf=1, p<0.01). This is in line with the literature finding that demographic-related identity centrality is a distinct measure of social identity centrality (Luhtanen & Crocker, 1992). Further, as indicated in Table 25 below, the two-factor model fit indices were acceptable

Table 25. Summary of Study II Confirmatory Measurement Model Statistics: Demographic-related Identity Centrality

Model	X^2(*df*)	CFI	TLI	RMSEA	RMSEA CI_{90}	SRMR
Gender Identity Centrality						
One-factor	53.52 (*9*)	0.79	0.64	0.21	0.16-0.27	0.09
Two-factor	17.37 (8)	0.96	0.92	0.10	0.03-0.17	0.07
Ethnicity Identity Centrality						
One-factor	31.92 (*9*)	0.92	0.86	0.15	0.09-0.21	0.06
Two-factor	7.49 (8)	1.00	1.00	0.00	0.00-0.11	0.03

Demographic-related identity threat. A confirmatory factor analysis was conducted for the items from the Public subscale of the Collective Self-Esteem Scale (Luhtanen & Crocker, 1992) and three items adapted from Ethier and Deaux (1990) that comprised each threat variable (i.e., organizational gender identity threat, organizational ethnic identity threat, workgroup gender identity threat, and workgroup ethnic identity threat). As in the previous study, the analysis was conducted with six items and then the first item was dropped. Similar findings were noted, in that the elimination of the first items in each of the scales did not indicate a significant difference between the one-factor and two-factor models for organizational gender identity threat (ΔX^2=0.01, Δdf=1, $p<ns$), organizational ethnic identity threat (ΔX^2=1.05, Δdf=1, $p<ns$), workgroup gender identity threat (ΔX^2=2.13, Δdf=1, $p< ns$), and workgroup ethnic identity threat (ΔX^2=0.01, Δdf=1, $p< ns$). Table 26 presents the findings from this analysis and indicates that the fit indices for the one-factor model were acceptable for each variable.

Table 26. Summary of Study II Confirmatory Measurement Model Statistics: Demographic-related Identity Threat

Model	X^2(*df*)	CFI	TFI	RMSEA	RMSEA CI_{90}	SRMR
Organizational Gender Identity Threat						
One-Factor	34.91 (*5*)	0.89	0.78	0.25	0.18-0.33	0.06

Two-Factor	34.91 (*4*)	0.89	0.71	0.28	0.20-0.37	0.06
Organizational Ethnic Identity Threat						
One-Factor	26.38 (*5*)	0.90	0.80	0.21	0.14-0.29	0.06
Two-Factor	25.32 (*4*)	0.90	0.75	0.24	0.15-0.33	0.06
Workgroup Gender Identity Threat						
One-Factor	5.39 (*5*)	1.00	0.99	0.28	0.00-0.14	0.04
Two-Factor	3.27 (*4*)	1.00	1.01	0.09	0.00-0.14	0.03
Workgroup Ethnic Identity Threat						
One-Factor	5.21 (*5*)	1.00	0.99	0.02	0.00-0.14	0.03
Two-Factor	5.21 (*4*)	0.99	0.96	0.06	0.00-0.17	0.03

Turnover Intentions. As in Study I, a binary logistic regression was performed to ascertain the effects of turnover intentions on the likelihood that participants would leave the organization. The logistic regression model was statistically significant, $\chi 2(3) = 8.12$, $p < .05$. The model explained 15.4% (Nagelkerke R^2) of the variance in turnover and correctly classified 78% of those that ultimately left or stayed with the organization. Controlling for gender and ethnicity, turnover intentions were found to contribute to the model. For each unit increase in turnover intentions, there was a 2.4 multiple in the likelihood that the individual would leave the organization.

Table 27. Summary of Study II Logistic Regression Analysis for Turnover

Variable	β	*OR*[a]	X^{2b}	ΔR^2
Block 1			8.12	0.15
Gender	-0.31	0.74	0.06	
Ethnicity	-0.06	0.95	0.12	
Turnover Intentions	0.85**	2.34	6.83	

[a] *OR=Odds Ratio*
[b] *Likelihood ratio chi-square test statistics are reported for tests of blocks and models; Wald chi-square tests are reported for tests of predictors*

Note: Voluntary leavers coded as '1', stayers coded as '0'
*†p<.10, *p<.05, **p<.01*

Analysis of Fit

A confirmatory factor analysis was conducted prior to analyzing the hypotheses. As with the previous study, I tested the models by organizational identification and workgroup identification. As demonstrated in Table 28 the results yielded that the eight-factor model fit the data better than the one-factor model for the organizational data (ΔX^2=598.44, Δdf=28, p<0.01) and the workgroup data (as the model did not load onto the first fixed factor), as well as the organizational seven-factor model (ΔX^2=94.39, Δdf=7, p<0.01) and the workgroup seven-factor model (ΔX^2=94.73, Δdf=7, p<0.01).

Table 28. Summary of Study II Confirmatory Measurement Model Statistics: Demographic-related Identity Threat

Model	X^2(*df*)	CFI	TLI	RMSEA	RMSEA CI_{90}	SRMR
Organization Model						
Eight-factor Model	721.07 (407)	0.80	0.77	0.85	0.07-0.10	0.11
Seven-factor Model	815.46 (*414*)	0.74	0.71	0.10	0.09-0.10	0.12
One-factor Model	1319.51 (*435*)	0.43	0.39	0.14	0.13-0.15	0.17
Workgroup Model						
Eight-factor Model	617.64 (*406*)	0.82	0.80	0.07	0.06-0.08	0.12
Seven-factor Model	712.37 (*413*)	0.75	0.72	0.08	0.07-0.09	0.13
One-factor Model	No convergence					

Preliminary Analysis

The means, standard deviations, reliabilities, and intercorrelations for the final aggregated variables utilized are found in Table 29 and were estimated using SPSS version 26.

Table 29. Study II Descriptive Statistics and Intercorrelations

	M	*SD*	*N*	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Gender[a]	0.10	0.30	110	--													
2. Ethnicity[b]	0.26	0.44	110	0.28**	--												
3. Gender Identity Centrality	3.68	0.77	104	-0.14	0.14	(*0.78*)											
4. Ethnic Identity Centrality	2.73	0.93	105	0.11	0.56**	0.33**	(*0.86*)										
5. Organizational Gender Identity Threat	1.68	0.57	96	0.16	0.01	-0.06	0.21*	(*0.86*)									
6. Organizational Ethnic Identity Threat	1.83	0.60	96	0.06	0.01	-0.05	0.23*	0.87**	(*0.85*)								
7. Organizational Identification	3.86	0.71	94	0.04	0.21*	0.19	0.03	-0.39**	-0.40**	(*0.74*)							
8. Workgroup Gender Identity Threat	1.73	0.55	100	0.23*	0.05*	0.00	0.17	0.77**	0.71**	-0.37**	(*0.75*)						
9. Workgroup Ethnic Identity Threat	1.90	0.56	101	0.07	-0.11	0.03	0.13	0.68**	0.73**	-0.39**	0.74**	(*0.73*)					
10. Workgroup Identification	3.95	0.67	94	0.08	0.27*	0.22*	0.04	-0.43**	-0.43**	0.92**	-0.41**	-0.35**	(*0.80*)				
11. Turnover Intentions	2.01	0.89	74	-0.03	-0.07	0.10	0.06	0.33**	0.27*	-0.42**	0.25*	0.24*	-0.38**	(*0.76*)			
12. Turnover	0.35	0.48	110	0.13	0.43	0.10	0.08	0.12	0.12	-0.13	0.15	0.18	-0.16	0.33**	--		
13. Citizenship Behaviors-Individual	3.90	0.80	73	0.15	-0.28*	0.14	-0.30*	-0.10	-0.09	0.36**	-0.04	-0.06	0.37**	-0.15	0.03	(*0.77*)	
14. Citizenship Behaviors-Organization	3.76	0.75	73	0.21	-0.27*	0.04	-0.37**	-0.06	-0.16	0.37**	-0.08	-0.14	0.38**	-0.21	0.11	.79**	(*0.74*)

Note. Reliability coefficients are in parentheses along the diagonal.
[a] *Gender was coded as 0=Male, 1=Female.*
[b] *Ethnicity was coded as 0=Caucasian, 1=Non-Caucasian*
**p<0.05, **p<0.01*

Tests of Hypotheses

A series of path analyses using Mplus (Muthen & Muthen, 2017) were utilized to test hypotheses. Table 30 presents a summary of the hypotheses testing results.

Table 30. Study II Summary of Hypotheses Results

Result	Research Hypothesis (H)
Not supported	Hypothesis 1a: Perceptions of gender identity threat by the organization will be more negatively related to organizational identification for those with greater gender identity centrality
Not supported	Hypothesis 1b: Perceptions of ethnic identity threat by the organization will be more negatively related to organizational identification for those with greater ethnic identity centrality
Partially supported	Hypothesis 2a: Organizational identification mediates the relationship between perceptions of gender identity threat and extra-role behaviors.
Partially supported	Hypothesis 2b: Organizational identification mediates the relationship between ethnic identity threat by the organization and extra-role behaviors.
Partially supported	Hypothesis 3a: Organizational identification mediates the relationship between gender identity threat by the organization and turnover intentions.
Partially supported	Hypothesis 3b: Organizational identification mediates the relationship between ethnic identity threat by the organization and turnover intentions.
Not supported	Hypothesis 4a: Perceptions of gender identity threat by the workgroup will be more negatively related to workgroup identification for those with greater gender identity centrality
Not supported	Hypothesis 4b: Perceptions of ethnic identity threat by the workgroup will be more negatively related to workgroup identification for those with greater ethnic identity centrality
Partially supported	Hypothesis 5a: Workgroup identification mediates the relationship between perceptions of gender identity threat by the workgroup and extra-role behaviors.
Partially supported	Hypothesis 5b: Workgroup identification mediates the relationship between perceptions of ethnic identity threat by the workgroup and extra-role behaviors.
Partially supported	Hypothesis 6a: Workgroup identification mediates the relationship between perceptions of gender identity threat by the workgroup and turnover intentions.
Partially supported	Hypothesis 6b: Workgroup identification mediates the relationship between perceptions of ethnic identity threat by the workgroup and turnover intentions.

Not supported	Hypothesis 7a: Workgroup identification will have a more positive relationship with extra-role behaviors for those with greater organizational identification.
Not supported	Hypothesis 7b: Workgroup identification will have a more negative relationship with turnover intentions for those with greater organizational identification.

Tests of Moderation and Moderated Mediation. Hypothesis 1a predicted that gender identity centrality would moderate the relationship between perceptions of gender identity threat by the organization and organizational identification. As demonstrated in Model 2 of Table 31, organizational gender threat was a significant predictor of organizational identification β = -0.41, p = .000, however the interaction term was not, β = -0.07, p = .475. Hypothesis 1a was not supported.

Table 31. Results of Study II Path Analysis for Hypothesis 1a

	Organizational Identification			
	Model 1		Model 2	
	Estimate	SE	Estimate	SE
Intercept	5.42	0.41	5.43	0.41
Gender[a]	0.15	0.10	0.15	0.10
Gender Org Threat[b]	-0.40**	0.09	-0.41**	0.09
Gender Centrality[c]	0.19*	0.09	0.17†	0.10
Gender Org Threat x Gender Centrality[d]			-0.07	0.10
R^2	0.20**		0.20**	

[a]Gender was coded as 0=Male, 1=Female
[b]Gender Org Threat = Organizational Gender Identity Threat
[c]Gender Centrality = Gender Identity Centrality
[d] Gender Org Threat x Gender Centrality = Organizational Gender Identity Threat x Gender Identity Centrality
*†p<.10, *p<.05, **p<.01*

Hypothesis 1b predicted that perceptions of ethnic identity centrality would moderate the relationship between ethnic identity threat by the organization and organizational identification. As demonstrated in Table 32, ethnic identity threat by the organization was a significant

predictor of organizational identification, (β = -0.42, p = .000), however the interaction between ethnic identity centrality and perceptions of organizational ethnic identity threat was not, (β = 0.14, p = .126). Hypothesis 1b was not supported.

Table 32. Results of Study II Path Analysis for Hypothesis 1b

	Organizational Identification			
	Model 1		Model 2	
	Estimate	SE	Estimate	SE
Intercept	5.35	0.42	5.33	0.42
Ethnicity[a]	0.23†	0.12	0.21†	0.12
Ethnic Org Threat[b]	-0.40**	0.09	-0.42**	0.09
Ethnic Centrality[c]	-0.03	0.12	0.02	0.13
Ethnic Org Threat x Ethnic Centrality[d]			0.14	0.09
R^2	0.21**		0.23**	

[a] Ethnicity was coded as 0=Caucasian, 1=Non-Caucasian
[b] Ethnicity Org Threat = Organizational Ethnic Identity Threat
[c] Ethnic Centrality= Ethnic Identity Centrality
[d] Ethnic Org Threat x Ethnic Centrality = Organizational Ethnic Identity Threat x Ethnic Identity Centrality
*†p<.10, *p<.05, **p<.01*

Hypothesis 2a predicted that organizational identification would mediate the relationship between perceptions of gender identity threat by the organization and extra-role behaviors. As shown in Model 2 of Table 33, organizational identification has a significant direct relationship with extra-role behaviors targeting individuals, (β= 0.34, p = .004). The overall indirect effect observed was statistically significant, β= -0.14, *SE*=0.06, p = .015, 95% Bootstrap CI [-0.28, -0.05]. To determine whether the indirect effect differed depending on the level of gender identity centrality, conditional effects were tested using bias-corrected bootstrapped confidence intervals. Coefficients were examined at low levels (-1 *SD* below the mean) and high levels (+1 *SD* above the mean) of gender identity centrality. The results demonstrated that the indirect effect of

gender identity threats on individual directed organizational citizenship behaviors through organizational identification was significant at both low levels of gender identity centrality, b = -0.17, SE=0.09, 95% Bootstrap CI [-0.39, -0.02], and high, b = -0.24, SE=0.11, 95% Bootstrap CI [-0.49, -0.05], however the index of moderated mediation indicated that these differences were not statistically different, *Estimate* = -0.04, SE=0.06, p = .558, 95% Bootstrap CI [-0.19, 0.08].

Relationships to organization directed extra-role behaviors demonstrated similar findings, with organizational identification indicating a direct relationship, β = 0.35, p = .004, as well as an observed overall indirect effect, β = -0.14, SE=0.06, p = .013, 95% Bootstrap CI [-0.27, -0.04]. Further, there was no difference statistically between low, b = -0.16, SE=0.08, 95% Bootstrap CI [-0.36, -0.02], and high levels, b = -0.23, SE=0.12, 95% Bootstrap CI [-0.49, -0.03], of gender identity centrality, as indicated by the index of moderated mediation, *Estimate* = -0.04, SE=0.07, p = .588, 95% Bootstrap CI [-0.21, 0.07]. Taken together, while organizational identification mediated the relationship between perceived threats to gender identity by the organization and extra-role behaviors, the indirect effects were not contingent upon one's gender identity centrality. Therefore, Hypothesis 2a was only partially supported.

Table 33. Results of Study II Path Analysis for Hypothesis 2a and 3a

	Organizational Citizenship Behaviors-Individual				Organizational Citizenship Behaviors-Organization				Turnover Intentions			
	Model 1		Model 2		Model 1		Model 2		Model 1		Model 2	
	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE
Intercept	5.41	0.59	2.90	0.75	5.43	0.58	2.90	0.73	5.40	0.58	4.22	0.56
Gender[a]	0.16*	0.08	0.17	0.14	0.16†	0.08	0.22	0.16	0.16*	0.08	-0.07	0.08
Gender Org Threat[b]	-0.42**	0.09	-0.02	0.13	-0.41**	0.09	0.01	0.12	-0.42**	0.09	0.23†	0.14
Gender Centrality[c]	0.17	0.11			0.17	0.11			0.17	0.11		
Gender Org Threat x Gender Centrality[d]	-0.07	0.09			-0.07	0.10			-0.07	0.09		
Organizational Identification			0.34**	0.12			0.35**	0.12			-0.35**	0.11
R^2	0.21**		0.16†		0.20**		0.18*		0.21**		0.24*	
Index of Moderated Mediation			0.07				-0.04				0.04	

[a]*Gender was coded as 0=Male, 1=Female*
[b]*Gender Org Threat = Organizational Gender Identity Threat*
[c]*Gender Centrality = Gender Identity Centrality*
[d] *Gender Org Threat x Gender Centrality = Organizational Gender Identity Threat x Gender Identity Centrality*
*†p<.10, *p<.05, **p<.01*

Hypothesis 3a predicted that organizational identification would mediate the relationship between perceptions of gender identity threat by the organization and turnover intentions. A direct relationship was observed with organizational identification, β = -0.35, p =.001. The indirect effects indicated evidence of organizational identification mediating the relationship between perceived threats to gender identity and turnover intentions, β = 0.15, *SE*=0.06, p = .008, 95% Bootstrap CI [0.05, 0.27], however the indirect effects were not contingent upon one's gender identity centrality, *Estimate* = 0.04, *SE*=0.08, p = .599, 95% Bootstrap CI [-0.07, 0.26]. Thus, Hypothesis 3a was only partially supported.

Hypothesis 2b predicted a mediated relationship between threats to ethnic identity by the organization and extra-role behaviors through organizational identification. The results of this analysis are presented in Table 34. Organizational identification was a significant predictor of both individual-, β = 0.42, p = .000, and organization-, β = 0.42, p = .001, directed extra-role behaviors. Bootstrapped results revealed an overall indirect effect from perceived threats by the organization to citizenship behaviors directed at the individuals through organizational identification, was significant, β = -0.18, *SE* = 0.06, p =.002, 95% Bootstrap CI [-0.30, -0.08], when ethnic identity centrality was low, b = -0.31, *SE*=0.10, 95% CI [-0.56, -0.15], and high, b = -0.16, *SE*=0.08, 95% CI [-0.35, -0.04]. However, the difference did not reach significance, *Estimate* = 0.07, *SE*=0.05, p = .183, 95% Bootstrap CI [-0.03, 0.19], indicating that the indirect effects were not different depending on one's level of ethnic identity centrality.

Similar findings were demonstrated for organization directed organizational citizenship behaviors, such that overall indirect effects were observed, β = -0.16, *SE* = 0.06, p =.007, 95% Bootstrap CI [-0.29, -0.06], at both low, b = -0.27, *SE*=0.10, 95% CI [-0.52, -0.10], and high, b = -0.14, *SE*=0.07, 95% CI [-0.29, -0.06], levels of ethnic identity centrality. However, the indirect

effects did not differ at low or high levels of ethnic identity centrality, *Estimate* = 0.06, *SE*=0.05, *p* = .185, 95% Bootstrap CI [-0.02, 0.17]. Taken together, Hypothesis 2b was partially supported.

Table 34. Results of Study II Path Analysis for Hypothesis 2b and 3b

	Organizational Citizenship Behaviors-Individual				Organizational Citizenship Behaviors-Organization				Turnover Intentions			
	Model 1		Model 2		Model 1		Model 2		Model 1		Model 2	
	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE
Intercept	5.32	0.60	2.75	0.74	3.75	0.09	2.23	0.50	5.31	0.59	4.31	0.56
Ethnicity[a]	0.21*	0.10	-0.36**	0.13	0.21*	0.10	-0.62**	0.23	0.21*	0.11	-0.02	0.10
Ethnic Org Threat[b]	-0.42**	0.08	0.08	0.13	-0.41**	0.08	-0.01	0.16	-0.42**	0.08	0.15	0.14
Ethnic Centrality[c]	-0.02	0.13			0.02	0.13			-0.02	0.13		
Ethnic Org Threat x Ethnic Centrality[d]	0.14	0.10			0.14	0.10			0.14	0.10		
Organizational Identification			0.42**	0.11			0.42**	0.13			-0.37**	0.11
R^2	0.16*		0.24**		0.22**		0.23*		0.23**		0.21*	
Index of Moderated Mediation			0.07				0.06				-0.07	

[a] *Ethnicity was coded as 0=Caucasian, 1=Non-Caucasian*
[b] *Ethnic Org Threat = Organizational Ethnic Identity Threat*
[c] *Ethnic Centrality = Ethnic Identity Centrality*
[d] *Ethnic Org Threat x Ethnic Centrality = Organizational Ethnic Identity Threat x Ethnic Identity Centrality*
*†p<.10, *p<.05, **p<.01*

Hypothesis 3b predicted that organizational identification would mediate the relationship between ethnic identity threat and turnover intentions. Bootstrapped results revealed an indirect effect from organizational identification on turnover intentions, $\beta = 0.16$, $SE = 0.06$, $p = .007$, 95% Bootstrap CI [0.06, 0.28], with no evidence of moderated mediation, *Estimate* = -0.07, $SE = 0.06$, $p = .191$, 95% Bootstrap CI [-0.20, 0.02]. Therefore, Hypothesis 3b was also partially supported.

Test of Workgroup Moderation and Moderated Mediation. As in Study I, a test of the intraclass correlation coefficient, based on the workgroups by location provided by the organization, was examined prior to tests of these hypotheses. This analysis indicated that the total variation accounted for by location in gender identity threat by the workgroup, ICC (1) = 0.01, ethnic identity threat by the workgroup, ICC (1) < 0.01, and workgroup identification, ICC (1) = 0.04, was extremely low. Therefore, aggregation was not necessary and a similar path analysis that was conducted for Hypotheses 1 through 3 was acceptable for analyzing Hypotheses 4 through 6.

Table 35. Results of Study II Path Analysis for Hypothesis 4a

	Workgroup Identification			
	Model 1		Model 2	
	Estimate	SE	Estimate	SE
Intercept	5.86	0.44	5.85	0.44
Gender[a]	0.21*	0.09	0.20*	0.09
Gender WrkGrp Threat[b]	-0.43**	0.08	-0.44**	0.08
Gender Centrality[c]	0.26**	0.09	0.25**	0.09
Gender WrkGrp Threat x Gender Centrality			-0.03	0.10
R^2	0.25**		0.25**	

[a] *Gender was coded as 0=Male, 1=Female*
[b] *Gender WrkGrp Threat = Workgroup Gender Identity Threat*

[c]*Gender Centrality = Gender Identity Centrality*
*†p<.10, *p<.05, **p<.01*

Hypothesis 4a stated that gender identity centrality would moderate the relationship between perceptions of workgroup gender identity threat and workgroup identification. As demonstrated in Model 2 of Table 35, gender identity centrality was a significant predictor of workgroup identification, (β = 0.25, p = .008), as were perceptions of gender identity threat by the workgroup (β = -0.44, p=.00). However, the interaction between the perception of those threats and gender identity centrality, (β = -0.03, p = .783), was not. Thus, Hypothesis 4a was not supported.

Table 36. Results of Study II Path Analysis for Hypothesis 4b

	Workgroup Identification			
	Model 1		Model 2	
	Estimate	SE	Estimate	SE
Intercept	5.82	0.45	5.78	0.45
Ethnicity[a]	0.23[†]	0.12	0.21[†]	0.13
Ethnic WrkGrp Threat[b]	-0.31[**]	0.09	-0.34[**]	0.09
Ethnic Centrality[c]	-0.07	0.12	-0.01	0.13
Ethnic WrkGrp Threat x Ethnic Centrality[d]			0.10	0.10
R^2	0.15[*]		0.18[*]	

[a] *Ethnicity was coded as 0=Caucasian, 1=Non-Caucasian*
[b] *Ethnic WrkGrp Threat = Workgroup Ethnic Identity Threat*
[c] *Ethnic Centrality= Ethnic Identity Centrality*
d Ethnic WrkGrp Threat
*†p<.10, *p<.05, **p<.01*

Hypothesis 4b predicted that ethnic identity centrality would moderate the relationship between perceptions of ethnic identity threat by the workgroup and workgroup identification. As noted in Table 36 in Model 2, ethnic identity threat by the workgroup was a significant predictor

of workgroup identification, (β = -0.34, p = .000), however the interaction was not (β = 0.10, p = 302). Hypothesis 4b was not supported.

Table 37. Results of Study II Path Analysis for Hypothesis 5a and 6a

	Organizational Citizenship Behaviors-Individual				Organizational Citizenship Behaviors-Organization				Turnover Intentions			
	Model 1		Model 2		Model 1		Model 2		Model 1		Model 2	
	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE
Intercept	5.86	0.59	2.40	0.59	5.87	0.59	2.57	0.71	5.86	0.59	4.30	0.75
Gender[a]	0.21†	0.11	0.11	0.13	0.21†	0.11	0.20	0.15	0.21†	0.11	-0.03	0.08
Gender WrkGrp Threat[b]	-0.44**	0.07	0.07	0.12	-0.44**	0.07	0.01	0.12	-0.44**	0.07	0.14	0.14
Gender Centrality[c]	0.25*	0.12			0.24*	0.12			0.25*	0.12		
Gender WrkGrp Threat x Gender Centrality	-0.03	0.10			-0.03	0.10			-0.03	0.10		
Workgroup Identification			0.40**	0.10			0.38**	0.12			-0.34**	0.13
R^2	0.16*		0.17*		0.25**		0.20*		0.25**		0.18†	
Index of Moderated Mediation			-0.02				-0.02				0.02	

[a] *Gender was coded as 0=Male, 1=Female*
[b] *Gender WrkGrp Threat = Workgroup Gender Identity Threat*
[c] *Gender Centrality = Gender Identity Centrality*
*†p<.10, *p<.05, **p<.01*

Hypothesis 5a predicted that workgroup identification would mediate the relationship between perceived threats to gender identity by the workgroup and extra-role behaviors. As shown in Table 37, workgroup identification has a significant direct relationship with extra-role behaviors targeting individuals, (β = 0.40, p = .000), and organizational extra-role behaviors, (β = 0.38, p = .001). Investigation of the indirect effects indicated support, β = -0.17, *SE* = 0.06, p =.003, 95% Bootstrap CI [-0.31, -0.08], for workgroup identification mediating the relationship between threats to gender identity by the workgroup and individual-directed extra-role behaviors for both low levels of gender identity centrality, b = -0.25, *SE*=0.12, 95% CI [-0.54, -0.05], and high levels of gender identity centrality, b = -0.28, *SE*=0.11, 95% CI [-0.50, -0.10]. However, the weight of indirect effects did not differ depending on these levels, *Estimate* = -0.02, *SE*=0.07, p = .825, 95% Bootstrap CI [-0.17, 0.13].

An indirect effect was also observed for the relationship with extra-role behaviors targeting the organization, β = -0.17, *SE* = 0.06, p = .005, 95% Bootstrap CI [-0.29, -0.06]. Analysis of the effect of the moderator indicated non-significant statistical differences in the indirect effects upon low and high levels of gender identity centrality, *Estimate* = -0.02, *SE*=0.07, p = .825, 95% Bootstrap CI [-0.17, 0.11].

Hypothesis 6a predicted that workgroup identification would mediate the relationship between threats to gender identity by the workgroup and turnover intentions. As demonstrated in Table 37, a direct relationship was observed with workgroup identification, (β = -0.34, p = .009). In addition, the indirect effect of workgroup identification to turnover intentions was also observed, β = 0.15, *SE*=0.06, p = .013, 95% Bootstrap CI [0.03, 0.26]. Analysis of the conditional effect indicated that the relationship workgroup gender identity threat and turnover

intentions through workgroup identification was not significant for different levels of gender centrality, *Estimate* = 0.02, *SE*=0.08, *p* = .854, 95% Bootstrap CI [-0.09, 0.25].

Table 38. Results of Study II Path Analysis for Hypothesis 5b and 6b

	Organizational Citizenship Behaviors-Individual				Organizational Citizenship Behaviors-Organization				Turnover Intentions			
	Model 1		Model 2		Model 1		Model 2		Model 1		Model 2	
	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE	Estimate	SE
Intercept	5.81	0.61	2.51	0.65	5.82	0.6	2.68	0.66	5.80	0.60	4.27	0.75
Ethnicity[a]	0.21†	0.12	-0.37**	0.12	0.20†	0.12	-0.37**	0.12	0.21†	0.12	0.01	0.10
Ethnic WrkGrp Threat[b]	-0.33**	0.09	0.05	0.11	-0.33**	0.09	-0.03	0.11	-0.33**	0.09	0.14	0.12
Ethnic Centrality[c]	-0.02	0.15			-0.02	0.15			-0.02	0.16		
Ethnic WrkGrp Threat x Ethnic Centrality	0.09	0.13			0.10	0.13			0.10	0.13		
Workgroup Identification			0.42**	0.09			0.42**	0.11			-0.34**	0.13
R^2	0.16*		0.24**		0.16*		0.25**		0.17*		0.27†	
Index of Moderated Mediation			0.05				0.05				-0.05	

[a] *Ethnicity was coded as 0=Caucasian, 1=Non-Caucasian*
[b] *Ethnic WrkGrp Threat = Workgroup Ethnic Identity Threat*
[c] *Ethnic Centrality= Ethnic Identity Centrality*
*†p<.10, *p<.05, **p<.01*

Hypothesis 5b predicted that workgroup identification would mediate the relationship between threats to ethnic identity by the workgroup and extra-role behaviors. Workgroup identification had a significant direct relationship with organization citizenship behaviors targeting individuals, (β = 0.37, p = .000). Evidence of indirect effects was also observed, β = -0.14, *SE* = 0.05, p =.005, 95% Bootstrap CI [-0.25, -0.06]. Conditional indirect effects on the moderator, however, were not observed, *Estimate* = 0.05, *SE*=0.08, p = .502, 95% Bootstrap CI [-0.10, 0.21].

The findings were similar with respect to the relationship to organizational citizenship behaviors targeting the organization. Workgroup identification had a significant direct relationship, (β = 0.42, p = .000), and there was evidence of indirect effects, β = -0.14, *SE* = 0.05, p =.011, 95% Bootstrap CI [-0.26, -0.05], for workgroup identification mediating the relationship between threats to ethnic identity by the workgroup and organization directed extra-role behaviors. However, there was no evidence of moderated mediation, *Estimate* = 0.05, *SE*=0.07, p = .487, 95% Bootstrap CI [-0.08, 0.19]. Taken together, Hypothesis 5b was partially supported.

Hypothesis 6b predicted that workgroup identification would mediate the relationship between perceived threats to ethnic identity by the workgroup and turnover intentions. Total indirect effects were observed, β = 0.11, *SE* = 0.05, p =.020, 95% Bootstrap CI [0.03, 0.22]. These effects did not vary depending on levels of ethnic identity threat, *Estimate* = -0.05, *SE*=0.07, p = .490, 95% Bootstrap CI [-0.19, 0.07]. Subsequently, Hypothesis 6b was partially supported.

Test of Moderation. Hypotheses 7a and 7b predicted the moderated relationship between workgroup identification and extra-role behaviors, as well as turnover intentions by

organizational identification. As demonstrated in Table 39 below, the interaction was a not significant predictor for extra-role behaviors or turnover intentions.

Table 39. Results of Study II Path Analysis for Interaction Between Organizational Identification and Workgroup Identification

	Organizational Citizenship Behaviors-Individual		Organizational Citizenship Behaviors-Organization		Turnover Intentions	
	Estimate	SE	Estimate	SE	Estimate	SE
Intercept	4.74	0.44	4.92	0.45	2.23	0.23
Organizational Identification	0.16	0.27	0.16	0.27	-0.41	0.26
Workgroup Identification	0.29	0.27	0.28	0.27	0.03	0.26
Org Iden x WrkGrp Iden[a]	0.17	0.12	0.09	0.12	0.11	0.12
R2	0.16†		0.16*		0.19*	

[a] *Org Iden x WrkGrp Iden=Organizational Identification x Workgroup Identification*
*†p<.10, *p<.05, **p<.01*

Supplemental Analysis

As in Study I, supplemental analyses were conducted to examine the direct relationships between the independent variables, as well as the interactions, to the dependent variables (extra-role behaviors and turnover intentions). In addition, the relationships between organizational threats to demographic-related identity and workgroup identification and workgroup threats to demographic-related identity and organizational identification were again explored.

Test of direct relationships. Table 40 presents the results of the path analysis of the relationships between gender, gender identity centrality, organizational threats to gender identity, the interaction between organizational threats to gender identity and gender identity centrality, and organizational identification to each of the outcome variables, extra-role behaviors towards the individual, toward the organization, and turnover intentions.

Table 40. Study II Direct Gender Relationships with Outcome Variables: Organization

	Organizational Citizenship Behaviors-Individual		Organizational Citizenship Behaviors-Organization		Turnover Intentions	
	Estimate	SE	Estimate	SE	Estimate	SE
Intercept	3.00	0.82	2.94	0.82	4.36	0.58
Gender[a]	0.09	0.12	0.13	0.12	-0.05	0.11
Gender Org Threat[b]	-0.02	0.13	-0.02	0.12	0.29**	0.11
Gender Centrality[c]	0.12	0.12	0.02	0.12	0.23*	0.10
Gender Org Threat x Gender Centrality[d]	0.08	0.12	0.09	0.12	0.27*	0.11
Organizational Identification	0.33**	0.12	0.36**	0.11	-0.37**	0.10
R^2	0.15†		0.17*		0.32**	

[a] *Gender was coded as 0=Male, 1=Female*
[b] *Gender Org Threat = Organizational Gender Identity Threat*
[c] *Gender Centrality = Gender Identity Centrality*
[d] *Gender Org Threat x Gender Centrality = Organizational Gender Identity Threat x Gender Identity Centrality*
*†p<.10, *p<.05, **p<.01*

The interaction between organizational threats to gender identity and gender identity centrality, (β = 0.27, p = .011), showed a significant positive relationship with turnover intentions. The simple slopes of the interaction were significantly different at high, b = 0.92, 95% CI [0.36, 1.48], levels of gender identity centrality. This was not the case for those with low gender identity centrality, b = 0.07, 95% CI [-0.36, 0.49], in which the difference was non-significant. Figure 8 demonstrates this relationship graphically and indicates that turnover intentions were higher for those with high gender identity centrality when threats to gender identity by the organization were perceived.

Figure 8. Interaction of Study II Organizational Threats to Gender Identity on Turnover Intentions

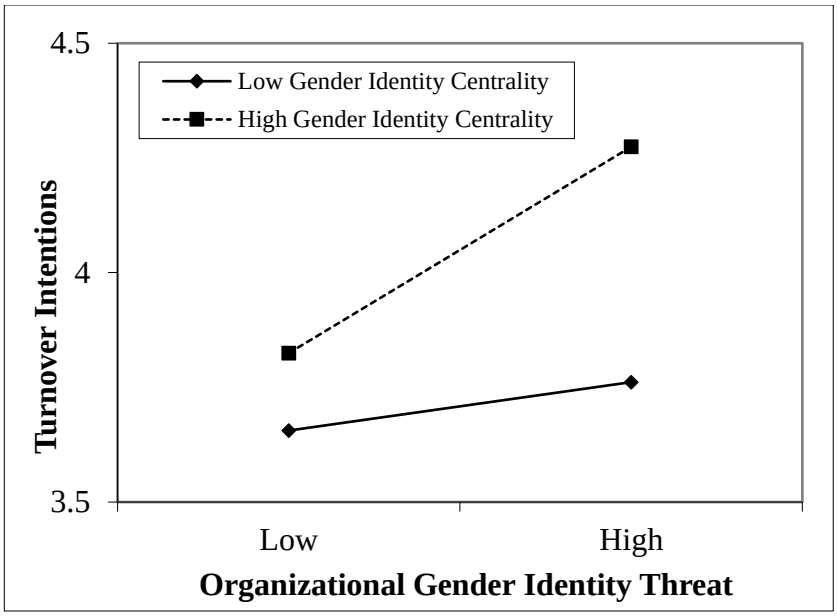


Table 41 presents the direct relationships for the independent variables related to ethnicity and the organization to the outcome variables. The interaction between ethnic identity threat by the organization and ethnic identity centrality reached at least marginal significance for all outcome variables. The interaction term was a marginally significant predictor for organizational citizenship behaviors directed at individuals, (β = -0.18, p = .081), and a significant predictor of organizational citizenship behaviors directed at the organization, (β = -0.20, p = .052), and turnover intentions, (β = 0.28, p = .008).

Table 41. Study II Direct Ethnicity Relationships with Outcome Variables: Organization

	Organizational Citizenship Behaviors-Individual		Organizational Citizenship Behaviors-Organization		Turnover Intentions	
	Estimate	SE	Estimate	SE	Estimate	SE
Intercepts	2.72	0.75	3.00	0.74	4.27	0.59
Ethnicity[a]	-0.20	0.13	-0.13	0.12	-0.10	0.13
Ethnic Org Threat[b]	0.08	0.11	-0.03	0.11	0.15	0.11
Ethnic Centrality[c]	-0.20	0.13	-0.31**	0.12	0.09	0.13
Ethnic Org Threat x Ethnic Centrality[d]	-0.18†	0.11	-0.20*	0.10	0.28**	0.10
Org Identification	0.40**	0.11	0.37**	0.10	-0.36**	0.11

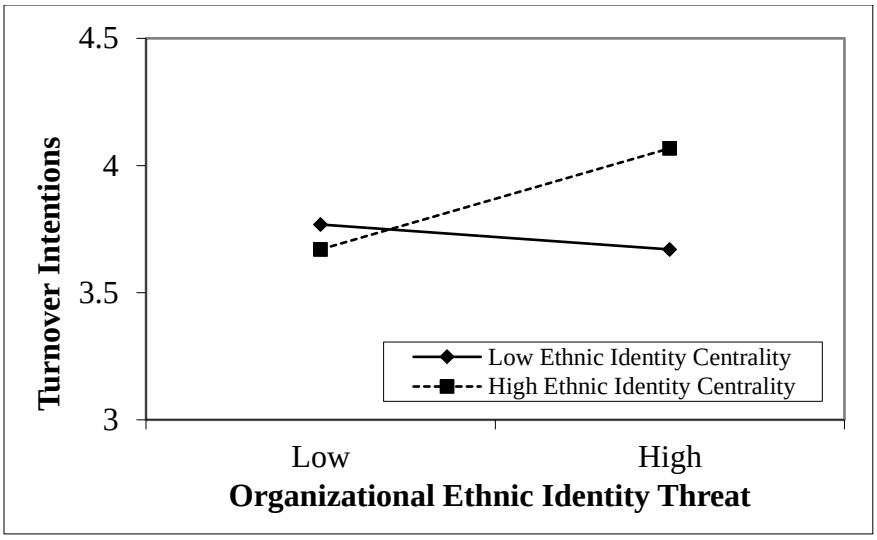
R^2	0.28^{**}	0.33^{**}	0.27^{**}

[a] *Ethnicity was coded as 0=Caucasian, 1=Non-Caucasian*
[b] *Ethnic Org Threat = Organizational Ethnic Identity Threat*
[c] *Ethnic Centrality = Ethnic Identity Centrality*
[d] *Ethnic Org Threat x Ethnic Centrality = Organizational Ethnic Identity Threat x Ethnic Identity Centrality*
†*p<.10, *p<.05, **p<.01*

Despite the marginal significance of the interaction term to organizational citizenship behaviors directed towards individuals, the simple slopes did not indicate a significant difference in these behaviors for those with low ethnic identity centrality, *b* = 0.40, 95% CI [-0.05, 0.85], nor for those with high ethnic identity centrality, *b* = -0.17, 95% CI [-0.63, 0.30], when there were perceived ethnic identity threats by the organization.

A similar analysis of the relationships with organizational citizenship behaviors directed at the organization was also conducted. For the relationship with organizational citizenship behaviors directed at the organization, the data indicated that differences in these behaviors were non-significant at both low, *b* = 0.25, 95% CI [-0.15, 0.65], and high, *b* = -0.32, 95% CI [-0.74, 0.10], levels of ethnic identity centrality when threats to ethnic identity by the organization were perceived. For turnover intentions, the simple slopes analysis demonstrated a significant difference in these attitudes for those with high ethnic identity centrality, *b* = 0.72, 95% CI [0.20, 1.24], but not for those with low ethnic identity centrality, *b* = -0.23, 95% CI [-0.73, 0.27]. Figure 9 demonstrates this relationship graphically and indicates that those with high ethnic identity centrality had higher turnover intentions when threats to ethnic identity by the organization were high.

Figure 9. Interaction of Study II Organizational Threats to Ethnic Identity on Turnover Intentions



At the workgroup level, the interaction between identity threat by the workgroup and demographic-related identity centrality demonstrated a significant relationship for both gender and ethnicity to turnover intentions. Table 42 presents the results of the path analysis for gender. While the interaction between gender identity threat by the workgroup and gender identity centrality was not a significant predictor of organizational citizenship behaviors directed at the individual, (β = 0.09, p = .505), nor the organization, (β = 0.05, p = .702), it was for turnover intentions, (β = 0.33, p = .002).

Table 42. Study II Direct Gender Relationships with Outcome Variables: Workgroup

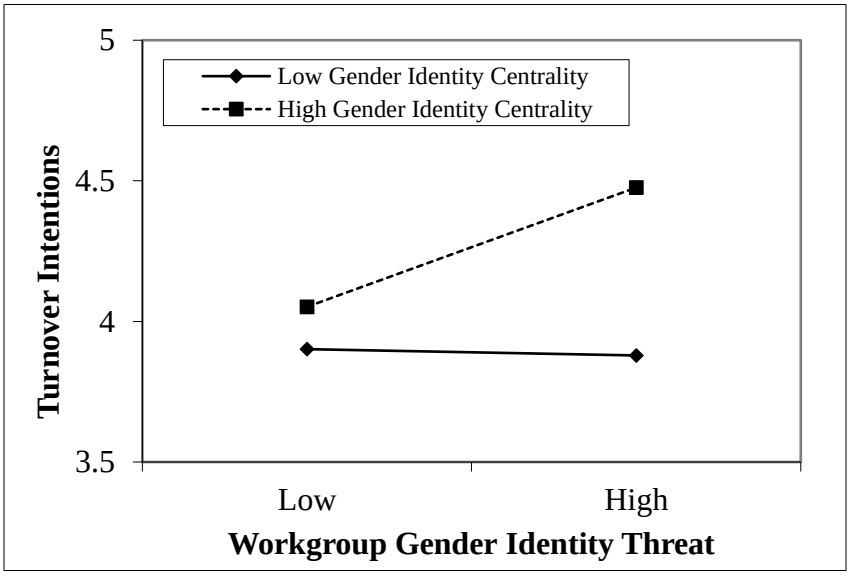
	Organizational Citizenship Behaviors-Individual		Organizational Citizenship Behaviors-Organization		Turnover Intentions	
	Estimate	SE	Estimate	SE	Estimate	SE
	2.54	0.89	2.59	0.90	4.58	0.67
Gender[a]	0.05	0.12	0.12	0.12	-0.03	0.11
Gender WrkGrp Threat[b]	0.08	0.13	0.02	0.13	0.20†	0.12
Gender Centrality[c]	0.10	0.12	0.00	0.12	0.25*	0.11
Gender WrkGrp Threat x Gender Centrality[d]	0.10	0.12	0.06	0.12	0.33**	0.11
Workgroup Identification	0.37**	0.12	0.38**	0.12	-0.37**	0.11
R^2	0.16†		0.17**		0.29**	

[a] *Gender was coded as 0=Female, 1=Male*
[b] *Gender WrkGrp Threat = Workgroup Gender Identity Threat*

[c] *Gender Centrality = Gender Identity Centrality*
[d] *Gender WrkGrp Threat x Ethnic Centrality = Workgroup Gender Identity Threat x Gender Identity Centrality*
*†p<.10, *p<.05, **p<.01*

Given the significant relationship that the interaction between perceptions of gender identity threat by the workgroup and gender identity centrality had to turnover intentions, a simple slopes analysis was conducted. The simple slopes for the interaction on turnover intentions indicated a significant difference in these attitudes for those with high levels of gender identity centrality, b = 0.83, 95% CI [0.28, 1.38], but not for those with low levels of gender identity centrality, b = -0.18, 95% CI [-0.62, 0.26]. Figure 10 demonstrates this relationship graphically and indicates that for those with higher gender identity centrality, turnover intentions increased substantially when threats to gender identity by the workgroup were perceived.

Figure 10. Interaction of Study II Workgroup Threats to Gender Identity on Turnover Intentions



The direct relationships related to ethnicity, as shown in Table 43, revealed that the interaction between ethnic identity workgroup threat and ethnic identity centrality was like the relationships found for gender. The interaction between ethnic identity threats by the workgroup and ethnic identity centrality was a non-significant predictor of both organization citizenship

behaviors directed at the individual, (β = -0.17, p = .133), and the organization, (β = -0.13, p = .297). For turnover intentions, however, the relationship was significant, (β = 0.33, p = .003).

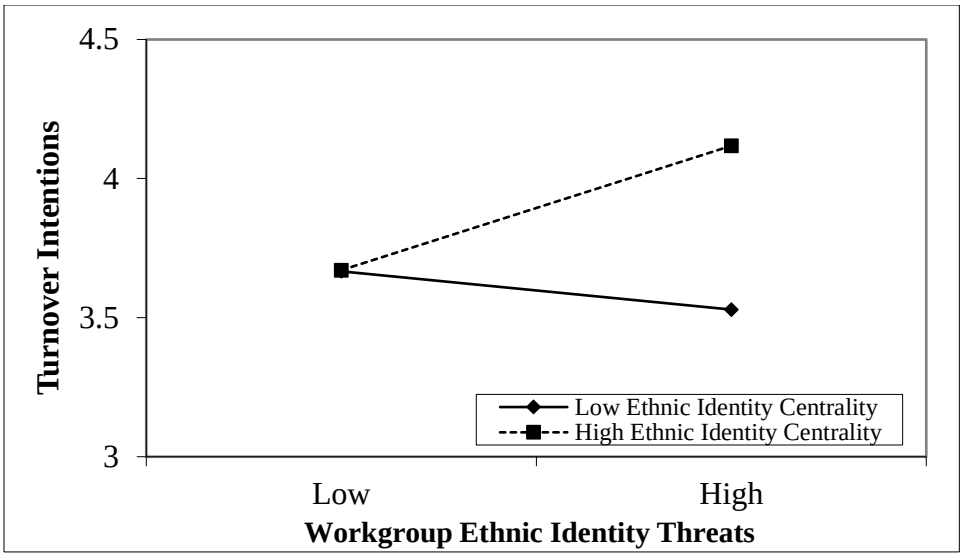
Table 43. Study II Direct Ethnicity Relationships with Outcome Variables: Workgroup

	Organizational Citizenship Behaviors-Individual		Organizational Citizenship Behaviors-Organization		Turnover Intentions	
	Estimate	SE	Estimate	SE	Estimate	SE
Intercept	2.51	0.80	2.68	0.79	4.21	0.65
Ethnicity[a]	-0.20	0.13	-0.16	0.13	-0.12	0.13
Ethnic WrkGrp Threat[b]	0.05	0.11	-0.01	0.11	0.15	0.11
Ethnic Centrality[c]	-0.22	0.14	-0.30*	0.14	0.18	0.14
Ethnic WrkGrp Threat x Ethnic Centrality[d]	-0.17	0.13	-0.10	0.11	0.33**	0.11
Workgroup Identification	0.39**	0.10	0.38**	0.10	-0.31**	0.11
R2	0.28**		0.30**		0.26**	

[a] *Ethnicity was coded as 0=Caucasian, 1=Non-Caucasian*
[b] *Ethnic WrkGrp Threat = Workgroup Ethnic Identity Threat*
[c] *Ethnic Centrality = Ethnic Identity Centrality*
[d] *Ethnic WrkGrp Threat x Ethnic Centrality = Workgroup Ethnic Identity Threat x Ethnic Identity Centrality*
*†p<.10, *p<.05, **p<.01*

For those with strong ethnic identity centrality, the simple slopes analysis demonstrated a significant decrease in turnover intentions when perceived ethnic identity threats by the workgroup were high, b = 0.76, 95% CI [0.28, 1.24]. This was not the case for those with low ethnic identity centrality, b = -0.29, 95% CI [-0.79, 0.21]. Plotting the interaction for further examination, as shown in Figure 11, demonstrated that turnover intentions were higher for those with high ethnic identity centrality when perceived ethnic identity threat by the workgroup was high.

Figure 11. Interaction of Study II Workgroup Threats to Ethnic Identity on Turnover Intentions



Tests of Threat Relationships. The relationships between perceptions of workgroup demographic-identity threat, demographic-related identity centrality, and organizational identification were explored, as were the relationships between perceptions of organizational demographic-identity threat, demographic-related identity centrality, and workgroup identification. As demonstrated in Table 44 the interaction between perceptions of gender identity threat by the workgroup and gender identity centrality was not a significant predictor of organizational identification, ($\beta = 0.02$, $p = .837$), nor was the relationship between the interaction of threats to gender identity by the organization and gender identity centrality to workgroup identification, ($\beta = 0.01$, $p = .893$).

Table 44. Study II Results of Path Models for Gender Threats on Organizational and Workgroup Identification

	Organizational Identification		Workgroup Identification	
	Estimate	SE	Estimate	SE
Intercept	5.63	0.43	6.16	0.45
Gender[a]	0.10	0.10	0.15	0.10
Gender Centrality[b]	0.21*	0.10	0.24*	0.10
Gender WrkGrp Threat[c]	-0.11	0.07		
Gender Centrality x Gender WrkGrp Threat[d]	0.02	0.08		

Gender Org Threat[e]		-0.19**	0.07
Gender Centrality x Gender Org Threat[f]		0.01	0.08
R^2	0.06	0.10†	

[a] *Gender was coded as 0=Female, 1=Male*
[b] *Gender Centrality = Gender Identity Centrality*
[c] *Gender WrkGrp Threat = Workgroup Gender Identity Threat*
[d] *Gender WrkGrp Threat x Ethnic Centrality = Workgroup Gender Identity Threat x Gender Identity Centrality*
[e] *Gender Org Threat = Organizational Gender Identity Threat*
[f] *Gender Org Threat x Gender Centrality = Organizational Gender Identity Threat x Gender Identity Centrality*
*†p<.10, *p<.05, **p<.01*

Table 45. presents the results of the analysis of the relationship between ethnic identity threats by the organization and workgroup identification, as well as the relationship between ethnic identity threats by the workgroup and organizational identification. As noted, the interaction was not a significant predictor of organizational identification, ($\beta = 0.003$, $p = .966$) nor workgroup identification, ($\beta = 0.01$, $p = .926$).

Table 45. Study II Results of Path Models for Ethnic Threats on Organizational and Workgroup Identification

	Organizational Identification		Workgroup Identification	
	Estimate	SE	Estimate	SE
Intercepts	5.50	0.43	6.00	0.46
Ethnicity[a]	0.26*	0.12	0.30*	0.12
Ethnic Centrality[b]	-0.10	0.13	-0.09	0.13
Ethnic WrkGrp Threat[c]	-0.21**	0.06		
Ethnic WrkGrp Threat x Ethnic Centrality[d]	0.00	0.07		
Ethnic Org Threat[e]			-0.22**	0.07
Ethnic Org Threat x Ethnic Centrality[f]			0.01	0.07
R^2	0.10*		0.12*	

[a] *Ethnicity was coded as 0=Caucasian, 1=Non-Caucasian*
[b] *Ethnic Centrality = Ethnic Identity Centrality*
[c] *Ethnic WrkGrp Threat = Workgroup Ethnic Identity Threat*
[d] *Ethnic WrkGrp Threat x Ethnic Centrality = Workgroup Ethnic Identity Threat x Ethnic Identity Centrality*
[e] *Ethnic Org Threat = Organizational Ethnic Identity Threat*
[f] *Ethnic Org Threat x Ethnic Centrality = Organizational Ethnic Identity Threat x Ethnic Identity Centrality*
*†p<.10, *p<.05, **p<.01*

Chapter 6: Discussion

The purpose of this research was to explore the influence of demographic-related identity on work-related outcomes and to identify what organizational factors influence this relationship. Using social identity theory to extend this understanding, I built on identity centrality and organizational identification to propose two important mechanisms underlying the relationship between perceived threats to demographic-related identity and work-related outcomes: demographic-related identity centrality and work-related identification. I examined how the centrality of demographic-related identity influences the relationship between perceived threats to demographic-related identities by the organization and workgroup and work-related identities, and, ultimately, how this relationship affects work-related outcomes. I predicted that threats to central demographic-related identities hinder identification in the workplace for those individuals with high demographic-related centrality, resulting in negative ramifications for extra-role behaviors and turnover intentions.

In each study, certain hypotheses were supported. For example, Hypotheses 1 and 4 predicted that the interaction between perceived threats to central demographic-related identity and central demographic-related identity would be related to work-related identification. Study I provided marginal support for these predictions for ethnic identity centrality, whereas Study II did not. Hypotheses 2, 3, 5 and 6 predicted that demographic-related identity centrality would have an indirect relationship, through organizational identification (Hypotheses 2 and 3) or workgroup identification (Hypotheses 5 and 6), to extra-role behaviors and turnover intentions. While there was evidence of an indirect relationship through work-related identification in Study II, the results were not consistent across both studies. Finally, the predicted relationship between

the interaction of workgroup and organization identification on extra-role behaviors and turnover intentions, as theorized in Hypothesis 7, was not observed in either study.

Overall, the results did not generally support my hypotheses. Nonetheless, important findings can be gleaned from this research. First, perceived threats to demographic-related identity, whether by the organization or workgroup, affect identification at work. The data demonstrated a negative direct relationship between threats to demographic-related identities and identification with workplace targets, no matter the degree of demographic-related identity centrality. In both studies, perceived gender identity threats by the organization had a strong negative relationship with organizational identification, whereas perceived ethnic identity threats by the workgroup had a similar relationship with workgroup identification. Furthermore, the supplemental analysis results of Study I demonstrated how perceived identity threats by the organization can have negative ramifications for lower-level work-related identities.

These findings provide insight into the outcomes of perceived demographic-related identity threats by the organization or workgroup. Perceived threats by the organization or workgroup force individuals to make complex choices with regards to their social identities, i.e., to limit identification with the work-related target or to deemphasize the existing social identity (Van Laar, Meeussen, Veldman, Van Grootel, Sterk, and Jacobs, 2019). The direct relationship observed in my studies not only supports workplace inclusivity research, but also extends organizational identification literature by presenting an important antecedent for workplace identification- threats to demographic-related identity. Threats to identity in organizational literature have primarily focused on threats to work-related identities (e.g., Lamarajan & Reid, 2013; Petriglieri, 2011). My research thus contributes to the very limited literature on non-work identities in the work domain (Thatcher & Greer, 2008; Ramarajan & Reid, 2013), as my

findings indicate that regardless of the centrality of one's demographic-related identity, threats to that identity have negative ramifications for identification in the workplace.

Second, both studies demonstrated the influential role of non-work identities, particularly those that are central to an individual's self-understanding, on work-related identification. Specifically, workgroup identification was directly related to gender identity centrality, and in Study I, ethnic identity centrality was related to organizational identification. These results highlight the need for a coherence in self-understanding across domains (Ashforth & Schinoff, 2016), and suggest that relationships are likely forged between the multiple identities held by an individual, especially those that are central. As individuals seek consistency in, or affirmation of, their self-understanding at work, identities that are important to the overall sense of self may be tied in some way to work-related identities. This finding supports theorizing on identity construction within the work domain (Ashforth & Schinoff, 2016), and provides insights into how individuals manage their non-work central identities at work.

The third important finding further broadens insights on central identities in the work domain and suggests that non-work identity centrality has implications for work-related identification, as well as work-related outcomes. A direct relationship between demographic-related identity centrality and extra-role behaviors toward both the individual and the organization, as well as turnover intentions, was observed. Both studies demonstrated ethnic identity centrality to be a predictor of extra-role behaviors directed at organizations and the individual. And in Study II, gender identity centrality was demonstrated to be a significant predictor of turnover intentions.

These results align with literature on central identities and provide evidence of the enduring prominence of important social identities and their transcendence of a specific situation

or social environment (Gurin & Townsend, 1986; Brewer, 1991). This finding extends the limited research on the management of non-work identities into the context of work by demonstrating that the identities that individuals hold central to their concept of self not only transcend a single domain, but also have implications for attitudes and behavior in the workplace (Cole, Jones, & Russell, 2016; Thatcher & Greer, 2008).

Finally, the findings from this research demonstrated an interaction between perceived identity threat and demographic-related identity centrality, just not as initially hypothesized. While the interaction between demographic-related identity centrality and perceived threats to demographic-related identity was not a significant predictor for organizational identification or workgroup identification, the supplemental analysis revealed that the interaction between demographic-related identity centrality and demographic-related identity threats did have a significant relationship with work-related outcomes.

Threats to social identities hinder self-worth and an overall coherent sense of self (Ashforth, et al., 2008; Rothausen, et al., 2017). When the existing social identity is central to one's concept of self, which is expected for demographic-related identities, perceived threats are likely to be felt more deeply. Ultimately, these threats devalue a central identity, compromising one's need for a positive sense of self and impeding the need to be consistent in self-understanding (Petriglieri, 2011). In the workplace, threats to important non-work identities have been demonstrated to serve as shocks to individuals, prompting turnover considerations, even for employees that were otherwise satisfied in their jobs (Rothausen, et al., 2017). The findings from my research extend this understanding by demonstrating the importance of identity centrality in this relationship.

Implications for Practice

The results of these studies also have practical implications. First, they demonstrate that perceived threats to identity by the organization or workgroup have a negative relationship with work-related identification, regardless of the demographic-identity centrality. This underscores the importance to all employees of a diversity climate, at both the organization and workgroup levels, that minimizes demographic-related identity threats. Incorporating awareness of identity threats into diversity and inclusion programming, such as how threats can manifest in daily workplace interactions, can be valuable in promoting a supportive diversity climate and has been demonstrated to enhance organizational identification (Van Laar et al., 2019; Randel et al., 2016). Given the ties to work-related identification, it is important for organizations to acknowledge the negative impact of threats to demographic-related identities in connection with their organizational diversity efforts.

Second, my findings emphasize the influential role of central identities in the workplace and provide insight into how individuals respond to perceived identity threats in this arena. Policies and procedures that promote equity and inclusion can be effective in developing a supportive climate that minimizes threats to demographic-related identity (Cole & Saalimath, 2013; Herdman and McMillan-Capehart, 2010). However, the findings highlight the need to do more. Organizations and managers should work to ensure that demographic-related identities are not only not threatened but affirmatively embraced. This would also be beneficial for other non-work identities that are central to employees (Thatcher & Greer, 2008). Training and education for managers and employees can assist in fostering a supportive diversity climate (Cole, Jones, Russell, 2016; Al Ariss, Özbilgin, Tatli, & April, 2014); this research suggests that these impacts can extend to promoting positive work attitudes and behaviors.

Limitations and Future Research

Despite these contributions, the two studies have limitations. The cross-sectional design hindered the ability to draw causal conclusions regarding the relationships. While both studies controlled for common method variance by measuring the independent and dependent variables at separate time points (Podsakoff, MacKenzie, & Podsakoff, 2012), and identity and identification have been demonstrated to be relatively stable over time (Ethier & Deax, 1994; Ashforth, 2001; Ashforth et al., 2008), perception of identity threats may vary over time. My findings demonstrated a relationship between perceptions of identity threats and work-related identification and work-related outcomes. A qualitative longitudinal study would provide additional insights into this relationship, as well as the maintenance efforts individuals adopt to protect identities that are important to them at work. These results could also provide insight into the specific instances that prompted perceptions of threat.

Another limitation was that both studies relied on self-reported information. The limitations of self-report data are well known (Podsakoff et al., 2003). The majority of the variables measured were internal states of the individual, in which self-reported beliefs, perceptions, and attitudes are acceptable (Spector, 2006). The two exceptions were turnover intentions and citizenship behaviors. A logistic regression between actual turnover and turnover intentions validated the data on turnover intentions. While it can be argued that an additional indicator of citizenship behaviors would have bolstered the reliability of the data, there is meta-analytic evidence that supports the viability of self-reported citizenship behaviors (Carpenter, Berry, & Houston, 2014).

Further, the homogeneity in demographic characteristics, particularly in ethnicity, of the sample population across both studies likely lent to some of the nonsignificant findings in the

hypotheses. While the results of my studies suggest that even non-minorities care about threats to demographic-related identities, the relatively small percentages of minorities in the samples may point to why the moderation hypotheses were not supported. Across both studies, while the percentage of participants that indicated an above average degree of centrality was not identical to the percentage of minorities for both gender and ethnicities, it was somewhat aligned. Future research can examine this further by not only utilizing a larger, more heterogenous sample, which would not only improve the power of the study, but also enable the ability to examine the intersectionality of the centrality demographic-related identities. In addition, future research can also consider replicating the design with a cross-sectional sample of minorities across multiple organizations, which will provide insights into the intersectionality of both gender and ethnic minorities and the perception of threat on work-related identification and outcomes.

Finally, the lack of variation within the workgroups across the workgroup-related variables in both studies prevented the ability to examine differences within each organization. While there may have been substantive differences between non-participants and participants, the high correlation between organizational and workgroup identification suggests that across both samples, the identities associated with the locations (workgroups) were very similar in nature to that of the organization, particularly in Study II. This leaves room for questions in respondents' target of the perceptions of threat by the workgroup. Individuals may have been responding to who they most work with, rather than an overall location. Future research can test this further by conducting a natural experiment with a cluster of workgroups over the lifetime of a project or task. In addition to collecting quantitative data, qualitative data will also be beneficial in gaining insights into threats to non-work identities in the workplace and how perceptions of threat are developed.

Conclusion

The purpose of this study was to examine the relationship between demographic-related identities and work-related attitudes and behaviors, while exploring the organizational factors that may influence this relationship. By using a social identity approach, this research contributes to both diversity and identity literature within the management domain by providing additional insight into the impact of threats to non-work identities on employees, including subsequent work-related outcomes. My findings demonstrate the detrimental impacts that threats to non-work identities can have in the workplace, for work-related identification and, ultimately, on employee attitudes and behavior. And when perceived identity threats are directed toward central identities, the effects and outcomes are more severe.

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Appendix I

Study I Recruitment Email

Dear [Study 1] Employee,

We would like you to give us your opinion about your experience working at [STUDY I], Inc. The purpose of this study is to investigate different work-related social identities at work. The results of this study, based on your responses, will be used to provide insights into employee perceptions of organizational identity and culture at [STUDY I], Inc, and may be used in support of academic research.

All of the information you provide will be completely confidential. The information you provide will be available only to the investigators, listed at the bottom of this letter. At no time will the researchers release identifiable results of the study to anyone other than the individuals working on the project without your written consent.

Participation is confidential and completely voluntary. Should you agree to participate, you will be asked a series of questions or presented with statements regarding your identity at work. These items will be presented online through the link below:

[QUALTRICS SURVEY LINK]

You have the right to withdraw at any time or not answer any of the questions presented in this research. Participants that complete the survey will be entered to participate in a raffle to win a $50 Visa Gift Card.

Thank you for your consideration.

Regards,

Dr. William J. Becker beckerwj@vt.edu/540-231-7382

Sarah E. Tuskey stuskey@vt.edu/305-237-0684

Appendix II

Study II Recruitment Email

Dear [insert employee]

We would like you to give us your opinion about your experience working at [Study II], Inc. The purpose of this study is to investigate the different demographic- and work-related social identities at work. The results of this study, based on your responses, will be used to provide insights into employee perceptions of organizational identity and culture at [Study II], Inc, and may be used in support of academic research.

All of the information you provide will be completely confidential. The information you provide will be available only to the investigators, Dr. William Becker and Ms. Sarah Tuskey. The information obtained from this research will be password encrypted and held on a password protected computer. Upon completion of the study, all identifiable information will be destroyed, and the de-identified data set will be kept indefinitely for future research.

Summary findings of this research will be presented to both [Study II], Inc, and in academic research in aggregate form only. Every effort will be made to keep your study-related information confidential. Part of this study includes obtaining your perceptions of performance. During data collection, your email address will be used to match your survey data. All of the information you provide will be confidential. The information you provide will be available only to the investigators listed at the bottom of this email. At no time will the researchers release identifiable results of the study to anyone other than the individuals working on the project without your written consent.

Participation is confidential and completely voluntary. Should you agree to participate, you will be asked a series of questions or presented with statements regarding your identity at work. These items will be presented in an online format and can be found at the link below. This initial survey should take approximately 15 minutes.

You have the right to withdraw at any time or not answer any of the questions presented in this survey. For questions about your human subject protections, you may contact the Virginia Tech Institutional Review Board at irb@vt.edu or 540-231-3732.

[INSERT LINK TO QUALTRICS SURVEY]

Within three weeks upon completion of this survey, you will be invited to participate in an additional survey. Participants that complete both surveys will be entered to participate in a raffle to win a $100 Visa Gift Card.

Thank you for your consideration.

Regards,

Sarah E. Tuskey stuskey@vt.edu/305-237-0684
Dr. William J. Becker beckerwj@vt.edu/540-231-7382

Appendix III

Sample of Survey Items

TIME 1

Demographic-related Identity Centrality

Please indicate the extent to which you agree or disagree with the following statements:

1-Strongly Disagree, 2-Disagree, 3-Neither Agree nor Disagree, 4-Agree, 5-Strongly Agree

1. Overall, being [specific response to gender/ethnicity] has very little to do with how I feel about myself.
2. Being [specific response to gender/ethnicity] is an important reflection of who I am.
3. In general, being [specific response to gender/ethnicity] is an important part of my self-image.
4. Being [specific response to gender/ethnicity] is unimportant to my sense of what kind of a person I am.

Demographic-related Identity Enhancement

Please indicate the extent to which you agree or disagree with the following statements:

1-Strongly Disagree, 2-Disagree, 3-Neither Agree nor Disagree, 4-Agree, 5-Strongly Agree

Workgroup

1. Overall, being [specific response to gender/ethnicity] is considered good by my workgroup.
2. My team considers [specific response to gender/ethnicity], on average, to be more ineffective than other [ethnic groups/gender].
3. In general, my team respects [specific response to gender/ethnicity].
4. I cannot talk to people in my team about my [specific response to gender/ethnicity].
5. I feel that being [specific response to gender/ethnicity] is incompatible with the people in my team.
6. I try not to show the parts of me that are [gender/ethnic] based.

Organization

1. Overall, being [specific response to gender/ethnicity] is considered good by my organization.
2. My organization considers [specific response to gender/ethnicity], on average, to be more ineffective than other [ethnic groups/gender].
3. In general, my organization respects [specific response to gender/ethnicity].
4. I cannot talk to people in my organization about my [specific response to gender/ethnicity].
5. I feel that being [specific response to gender/ethnicity] is incompatible with the people in my organization.
6. I try not to show the parts of me that are [specific response to gender/ethnicity] based.

Workgroup/Organizational identification

Please indicate the extent to which you agree or disagree with the following statements:

1-Strongly Disagree, 2-Disagree, 3-Neither Agree nor Disagree, 4-Agree, 5-Strongly Agree

Workgroup

1. When someone praises my team, it feels like a personal compliment.
2. When someone criticizes my team, it feels like a personal insult.
3. When I talk about my team, I usually say ‘we’ rather than ‘they’.
4. I am very interested in what others think about my team.

Organization

1. When someone praises [name of the organization], it feels like a personal compliment.
2. When someone criticizes [name of the organization], it feels like a personal insult.
3. When I talk about [name of the organization], I usually say ‘we’ rather than ‘they’.
4. I am very interested in what others think about [name of organization].

Controls

Gender
What gender do you identify most strongly identify?

- Male
- Female
- Not-Listed/Other [Text response]

Ethnicity
What race/ethnicity do you identify most strongly identify?

- African-American/Black
- Native American or Alaskan Native
- Asian
- Latino/a or Hispanic
- Native Hawaiian or Other Pacific Islander
- Caucasian/White
- Middle Eastern/Arab
- Bi/Muti-racial
- Not-Listed/Other [Text response]

TIME 2

Turnover intentions
Please indicate the extent to which you agree or disagree with the following statements:

1-Strongly Disagree, 2-Disagree, 3-Neither Agree nor Disagree, 4-Agree, 5-Strongly Agree

1. I intend to leave this job within the next year.
2. I would leave my job if a similar position were available at another company.
3. I intend to remain with this company indefinitely.
4. Thoughts about quitting this job cross my mind.

Extra-role behaviors
Please indicate how often you engage in the following:

1-Never, 2-Rarely, 3-Occasionally, 4-Frequently, 5-Always

Individual

1. Went out of my way to make newer employees feel respected.
2. Willingly gave my time to help others who have work-related problems.
3. Adjusted my work schedule to accommodate other employees' requests for time off.
4. Assisted others with their duties.

Organization

5. Kept up with developments in the organization.
6. Offered ideas to improve functioning of the organization.
7. Took action to protect the organization from potential problems.
8. Expressed loyalty toward the organization.