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The Nature of Collective Identity: Construct Validity of a Scale and a Preliminary Examination of Predictive Validity

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THE FLORIDA STATE UNIVERSITY
COLLEGE OF BUSINESS

THE NATURE OF COLLECTIVE IDENTITY: CONSTRUCT VALIDITY OF A SCALE
AND A
PRELIMINARY EXAMINATION OF PREDICTIVE VALIDITY

By
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TALBE OF CONTENTS

List of Tables	Page viii
List of Figures	Page x
Abstract	Page xi
 Chapter 1 – Introduction	 Page 1
Collective Identity	Page 2
Collective Identity Scale Development	Page 4
Chapter 2 – Literature Review	Page 6
Why Join a Group?	Page 7
Which Social Identity is Salient?	Page 7
Collective Identity	Page 8
Dimension of Collective Identity	Page 8
Dimensions of Identification Process	Page 12
Multiple Collective Identities	Page 12
Limits in Applying Social Identity to Organizations	Page 12
Dissertation Purpose	Page 17
Measuring Collective Identity.....	Page 17
Scale Validity	Page 17
Pilot Scale Development	Page 17
Method	Page 18
Measures	Page 18
Pilot Results	Page 18
Discussion of Results from Pilot Study	Page 20
Chapter 3 – Dissertation Research Studies: Exploratory and Confirmatory	
Analysis	Page 23
Factor Structure	Page 23
Combining Ashmore et al.’s (2004) Dimensions	Page 23
Three Dimensions of Collective Identity	Page 23
Convergent and Discriminant Validity	Page 24

Convergent Validity	Page 24
Discriminant Validity	Page 29
Dissertation Research Studies: General Conceptual and Research Model	
for Predictive Validity	Page 31
Theoretical Model	Page 31
Research Model for Predictive Validity	Page 40
Chapter 4 – Methodology	Page 47
Exploratory Factor Analysis	Page 47
Procedures for Exploratory Factor Analysis	Page 47
Analysis for Exploratory Factor Analysis	Page 47
Measures for Exploratory Factor Analysis	Page 49
Confirmatory Factor Analysis	Page 49
Procedures for Confirmatory Factor Analysis	Page 49
Analysis for Confirmatory Factor Analysis	Page 49
Measures for Confirmatory Factor Analysis	Page 50
Psychometric Properties of CIS	Page 50
Procedures for Convergent, Discriminant and Predictive Validity	Page 50
Analysis for Convergent, Discriminant and Predictive Validity	Page 50
Measures for Convergent, Discriminant and Predictive Validity	Page 50
Chapter 5 – Results	Page 55
Results for Exploratory Factor Analysis Studies	Page 55
Item Analysis	Page 55
Dimensionality of Collective Identity	Page 56
Reliability and Factor Correlations	Page 56
Additional Analysis	Page 57
Results for Confirmatory Factor Analysis Studies	Page 59
Results for Convergent, Discriminant, and Predictive Validity	Page 58
Additional Analysis	Page 62
Chapter 6 – Discussion	Page 65
Contributions	Page 65

Limitations	Page 68
Future Research	Page 69
Implications for Business	Page 71
General Conclusion	Page 71
 ENDNOTES	 Page 73
 APPENDICES	
A Collective Identity Scale – Pilot Study Results	Page 82
B Exploratory and Confirmatory Analyses	Page 86
C CIS Items and PAF Results for Research Sample	Page 91
D Convergent Discriminant, and Predicative Hypotheses	Page 95
E Copy of Survey	Page 108
 REFERENCES	 Page 125
BIOGRAPHICAL SKETCH	Page 138

LIST OF TABLES

Table 1: Pattern Matrix from Principle Component with Oblimin Rotation ...	Page 84
Table 2: Pattern Matrix from Principle Axis Factor with Oblimin Rotation ...	Page 85
Table 3a: Pattern Matrix from Principle Axis Factor with Oblimin Rotation ...	Page 86
Table 3b: Eigenvalues, Variance Explained, and Reliabilities	Page 87
Table 4: Correlations between Factors	Page 88
Table 5: CFA on Exploratory Data Set	Page 89
Table 6: CFA on Confirmatory Data Set	Page 89
Table 7: Convergence Between Data Sets	Page 90
Table 8: Convergence Between Data Sets	Page 90
Table 9: Convergence Between Data Sets	Page 90
Table 10: Pattern Matrix – Organization-based Identity	Page 92
Table 11: Pattern Matrix – Family-based Identity	Page 93
Table 12: Pattern Matrix – Social-based Identity	Page 94
Table 13: Bi-variate Correlations between Variables of Interest	Page 95
Table 14: Bi-variate Correlations of Organization Identity, Sub-dimensions, and Support	Page 96
Table 15: Bi-variate Correlations of Family Identity, Sub-dimensions, and Support	Page 97
Table 16: Bi-variate Correlations of Social Identity, Sub-dimensions, and Support	Page 98
Table 17: Bi-variate Correlations for Validity	Page 99
Table 18: Role Conflict, Organization Identity, and Tension	Page 100
Table 19: Role Conflict, Organization Identity, and Depressed Mood at Work	Page 100
Table 20: Role Conflict, Organization Identity, and Burnout	Page 101
Table 21: Role Conflict, Organization Identity, and Affective Commitment	Page 101
Table 22: Role Conflict, Co-worker Support, and Tension	Page 102
Table 23: Role Conflict, Co-worker Support, and Depressed Mood at Work	Page 102
Table 24: Role Conflict, Co-worker Support, and Burnout	Page 103
Table 25: Role Conflict, Co-worker Support, and Affective Commitment	Page 103
Table 26: Work-family Conflict, Family Identity, and Tensions	Page 104
Table 27: Work-family Conflict, Family Identity, and Depressed Mood at Work	Page 104

Table 28: Work-family Conflict, Family Identity, and Burnout	Page 105
Table 29: Work-family Conflict, Family Identity, and Affective Commitment	Page 105
Table 30: Work-family Conflict, Family Support, and Tension	Page 106
Table 31: Work-family Conflict, Family Support, and Depressed Mood at Work	Page 106
Table 32: Work-family Conflict, Family Support, and Burnout	Page 107
Table 33: Work-family Conflict, Family Support, and Affective Commitment	Page 107

LIST OF FIGURES

Figure 1: Theoretical Model	Page 74
Figure 2: Model for Predictive Validity: Organizational Antecedents	Page 75
Figure 3: Model for Predictive Validity: Family Antecedents	Page 76
Figure 4: Role Conflict, Organization Identity, and Depressed Mood at Work	Page 77
Figure 5: Role Conflict, Organization Identity, and Burnout	Page 78
Figure 6: Role Conflict, Co-worker Support, and Burnout	Page 79
Figure 7: Role Conflict, Co-worker Support, and Affective Commitment ...	Page 80
Figure 8: Work-family Conflict, Family Support, and Tension	Page 81

ABSTRACT

The purpose of this dissertation is to develop and validate a new measure of identity. Based on the research on collective identity (Ashmore, Deaux, and McLaughlin-Volpe, 2004), the Collective Identity Scale (CIS) developed in this dissertation represented a multidimensional measure of identity that can be used to measure any identity type. Based on seven exploratory and confirmatory data sets, a 14-items measure holds the same factor structure for organization-based identity, family-based identity, and social-based identity. In a final data set, three additional items are added to strengthen each dimension in the scale. Convergent and discriminant validity are also shown in the final data set.

This dissertation also proposes a theoretical model that explains the interactive influence of identity, support and stress. Part of this model is tested to illustrate predictive validity of the CIS. Partial support is received for the research model. Results from this dissertation show that identity and support *can*, independently, moderate conflict-outcomes relationships. Specifically, organizational identity moderated the relationship between role conflict and depressed mood at work, such that those low in organizational identity increased in depressed mood at work as role conflict increased. Organizational identity also moderated the relationship between role conflict and burnout, such that individuals with low organization identity tend to increase in burnout as role conflict increased. Co-worker support also moderated the relationship between role conflict and affective commitment, such that affective commitment decreased at a greater rate as role conflict increased for individuals low in co-worker support.

Furthermore, co-worker support was found to moderate the relationship between role conflict and burnout. However, contrary to the hypothesis, individuals with *high* organization identity increased in burnout as role conflict increased. Similarly surprising, family support moderated the relationship between work-family conflict and tension in a manner contrary to the hypothesis; tension due to work-family conflict increased at a greater rate for individuals with a supportive family than for those with an unsupportive family. Collectively, the results from this dissertation are discussed in relation to future research agenda and practical implications.

CHAPTER 1 -INTRODUCTION

Who we are, the inner self, is a very complex concept. In reviewing the current state of identity theory, Stryker and Burke (2000) noted that there are three distinct ways the word 'identity' is used. First, some (e.g., Calhoun, 1994) have used identity to refer "...to the culture of a people" (Stryker & Burke, 2000, p. 284); or rather, these researchers equate ethnicity and identity. Others, according to Stryker and Burke (2000), have proposed a more theoretically driven conceptualization of identity, such as Tajfel's (1982) social identity theory, which pertains to the self in relation to a social group. That is, this view of identity refers to how individuals define themselves in terms of social groups to which they belong. Finally, other researchers have referred to identity as "...parts of a self composed of the meanings that persons attach to the multiple roles they typically play in highly differentiated contemporary societies" (Stryker & Burke, 2000, p. 284).

This view is consistent with the early works on the self (e.g., James, 1890), which noted that individuals possess "...as many selves as groups..." to which they belong (Stryker & Burke, 2000, p. 286). Thus, as noted by Mead (1934), the self is shaped by society, and the self, consequently, helps shape behaviors. This dissertation examines identity as a combination of the latter two conceptualizations of identity. Thus, identity refers to a conceptualization of the self that reflects the different groups to which an individual belongs.

In this, individuals hold many identities at once, which are cognitively arranged hierarchically according to importance. Based on the works of cognitive social psychologists (e.g., Markus, 1977), identity researchers have suggested identities that are more salient (i.e., higher in the cognitive hierarchy) will have a higher probability of being invoked across a variety of situations (Stryker & Burke, 2000). Identities that are salient drive cognitive interpretations of situations and thus influence behavior (Stryker & Burke, 2000). The purpose of this dissertation is to develop a measure of identity, as well as conduct a preliminary test of this measure in a stress-strain model that explores the relationships between identity, support, conflict, and various cognitive outcomes.

Within the organizational sciences, identity has been studied for nearly fifty years. Gouldner (1957) examined the difference between individuals with local versus cosmopolitan identities, noting that the former are committed to and identify with their organization whereas the latter are committed to and identify with their profession. Gouldner's work has waxed and

waned in conceptual popularity, with concepts such as organizational commitment, role salience, and organizational identification emerging as important building blocks to understanding individuals' behavior in workplace settings.

However, previous work on the role of identity in the workplace is incomplete. Previous work on organization identification has been limited to examining identities that are outside of the organization world. That is, organizational scientists have tended to ignore the fact that some employees, who do not necessarily identify with their organization or their profession, could be equally productive workers. For instance, it has been noted that the workforce is becoming comprised more and more of temporary employees (Segal & Sullivan, 1997). It is not likely that these employees will be high in either organizational identification or commitment. However, this does not necessarily mean their output will be below average. Why is this? It could be that temporary employees have identities based in other domains, yet work very hard at their job because they realize the economic importance of sustaining a steady source of income.

Furthermore, the seminal works in organizational identification (e.g., Hogg & Terry, 2001), which are largely based on the work of Turner (1987), Stryker (1987), and Tajfel (1978), do not take into account how identities outside of the organization affect attitudes and emotions in the workplace in positive and negative ways. As noted by Lewin (1936), individuals react to and construct their "reality" based on their perceptions of the world in which they operate. As stated earlier, individuals hold many identities, which they arrange according to their importance.

Because people spend approximately 35%-53%¹ of their waking hours per week at work, individuals may possibly bring a salient identity into the workplace that is not work-based. Individuals process situational information through their salient identity lens, and so it is useful for organizations to examine identities that are not work-based. That is, individuals' social identity (i.e., the way in which individuals associate themselves in society) could influence individuals' orientation and perceptions in the workplace.

Collective Identity

The current work in social psychology has noted that there should be a new, concise conceptualization of social identity. Ashmore, Deaux, and McLaughlin-Volpe (2004) stated that "collective identity" might be a good way to conceptualize identity. It should be noted that Ashmore et al.'s (2004) use of the term "collective identity" is different than that has been used recently in the organizational sciences. For instance, Brewer and Gardner (1996) noted that

collective identity is the highest level of identification orientation. That is, personal identification orientation refers to an individual loci of focus, while relational identification orientation refers to an interpersonal loci of focus (Sluss & Ashforth, 2007), and collective identification orientation refers to a group loci of focus.

Furthermore, in the identity literature, there has been a distinction between identity and identification. For instance, Sluss and Ashforth (2007, p. 11) noted that relational identity refers to "...the nature of one's role-relationship..." while relational identification refers to "...the extent to which one defines oneself in terms of a given role-relationship." In other words, researchers have noted that identity is more of the external view of a group's image, whereas identification refers to one's individual attachment to said groups. However, as other identity theorists have done before (e.g., Brewer & Gardner, 1996), this dissertation, views identity and identification as nearly the same. The higher one's identification with a group, the more likely they hold said group as an identity base. Thus, collective identity pertains to how individuals define themselves by various group memberships. It is an individual level phenomenon and therefore identity and identification are used interchangeably.

Collective identity has been proposed to have seven dimensions that encompass overlapping aspects of the various identity theories. According to Ashmore et al. (2004), collective identity consists of self-categorization (i.e., placing oneself into a particular social group), evaluation (i.e., attitude toward that group), importance (i.e., how central the identity is to one's sense of self), attachment/sense of interdependence (i.e., the degree to which one's fate is interlinked with the group), social embeddedness (i.e., ongoing social relationships), behavioral involvement (i.e., actions based on belonging to a social group), and context and meaning (i.e., internalized beliefs about the attributes and history of the group).

The foregoing seven dimensions parsimoniously summarize and synthesize previous work on self-categorization theory and social identity theory. Collective identity has important implications for many areas of the organizational sciences, such as occupational stress (as described below), human resource management (e.g., role of collective identity in the attraction-selection-attrition framework), social influence (e.g., role of collective identity in choice of influence tactics and reception of influence attempts), socialization (e.g., influence of newcomers' collective identity on reception of shaping activities), leadership (e.g., role of collective identity on perceived similarity), strategy (e.g., role of managers' collective identity on

strategy pursuit), and conflict resolution (e.g., influence of collective identity in differences of opinion on similar issues). This dissertation examines the role of collective identity in the stress process, although primary emphasis is on the development of a psychometrically-sound scale of collective identity.

Collective Identity Scale Development

Although collective identity represents a theoretical improvement over past conceptualizations of social identity, Ashmore et al. (2004) noted that measurement issues have not been resolved. These researchers provided examples of the various measures of specific dimensions of collective identity, but failed to provide an overall scale of collective identity that taps all dimensions. Furthermore, Stryker and Burke (2000) noted, “Accomplished research, however, also suggests the need for refinements of concept and measurement for amplifications of the [social identity] theory” (p. 286). Later, these researchers identify measurement of identity as a critical challenge for future researchers.

Specifically, Stryker and Burke (2000) stated, “A second critical challenge is to develop measures of identity meanings and identity salience that are independent of self-reports and that can be utilized in nonexperimental research” (p. 293). Although Stryker and Burke (2000) advocated a measure that is not self-report, for the purposes of organizational investigation, a self-report measure may be, perhaps, most practical for nonexperimental research. Furthermore, because of the importance that collective identity could play in the study of organizational behavior, it is necessary to develop a scale that measures the multiple dimensions of collective identity in a reliable and valid manner.

It is desirable to measure all seven dimensions of collective identity in such a way that data collection is practical (e.g., self-report measures) yet enables examination of each dimension independently. An overall measure of collective identity is useful so that organizational scientists can examine the differences between individuals who have a work-based collective identity versus individuals who have a family-based collective identity versus individuals who have a social group-based identity, etcetera. Independent examination of each dimension is important to examine specific cognitive, affective, and behavioral processes. For instance, collective identity could be used to explain how individuals experience varying degrees of strain when faced with similar stressors. Specifically, it could be that certain dimensions of collective

identity will be more relevant when examining specific stages of the organizational stress process.

The primary purpose of this dissertation is to develop and validate a multi-dimensional scale of collective identity in order to facilitate empirical research in this important area of inquiry. Second, this dissertation focuses on the role of collective identity in the organizational stress process by examining how various collective identity types (i.e., organization-based and family-based) influence coping (i.e., social support) and strain. Therefore, this dissertation research is organized into two distinct but related phases. The exploratory and confirmatory factor analyses involve the development and initial validation of the Collective Identity Scale (CIS), which reports on the item generation and analyses, exploratory and confirmatory factor structure, and construct validity (i.e., convergent and discriminant validity) of this new scale. The research study further confirms the psychometric properties found in the factor analysis studies, and then examines the criterion-related validity of the CIS by empirically examining the role collective identity plays in the occupational stress model. Collectively, then, this dissertation intends to not only introduce a new measure of collective identity to the field, but also demonstrates its sound psychometric properties and predictability of important organizational phenomena.

CHAPTER 2 - LITERATURE REVIEW

“Who am I?” is a question that individuals have long asked themselves (e.g., James, 1890; Mead, 1934). The self is a multifaceted and complex phenomenon (Coppersmith, 1967). One way to conceptualize oneself is in relation to society or social groups; known as social identity. Social identity can be conceptualized as an “individual’s knowledge that he belongs to certain a group together with some emotional and value significance to him of this group” (Tajfel, 1972, p. 292). According to Tajfel (1972, p. 293), a system of social categorizations helps create and define “an individual’s own place in society” (Hogg & Terry, 2001, p. 3).

This literature review will be organized as follows. First, the origins of social identity will be delineated, followed by a review of why individuals choose to join social groups and which identity is most salient is given. Next, collective identity is defined with particular emphasis placed on the seven dimensions outlined by Ashmore et al. (2004). Also in this section, the three dimensions of the identification process and multiple identities are discussed. Following, the current use of identity in the organizational sciences is reviewed highlighting the limitations of current research. Concluding this literature review, the purpose of this dissertation is outlined, as well as the results from a pilot study.

Tajfel (1982) was one of the first to introduce the concept of social identity. Social identity theory’s basic premise is that the social categories in which one falls, and to which one feels attached, provide “a definition of who one is in terms of defining characteristics of the category – a self-definition that is part of the self-concept” (Hogg & Terry, 2001, p. 3).

Tajfel’s (1982) work was followed by the work of Turner and others (e.g., Turner, 1985; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987) who developed the self-categorization theory, which illustrates how the social identity phenomenon occurs. Basically, after individuals realize that they are members of a social group, they will identify a hypothetically perfect group member, known as the prototypical member (Turner, 1985). After individuals envision a prototypical member, depersonalization occurs, which is the process by which individuals transfer the self to the prototypical member (i.e., individuals attempt to match themselves to the prototypes they envision for the group; Tuner, 1985). This “provides normative behaviors, stereotyping, ethnocentrism, positive ingroup attitudes and cohesion, cooperation and altruism, emotional contagion and empathy, collective behavior, shared norms, and mutual influence” (Hogg & Terry, 2001, p. 5).

Turner and others (e.g., Turner, 1985; Turner et al., 1987) noted that self-categorization theory leads to the social identity phenomena, which involves two cognitive processes. First, the cognitive process of categorization is facilitated by self-categorization (Hogg, 2001). That is, classifying oneself into a social group gives meaning to context and reduces uncertainty about the self, others, and behaviors (Hogg, 2000; Hogg & Mullin, 1999). Second, the cognitive process of self-enhancement occurs. That is, after individuals have placed themselves into a social group, and depersonalized, they will view ingroup norms and stereotypes as positive (and subsequently, therefore, their actions will be viewed positively). Generally, when activated, social identity leads to ingroup stereotyping, norms that predict self-perceptions and conduct, and outgroup stereotyping (Hogg & Terry, 2001).

Why Join a Group?

There are two hypotheses that attempt to illustrate why individuals join a group. First, there is the self-esteem hypothesis (e.g., Abrams & Hogg, 1988). This hypothesis asserts, “social identity and intergroup behavior is guided by the pursuit of evaluatively positive social identity through positive self-esteem” (Hogg & Terry, 2001, p. 6). Second, there is the uncertainty reduction hypothesis (e.g., Hogg, 2000; Hogg & Mullin, 1999). This hypothesis asserts that prototypes of typical members reduce ambiguity and enhance understanding of new situations by providing clear ideals for classifying information. As such, individuals will “reduce subjective uncertainty about one’s perceptions, attitudes, feelings, and behaviors, and ultimately one’s self concept” and place within the social world (Hogg & Terry, 2001, p. 6).

Which Social Identity is Salient?

Which identity emerges and thus guides behavior is generally based on two elements. First, individuals have a tendency to cognitively match aspects (i.e., characteristics) of social groups to the situational context (e.g., Oakes & Turner, 1990; Oakes, Haslam, & Turner, 1994). For instance, McCall and Simmons (1978) noted that one hierarchy that individuals cognitively hold is the situational self - that which ranks identities in terms of the likelihood that adopting such an identity will result in positive outcomes given the social situation.

However, McCall and Simmons (1978) also refer to a prominence hierarchy, which is based on individuals’ commitment and investment to the identity as well as “...the intrinsic and extrinsic gratification associated with the identity” (Stryker & Serpe, 1994, p. 17). McCall and Simmons’s (1978) prominence hierarchy is similar to the concept of social identity hierarchy

(e.g., Stryker, 1980), which arranges identities in terms of salience or the likelihood they will be invoked across situations (e.g., Stryker & Serpe, 1994). That is, the second element of identity salience realizes that individuals have an internal preference for one identity over others. An identity that is salient predicts behavior across a variety of situations. For instance, Stryker and Serpe (1994) provided the example of a professor whose salient social identity is teaching will illustrate this salient identity by lecturing his or her children.

Empirical research, although not without methodological challenges, has shown favorable results for a cognitive salient identity leading to behaviors (Stryker & Burke, 2000). Stryker and Serpe (1982) showed that time spent in religious activities could be predicted by the salience of a religious identity. Furthermore, frequency of blood donations could be predicted by a salient donor identity (Callero, 1985). Finally, Stryker and Burke (2000) reported the findings of Nuttbrock and Freudiger (1991) who found sacrifices for children were more likely by women whose salient identity was motherhood.

Collective Identity

Identity has been studied from a variety of disciplinary perspectives including psychology, sociology, and social psychology (Gleason, 1983). Despite the abundance of theories that exist on identity, such as social identity theory (e.g., Tajfel, 1972, 1978, 1982), identity theory (e.g., Stryker, 1980), and self-categorization theory (e.g., Turner et al., 1987), there is considerable overlap and divergence among them. That is, although all of these theories deal with individuals' self-concept in relation to a larger group, there are subtle differences in meaning dependent on discipline (Brubaker & Copper, 2000).

For example, in a study that examines the overlapping role between salience and centrality, Stryker and Serpe (1994) spent considerable effort to illustrate the conceptual overlap between their term "identity salience" and other terms such as McCall and Simmons's (1978) "salience" and Rosenberg's (1979) "psychological centrality." In an attempt to provide a more parsimonious, inclusive understanding of what truly makes up individuals' identity, some researchers (e.g., Ashmore et al., 2004) have used a more universal term known as collective identity.

Dimensions of Collective Identity – Ashmore, Deaux, and McLaughlin-Volpe

Collective identity is similar to social identity in that collective identity concerns categorical membership based on some commonalities (Ashmore et al., 2004). Furthermore, as

Deaux (1996) noted, collective identity refers to “...a subjective claim or acceptance by the person whose identity is at stake...” (Ashmore et al., 2004, p. 81). Researchers such as Brewer and Gardner (1996) and Simon and Klandermans (2001) have suggested that the term collective identity be used more readily than social identity, as the former seems to encompass various aspects of the latter (Ashmore et al., 2004) without traditional connotations. Ashmore et al. (2004) summarized the governing factors that compose individuals’ collective identity. These researchers elucidate seven elements that dictate collective identity: self-categorization, evaluation, importance, attachment, social embeddedness, behavioral involvement, and context and meaning. Each element is briefly defined below.

Self-categorization. Ashmore et al. (2004) described self-categorization as the most basic element of collective identity. Essentially, self-categorization refers to simply placing oneself into a specific social group (Deaux, 1996). Phinney (1995) noted that self-categorization is the necessary first step in collective identity because individuals must first see themselves as a part of a group before they can internalize aspects of the group.

Self-categorization is comprised of three aspects (Ashmore et al., 2004). First, there is placing the self into the social category. Following, the second aspect refers to the goodness of fit. This sub-dimension pertains to individuals’ subjective evaluation of the degree to which they perceive themselves to be similar to a prototypical member. Finally, there is an aspect of perceived certainty of the self-identification. This aspect has to do with how certain an individual is that they actually belong to the social group.

Evaluation. The second element of collective identity presented by Ashmore et al. (2004) is evaluation. Evaluation refers to “...the positive or negative attitude that a person has toward the social category in question” (Ashmore et al., 2004, p. 86). Evaluation is further delineated into two aspects, a private regard and a public regard. The private regard refers to the favorability of one’s own identity, whereas the public regard refers to the favorability that one perceives others having of the social group. Cooley (1902) asserted that the public and private regard should be the same in his classic notion of the “looking glass-self.” This view proposed that individuals internalize and reflect their view of themselves based on their perceptions of others’ feelings of their social groups. However, more recent research (e.g. Ashmore et al., 2004) has proposed that the public and private regard can be divergent, such that one may belong

to a group that is not viewed positively by society (e.g., a stigmatized group), yet may be viewed by the individuals as positive.

Importance. Importance refers to the degree to which a specific group membership has significance to individuals' overall sense of self (Ashmore et al., 2004). Ashmore and his colleagues distinguish between two types of importance, explicit and implicit. Explicit importance refers to "...the subjective appraisal of the degree to which a collective identity is important to her or his overall sense of self..." (p. 87). Conversely, implicit importance refers to "...the placement, from low to high, of a particular group membership in the person's hierarchically organized self-system..." (p.87). The important distinction between explicit and implicit is that the former is cognitive whereas the latter may be done subconsciously. However, both interact to determine which identities are valued more than others.

Importance is very similar to Fiske and Taylor's (1991) notion of chronic accessibility, Stryker and Serpe's (1994) concept of salience, which is "a readiness to act out an identity as a consequence of the identity's properties as a cognitive structure or schema" (p. 17), and McCall and Simmon's (1978) term 'prominence.' That is, identities that are more important to individuals provide a script, which will dictate attitudes and actions. The more central an identity is to the self-concept, the more importance an identity is and, subsequently, the more likely individuals will rely on that identity to determine which behaviors and feelings are appropriate across a variety of situations (conceptually, this is similar to depersonalization noted by self-categorization theory).

Attachment/sense of interdependence. Ashmore et al. (2004) described attachment as "...the degree to which the fate of the group is perceived as overlapping with one's personal fate" (p. 90). This element stems from Baumeister and Leary's (1995) notion of a need to belong, which asserts that all human beings long for positive, lasting, and stable relationships. Ashmore et al. (2004) noted that several researchers (e.g., Aron & McLaughlin-Volpe, 2001; Tropp & Wright, 2001) have suggested that identifying with an important referent group is synonymous with constituting close relationships with the group (which in turn leads to including the group as a part of the self).

There are three aspects of attachment: 1) interdependence and mutual fate, 2) attachment and affective commitment, and 3) interconnection of self and others (Ashmore et al., 2004). Interdependence refers to the realization of a mutual fate, which pertains to being consciously

aware that being recognized as a group member entails similar outcomes. Attachment and affective commitment refer to emotional involvement with the group. Lastly, the interconnection of self and others refers to self-group merging or interjection, which is, according to Rosenberg (1979), an internalization of the group such that events that occur to the group personally affect the individual.

Social embeddedness. Ashmore et al. (2004) defined social embeddedness as “...the degree to which a particular collective identity is implicated in the person’s everyday ongoing social relationships” (p. 92). Social embeddedness refers to individuals’ social network and interpersonal relationships. It can range from high to low, depending on the content and context of the majority of individuals’ interactions.

Social embeddedness is more objective and external than affective commitment (Ashmore et al., 2004). That is, it involves an interaction between the person and the social environment (Ashmore et al., 2004). Ashmore et al.’s (2004) dimension of social embeddedness is derived from Stryker and Serpe (1994)’s notion of social networks. In their definition and that of Stryker (1980), there is an understood cost of breaking away from such social roles.

Behavioral involvement. Ashmore et al. (2004) defined behavioral involvement as the degree to which individuals partake in action based on their collective identity. That is, to what degree does the individual’s behavior represent the group to which the individual is a member? Ashmore et al. (2004) describe behavioral involvement as “a clear expression of the identity itself” (p. 17).

Context and meaning. Ashmore et al. (2004) noted that there are three aspects of context and meaning that affect individuals’ collective identity. First, self-attributed characteristics concern the amount individuals internalize attributes of the group as attributes of themselves. Secondly, ideology refers to “...beliefs about experience and history of the group over time” (p. 94), and often involves perceptions of a group’s position in society. Lastly, narrative is a reflection by an individual about a group. Narrative can take two forms: 1) collective identity story and 2) group story. A collective identity story is basically a story of an individual as a group member where a group story is an individual’s perception of a group’s history.

Dimensions of Identification Process

Brewer (1988) and Fiske and Neuberg (1990) noted that the identification process consisted of cognitive, affective, and behavioral aspects. The identification process is controlled and automatic, in that individuals make snap judgments about others and groups as well as cognitively meddle over the complexity of their situations (Brickson, 2000). Further, the identification process occurs in a step-like procedure. Individuals first cognitively place themselves in a group, develop affective evaluations about the group, which result in behavioral consequences.

Brickson (2000) noted how the identification process influences the collective identity of minority members in an organization. She noted that minority members of an organization could view themselves as peripheral members (i.e., unlike the typical member) during the cognitive process, which leads to increases in negative affective feelings toward themselves and the organization (e.g., lower self-esteem and low organizational commitment), resulting in counterproductive behavioral responses (e.g., higher turnover intentions). Lastly, Lembke and Wilson (1998) noted that team identity is really a cognitive, emotional and behavioral alignment among team members.

Multiple Collective Identities

Although not the purpose of their research, Ashmore et al. (2004) noted that it is likely that individuals hold several collective identities at one time. This notion is not novel, as many have suggested an identity hierarchy (e.g., Stryker, 1980; Rosenberg, 1979; McCall & Simmons, 1978; Burke, 1991; Callero, 1985). That is, the various identities individuals' possess are cognitively arranged from most significant to least significant (Stryker, 1980; Stryker & Serpe, 1994). Foddy and Kashima (2002) distinguished between central and peripheral identities, in that the former are higher in one's identity hierarchy and the latter are lower in one's identity hierarchy. However, to date, research has not empirically investigated why some identities are more central whereas other identities are more peripheral. One of the contributions of the current dissertation is that proposing that the elements of collective identity could be examined as to their differential impact on central versus peripheral collective identities.

Limits in Applying Social Identity to Organizations

As earlier noted, the application of social identity theory and identity theory has been incomplete in the organizational sciences. Specifically, work has been relatively limited to

considering only identities that are based on the workplace. That is, organizational scientists have examined the implications of individuals with high or low organizational identity but have not examined how identities that are based outside of the organization will affect behaviors in a workplace context.

Since the late 1960s (e.g., Brown, 1969; Hall, Schneider, & Nygren, 1970; Lee, 1971; O'Reilly & Chatman, 1986; Patchen, 1970; Rotondi, 1975), organizational identification has been studied as an antecedent to job satisfaction and organizational effectiveness (Ashforth & Mael, 1989). Organizational identification can be defined as “the process by which the goals of the organization and those of the individual become increasingly integrated and congruent” (Hall et al., 1970, pp. 176-177). Likewise, Patchen (1970) defined organizational commitment as “shared characteristics, loyalty, and solidarity” (Ashforth & Mael, 1989, p. 23).

However, as noted in Ashforth and Mael's (1989) seminal work on organizational identification, past research is flawed in that it does not have a theoretical base, leading to confusion between organizational identification and organizational commitment, internalization, affect, and behaviors. Thus, these researchers (i.e., Ashforth & Mael, 1989) were the first to apply the principles of social identity theory to an organizational context. In their work, Ashforth and Mael (1989) employ social identity theory (Tajfel, 1978, 1981; Tajfel & Turner, 1985; Turner, 1975, 1982, 1984, 1985) to illustrate three antecedents to organization identification: distinctiveness, prestige, and salience of out-groups.

Distinctiveness refers to “the group's values and practices in relation to those of comparable groups (Oakes & Turner, 1986; Talman, 1943)” (Ashforth & Mael, 1989, p. 24). Prestige is the second antecedent to organizational identification, implying that the greater the prestige of the organization, the greater the likelihood for identification due to a need to enhance self-esteem (Ashforth & Mael, 1989). The third antecedent Ashforth and Mael (1989) proposed is the salience of out-groups (Allen, Wilder, Atinson, 1983; Turner, 1981). Specifically, when out-groups are more evident, individuals are more likely to develop a social identity that is based on the organization.

Furthermore, Ashforth and Mael (1989) posited there are several consequences of organizational identification that are supported by social identity theory. First, they proposed that organizational identification will enhance support for and commitment to the organization. Second, based on group formation literature (Turner, 1982, 1984), which notes that group

formation will be associated with intragroup cohesion, cooperation, altruism, and positive in-group evaluations, Ashforth and Mael (1989) proposed that organizational identification will be associated with loyalty and pride for the organization. Ashforth and Mael (1989) also asserted that organizational identification will lead to internalization of group values and norms, as well as, a general homogeneity of attitudes and behaviors. Finally, organizational identification is proposed to reinforce the antecedents of organizational identification (Ashforth & Mael, 1989).

Dutton, Dukerich, and Harquail (1994) developed a model that explained how an organization's image determines the strength of identification with the organization. These researchers defined organization identification as a "cognitive connection" that is "degree to which a member defines him- or herself by the same attributes that he or she believes define the organization" (Dutton et al., 1994, p. 239). Their research noted what factors will lead to a strong organizational identity in relation to other possible identity groups (i.e., social groups).

Specifically, Dutton et al. (1994) proposed that individuals will have stronger organizational identity when there is greater 1) attractiveness to the perceived organizational identity, 2) consistency between member self-defining attributes and the attributes of the organization image, and 3) distinctiveness between the organization's image and the image of other organizations. Furthermore, these researchers proposed that the more the organization's image enhances a member's self-esteem, the stronger the individual's organizational identification (Dutton et al., 1994). Likewise, the more contact individuals have with the organization, the more likely they will be attracted to the organization; thus, the stronger the organizational identification (Dutton et al., 1994). Dutton et al. (1994) also hypothesized that the greater the visibility of the member's affiliation with the organization, the stronger the relationship will be between the perceived organizational identity and the individual's organizational identity.

Dutton and her colleagues (1994) also proposed several consequences of organizational identification. Specifically, their model illustrated a feedback loop which links organizational identification with its antecedents. That is, there is a reciprocal relationship in which the higher the organizational identity, the more the antecedents will be reinforced. Dutton et al. (1994) explained that the greater the organizational identification, the more attractive the members will be to the organization and the more attractive the members will perceive others' perception of the organization. Furthermore, the stronger the individual's organizational identification,

individuals will 1) seek more contact with the organization, 2) have greater cooperation with other organization members, 3) show more competitive behaviors toward outgroup members, and 4) more organizational citizenship behaviors will be performed (Dutton et al., 1994).

Empirical research has shown that employees with high organizational identity purchase more company stock than individuals with low organizational identity (Washington, 2000). In the same study, however, job identity was shown to be negatively associated with stock purchase. This relationship held only for initial public offering (IPO), but not at a purchase offering five months after the IPO (Washington, 2000). Lastly, Washington (2000) found that career identity, but not organizational identity, was positively related to likelihood of completing a skill-based pay training program. Thus, it is evident that individuals hold a number of identities at once, some of which are based on their employing organization (e.g., organizational identity, job identity, career identity, Washington, 2000) whereas other identities may be derived from groups that are not organizationally based (Dutton et al., 1994).

Dutton et al. (1994) furthered Ashforth and Mael's (1989) ideas of social identity theory in organizations by examining the factors that drive organizational identity versus outside identities. However, again, their work is limited in that they do not consider how individuals with 'salient' identities that are not work-based may affect behavior in the workplace.

In the most recent works on organizational identification, researchers (e.g., Kreiner & Ashforth, 2004) have attempted to further our conceptualization of identity in the workplace by more thoroughly examining the ways in which individuals could derive their identity from an organization. Kreiner and Ashforth (2004) empirically examined four distinct types of organization identification: 1) identification, 2) disidentification, 3) ambivalent identification, and 4) neutral identification. Specifically, given that "organization is merely *one* way that an individual might derive a sense of self vis-a-vis the organization" (Kreiner & Ashforth, 2004, p. 2).

Disidentification pertains to a situation in which individuals' defining characteristics run counter to the defining characteristics of an organization (Elsbach & Bhattacharya, 2001). Ambivalent identification refers to a situation in which individuals can relate to some of the defining characteristics of an organization, but disagree with some other aspects of the organization's identity (Dukerich, Kramer, & McLean Parks, 1998; Elsbach, 1999, 2001; Pratt & Doucet, 2000; Ashforth, 2001). Finally, neutral identification occurs in situations in which

individuals have “neither identity overlap with nor identity separation from [their] employer” (Kreiner & Ashforth, 2004, p. 4). Although these four types of organizational identity extend our understanding of how individuals identify with their organization, again, this line of research still needs to be extended to include non-work based identities that are salient while at work.

Research applying social identity theory to applicants’ reactions has theoretically implied that individuals hold identities before they enter a new organization (i.e., during the selection process). Specifically, Herriot (2004) posited that during the selection process applicants will base their self-selection assessment on the congruence between their salient identity and their perceptions of the organization’s identity. Individuals who hold identities that may run counter to their perceptions of the organization during the selection process will self-select themselves out of the applicant pool (Herriot, 2004).

Although their research is theoretically driven and logical, Ashforth and Mael’s (1989) and other’s (e.g., Dutton et al., 1994; Kreiner & Ashforth, 2004) research is limited in one critical way. They spend considerable time illustrating how identities within the organization (e.g., work group identity versus organizational identity) may conflict with each other, and which prevails as the driving force behind behaviors and attitudes. Research has continued in this realm, for instance, distinguishing between career identity, entrepreneurial identity, job identity, organization identity, and team identity (Washington, 2000). However, these researchers fail to extend their research to consideration identities that reside outside of the organization, and, that may conflict with organization and work group identity.

Organizational scientists have begun to examine a select few identities that reside outside of the organization. Specifically, research examining diversity in the workplace has noted that a ‘diversity identity’ has organizational implications. For instance, Mehra, Kilduff, and Brass (1998, p. 441) noted that “the extent to which women are a token presence in a work setting rather than a substantial proportion of the workforce tends to influence informal interaction patterns (Kanter, 1977).” Following Kanter’s (1977) assertion, Mehra et al. (1998) found that a social category will be more likely to be the basis for social identification the greater the disparity between that social group and the majority.

Dissertation Purpose

Measuring Collective Identity

To extend social identity research into the organizational sciences, it is necessary to develop a measure that accurately captures the most recent conceptualization of identity. This measure would be of most use if it 1) is a self-report measure on a Likert-type scale enabling the ease of information collection and statistical analysis, and 2) is capable of measuring multiple identities. The purpose of this dissertation is to develop a measure that taps all the elements of collective identity, and that is amenable to measure multiple identities. By doing so, the field of organizational behavior will benefit by allowing multiple identities to be compared and contrasted. This is based on previous work that there are distinct dimensions that represent collective identity; specifically, self-categorization, evaluation, attachment, importance, social embeddedness, behavioral involvement, content and meaning (Ashmore et al., 2004).

Pilot Hypothesis 1: There are distinct dimensions of collective identity that represent self-categorization, evaluation, attachment, importance, social embeddedness, behavioral involvement, content and meaning.

Scale Validity

Research on scale development (e.g., Hinkin, 1995; Schwab, 1980; Nunlley, 1978) has established that a scale must demonstrate the basic and essential psychometric properties of reliability and validity. In relation to the former, reliability refers to consistency in measurement, and there are several types of reliability coefficients that can be computed to demonstrate this consistency in measurement. Perhaps the most frequently reported type of reliability is internal consistency, and it is typically computed as coefficient alpha (Cronbach, 1951). Furthermore, it is desirable that the scale be generalizable (i.e., reliable among a variety of sample populations). One way to ensure generalizability is to conduct several studies involving different sample populations.

Pilot Scale Development

The first step in developing a scale to measure the dimensions of collective identity is to generate scale items. To do so, each dimension was identified by a concise definition as defined by Ashmore et al. (2004). Five to seven items were generated to represent each dimension. However, in order to ensure that the items were amenable to a wide variety of social groups, items were generated such that the specific social categories were absent but could be inserted as

needed. Second, the items developed were examined by two experts (i.e., M.T. Royle & N. P. Harvey), who identified two or three items that they felt best represented the definitions of each dimension. In final, a pilot scale of 47 items remained. This was the scale that was used for factor analyses, and convergent and discriminant validity in phase one of the scale development.

Method

Sample and procedures. Surveys were distributed to students in my undergraduate class. They were asked to have three students plus themselves complete a survey that asked information about collective identity and other constructs of interest. A total of 150 surveys were fully completed. The average age for the students was about 21 years of age ($\mu=20.9$, $n=151$). About half the sample was male ($\mu=.47$, $n=152$). On average, the students were juniors ($\mu=3.3$, $n=152$) and had attended the university for 3 years ($\mu=2.7$, $n=153$).

Measures

Collective identity. Measure contained 47 items, which represented the seven dimensions that compose collective identity (See Appendix A).

Pilot Results

Item analyses. A major purpose of this dissertation is scale development, with specific reference to a new measure of collective identity. Therefore, item generation and analyses was an initial step in scale creation. In order to maximize content and construct validity, items were only retained if they provided an adequate representation of the parsimonious dimensions of collective identity. Therefore, several phases of scale development were conducted. First, as suggested by Nunnally (1978), items that displayed an item-to-total correlation that were equal to or greater than .40 were retained; resulting in the elimination of 12 items (CI10, CI11, CI14, CI17, CI19, CI26, CI27, CI29, CI36, CI43, CI46, & CI47).

Second, to clarify factor interpretation, items with problematic high cross loadings were examined. This procedure was conducted using SPSS 11.5, with a preliminary principal component analysis with oblique rotation. During this stage of scale development principal component analysis is for item reduction. The pattern matrix showed that 3 items either loaded on two or more factors greater than .35, with the highest loading not being on the intended factor; or did not load on any factor with a loading of at least .35 (i.e., CI13, CI32, & CI47). Thus, these items were eliminated. A preliminary principal component analysis with oblique rotation was then repeated 3 more times, each time eliminating items that did not adequately load

on one factor. As a result, 4 additional items were eliminated (i.e., CI23, CI28, CI40, & CI42). Therefore, a set of 29 items was retained because they met the criteria in assessing the factor structure. The item-to-total correlation for the 29 items ranged from .41 to .77. The internal consistency reliability was conducted using Cronbach's alpha (1951) which was .91.

Dimensionality of collective identity. To examine the factor structure of the collective identity scale, after conducting the item-reduction procedure described above, a principal axis factor analysis with oblique, direct oblimin factor rotation was performed. Oblique factor rotation was used because it has been noted that this rotation method imposes fewer constraints, which is desirable in early stages of scale development (Ferris, Treadway, Kolodinsky, Hochwarter, Kacmar, Douglas, & Frink, 2005; Hair, Anderson, & Tatham, 1987). Also, this rotation method allows the factors to correlate, as the theory implies they would, and does not impose orthogonality on factors that might be related. Using the Kaiser-Guttman criterion of only retaining factors with eigenvalues exceeding 1.0, 7 factors emerged. However, one item (i.e., CI24) did not adequately load on any one factor. Thus, this item was eliminated and the principal axis factor analysis with oblique, direct oblimin factor rotation was conducted. Again, one item (i.e., CI25) did not adequately load on anyone factor, was subsequently eliminated and the factor analysis was repeated. This analysis then resulted in the emergence of 7 factors, as reported in Table 1.

Next, each factor was named by examining the items. The seven factors were named: 1) self-categorization: goodness-of-fit (i.e., CI7, CI5, CI4, & CI6), 2) self categorization: placing/certainty (i.e., CI3, CI1, CI8, CI2, CI9, & CI12), 3) evaluation (i.e., CI16 & CI15), 4) importance (i.e., CI22, CI20, CI21, & CI31), 5) content and meaning: ideology (i.e., CI44, CI45, CI30, & CI18), 6) social embeddedness (i.e., CI35, CI33, CI37, & CI34), & 7) behavioral involvement (i.e., CI38, CI39, & CI41). However, several of the items were not theoretically justifiable (i.e., they did not load on the a priori factor). Thus, item 12 was eliminated from factor 2, item 31 was eliminated from factor 4, items 30 and 18 were eliminated from factor 5, and item 37 was eliminated from factor 6.

Principal axis factor analysis with oblique, oblimin rotation was again conducted, with 7 factors emerging as the final solution (See Table 2). Eigenvalues ranged from 1.00 to 7.41, with 72.92% of the total variance explained. Factor one, self-categorization: placing/certainty (i.e., CI3, CI1, CI8, CI2, & CI9), explained 33.66% of the variance. Factor two, behavioral

involvement (i.e., CI38, CI39, & CI41), explained 10.21% of the variance. Evaluation, factor three (i.e., CI16 & CI15), explained 7.77% of the variance. Factor four, importance (i.e., CI22, CI20, & CI21), explained 6.43% of the variance. Self categorization: goodness of fit, factor five (i.e., CI7, CI5, CI4, & CI6), explained 5.44% of the variance. Social embeddedness, factor six (i.e., CI35, CI33, & CI34), explained 4.86% of the variance. Finally, factor seven, content and meaning: ideology (i.e., CI44 & CI45), explained 4.55% of the variance.

Reliability and factor correlations. As noted in Table 2, internal consistency measures of reliability ranged from .67 to .89. Although two (i.e., factor 4 & factor 7) of the factor's internal consistency reliability estimates fell below the recommended .70 level (Nunnally, 1978), the remaining factors displayed adequate reliability indices. Furthermore, as reported in Table 3, correlations between the collective identity dimensions ranged from .09 to .57. These correlations are modest in magnitude.

Discussion of Results from Pilot Study

The purpose of this dissertation is to develop a scale of collective identity that is self-report and representative each of the seven dimensions illustrated by Ashmore et al. (2004). A hypothesis is offered about the factor structure of the scale. Results from a student sample pilot study revealed partial support for the hypothesis tested.

Summary of pilot results. Specifically, pilot hypothesis 1 received partial support, in that a factor structure did emerge. However, it was hypothesized that seven dimensions (i.e., self-categorization, evaluation, attachment, importance, social embeddedness, behavioral involvement, and content and meaning) would be represented by seven distinct factors. Results from several phases of construct development such as item-to-total correlation, principal component factor analysis and principle axis factor analysis, and internal consistency were undertaken. In the final factor structure, seven factors emerged, representing the collective identity dimensions of self-categorization: placing/certainty (F1) and goodness-of-fit (F5), evaluation (F3), importance (F4), social embeddedness (F6), behavioral involvement (F2), and content and meaning: ideology (F7). Although seven factors did emerge, pilot hypothesis 1 received only partial support for several reasons.

First, not all of the theoretical dimensions, as described by Ashmore et al. (2004) emerged. Notably, the dimension of attachment failed to emerge as an independent factor. Furthermore, two factors (i.e., evaluation and content and meaning: ideology) contained only two

items in the final factor structure. Lastly, two of the factors (i.e., importance and content and meaning: ideology) failed to meet the minimum alpha level that is generally accepted (i.e., .70; Cronbach, 1951).

Implications. Results from the pilot study illustrate that a factor structure does exist that underlies the dimensions of collective identity. Although the dimension of attachment dropped out, the sub-dimensions of self-categorization: placing/certainty and self-categorization: goodness-of-fit emerged as unique factors as theory suggested. First, it would not be hard to imagine the dimension of attachment to drop out for a sample of students. They may feel some sense of categorization with the university, but be particularly attached to their school.

Furthermore, the sub-dimensions of self-categorization: placing/certainty and self-categorization: goodness-of-fit emerged as distinct factors. That is, the scale actually represents not only the dimensions of collective identity, but also important sub-dimensions. It may be important to investigate the difference between feelings of having to be with a social group (i.e., self-categorization: placing/certainty) and feelings of belonging there (i.e., self-categorization: goodness-of-fit). Examining these sub-dimensions may be useful in empirical examination of the socialization process, for example, in which new members belong to an organization but still have to decided if they fit with the their new employer.

Future research agenda. This is the conclusion of the pilot study. Although a factor structure did emerge, it was not completely theoretically consistent. However, the empirical investigation of the pilot study does provide support for a multi-dimensional scale of collective identity. Thus, the dissertation research study proceeds in several phases. First, empirical efforts continue with scale development, starting with generating additional items for dimensions.

After examining the relationships in pilot study, the pilot hypothesis is amended. That is, given the conceptual similarity between several of the dimensions, the pilot hypothesis is refined. Specifically, as described below, it is hypothesized that the collective identity scale will capture three under lying dimensions, as referenced by research on the identification process. Furthermore, hypotheses designed to illustrate convergent and discriminant validity are developed such that they are theoretically justifiable.

Additionally, the dissertation research studies conduct exploratory and confirmatory factor analysis use working individuals as respondents. It could be that several of the below acceptable reliabilities in the pilot study were due to the changes in meaning when adapting the

scales to the student sample, thus a working population may yield more statistically useful data. In dissertation research studies, students are asked to distribute and collect surveys to three different individuals who have each been working full time for at least 5 years. The three surveys are different in that, in each, the collective identity scale are adapted to represent either 1) work-based collective identity, 2) family-based collective identity, and 3) social group collective identity.

CHAPTER 3 - DISSERTATION RESEARCH STUDIES: EXPLORATORY AND CONFIRMATORY ANALYSIS

Given the conceptual overlap between several of the dimensions, the seven dimensions described by Ashmore et al. (2004) have been cross referenced with other relevant research. As such, I propose that three factors actually represent the main dimensions of identity. Specifically, based on research pertaining to the identification process, the goal of the CIS is to capture the cognitive, affective, and behavioral dimensions of collective identity. In the following paragraphs, justification for combining Ashmore et al.'s (2004) dimensions of collective identity is provided. Subsequently, theoretical justification is provided for the three dimensions that are now anticipated to emerge from the CIS scale.

Factor Structure

Combining Ashmore et al.'s (2004) Dimensions

One possible reason that several of the identity dimensions did not emerge during the pilot study was due to the inability of individuals to cognitively distinguish between some of the dimensions outlined by Ashmore et al. (2004). For instance, it is possible that attachment, evaluation, and importance are part of a higher-order dimension. Furthermore, it is possible that social embeddedness and behavioral involvement are part of a manifested latent variable.

Three Dimensions of Collective Identity

The seven dimensions outlined by Ashmore et al. (2004) do align with other multifactor conceptualizations of identity. For instance, research on the identification process suggests that identity has at least three elements: cognitive, affective, and behavioral (e.g., Lembke & Wilson, 1998; Brickson, 2000). The cognitive elements should reflect the self-categorization/placing dimension of Ashmore et al. (2004). Further, the affective element should reflect Ashmore et al.'s (2004) evaluation and importance. Finally, the behavioral element should reflect Ashmore et al.'s (2004) dimensions of social embeddedness, and behavioral involvement. Furthermore, it is hypothesized that the same dimensionality of the CIS will hold for a organization-based identity, a family-based identity, and a social-based identity. Therefore, the following hypothesis is tested:

Hypothesis 1: Based on the dimensions specified by Ashmore et al. (2004), the collective identity scale (CIS) will be a multi-dimensional scale with at least three distinct factors

representing cognitive, affective, and behavioral dimensions which will hold for organization-based identities, family-based identities, and social-based identities..

Convergent and Discriminant Properties

Convergent Validity

Three types of validity are necessary for scale development (Schwab, 1980). First, convergent validity must be shown, which is when the construct of interest is shown to be related to other constructs that are similar in nature. Conversely, discriminant validity is where the construct of interest is shown to be unrelated to constructs that are different. Finally, predictive, or criterion-related, validity refers to the extent to which a construct of interest can predict other variables in the nomological network.

Convergent validity is one step in illustrating the psychometric properties of a new measure. In establishing convergent validity, a new measure is shown to be significantly related to well-established measures in the field that, conceptually, are related to the construct of the new measure. In the following section, hypotheses are developed that establish how the collective identity scale relates to pertinent established concepts in the organizational sciences.

Emotional social support. As earlier stated, social support is described as friendly, respectful, and/or helpful people (Beehr, 1995), with whom one has positive interactions. Caplan, Cobb, French, Harrison, and Pinneau (1975) noted that there could be two distinct types of social support: 1) emotional support and 2) instrumental support. Emotional support refers to the therapeutic nature of talking with others. Emotional support could work in one of many ways including support from co-workers, family members, or supervisors (Beehr & Glazer, 2001).

Emotional support can put individuals in a positive mood by talking with others about positive things. For instance, in an organizational context, when bothered about a demanding supervisor, individuals might talk with co-workers about the positive things (e.g., rewards) about their job. Thus, individuals develop a general positive feeling about their job, consequently reducing strain. Second, emotional support can relieve strain by talking with others about the stressors at hand. In this way, talking with others acts as a cathartic process. Returning to the organizational example, complaining with co-workers about the demanding boss might allow emotional expression followed by a sense of serenity. Finally, emotional support can work by

talking with others about unrelated topics. For instance, one can talk with co-workers about home life, the weather, or sports to take their mind off their demanding boss.

Co-worker emotional support. It is hypothesized that there will be a relationship between collective identity and social support. Specifically, Mehra et al. (1998) noted:

“People are social beings who seek to establish ties of identity and friendship with others. In organizational settings, diverse groups of people use these ties for social support...” (p. 441). Implied in these statements is the notion that social identity acts as a means of social support. Thus, groups to which individuals belong (i.e., cognitive), and with which they have positive (i.e., affective) interactions (i.e., behavioral), will act as social support systems.

It is hypothesized that measures of organization identity will be correlated with measures of co-worker support. As individuals identify more with an organization, they become assured that they are similar to other members of said organization. Furthermore, as individuals identify more with an organization, they will experience increased attachment with the organization. Lastly, as individuals identify more with an organization, they will tend to interact more with members of that organization. Thus, it is logical that individuals who have a high organization identification will rely on their co-workers as a primary source of social support.

Hypothesis 2: Organization identity will be positively correlated with co-worker support.

Positive-discussion support. As individuals’ identification with an organization will influence the type of discussion that will take place among the co-workers. Specifically, as individuals increase their identification with an organization, they increase their “private regard” for the organization. That is, as individuals’ identification with an organization increases, they view the organization more positively than individuals with low organization identification. Thus, discussion among co-workers with high identification will pertain to the positive aspects of being a member of said organization. In other words, organization identity will be positively correlated with positive-discussion support.

Hypothesis 3: Organization identity will be positively correlated with positive-discussion support.

Empathetic-discussion support. Individuals with high organization identification will have support discussions that are empathetic in nature. Empathetic-discussion support is when co-workers listen to an individual in an understanding manner. It is hypothesized that there is a relationship between organization identity and empathic-discussion support. Members with high

organization identification feel as though they “fit” with other members of the organization. They feel as though other individuals with high organization identification have a similar thought process. Due to this feeling of understanding and comfort with other members, there will be correlation between organization identity and empathic-discussion support.

Hypothesis 4: Organization identity will be positively correlated with empathetic-discussion support.

Family emotional support. Individuals with a family-based collective identity will look for support outside of the organization. Social support can also reside outside of the organization that stems from members of one’s “family.” King, Mattimore, King, and Adams (1995) noted that family support consists of individuals who are willing to listen, and offer advice and words of encouragement. It is here posited that individuals who are high in family-based collective identity will have a corresponding support system.

Again, by examining each of the elements of collective identity, the link between family-identity and family support is drawn. First, in order for individuals to even direct their problem-oriented conversations toward family members, individuals must cognitively place themselves into the family, and they must hold some sort of affective feelings about the group. Finally, by the very nature of talking with family members, individuals are interacting with their family. Thus, the overall scale of family-based collective identity will be highly correlated with measures of family-based social support. Specifically, it is hypothesized that individuals with a high family-based collective identity will have high perceptions of emotional family support. The following hypothesis is offered:

Hypothesis 5: Family identity will be positively correlated with family support.

Outside-discussion emotional support. Social-based collective identity will also influence the type of support discussion. Specifically, organizational members who have a high social identification will most likely have support discussions with co-workers that do not pertain to the work place. Outside-discussion support refers to co-worker discussions about matters that are not related to the workplace. Outside-discussion support acts as a support system because it serves as a mental respite for workers. It is hypothesized that individuals high in a social-based collective identity will be likely to use outside-discussion emotional support in the workplace. That is, because these individuals define themselves by some social group that rests outside of the organization, while in the organization and attempting to relieve mental stress, the matching

hypothesis would contend that they would talk with co-workers about unrelated matters. The matching hypothesis contends that support will only mitigate felt strain if it appropriately relieves the stressor. Emotional social support in the workplace is an attempt by individuals to cope with their perceived workplace stressors. Because sense of self rests outside of an organization, it is likely that their discussions designed to put them in a good mood would stem from outside of the organization. Thus,

Hypothesis 6: Social identity will be positively correlated with outside-discussion support.

Instrumental support. Caplan et al. (1975) also described instrumental support. Instrumental support refers to tangible assistance in either financial form or physical resources (such as a place to stay). The instrumental support may not be related directly to the stressor, but is offered by a supporter with the resources necessary to help. Furthermore, for instrumental social support to relieve strain, it must be accepted by the supportee. As such, in order for supporters to know the needs of the supportee, they probably must have some close interactions. Again, belonging to a social group which both parties view positively likely will increase interaction time. Furthermore, Beehr (1995) noted that emotional support and instrumental support are likely to be strongly correlated. Thus, a hypothesis, similar to the ones above, is offered for the type of collective identity and instrumental support. Specifically; it is here posited that all identity types will be positively correlated with perceptions of resources.

Hypothesis 7: Organization identity will be positively correlated with instrumental support.

Hypothesis 8: Family identity will be positively correlated with instrumental support.

Hypothesis 9: Social identity will be positively correlated with instrumental support.

Perceptions of organizational politics. Perceptions of organizational politics (POPs) refers to how individuals perceive their work environment. Individuals who have high perceptions of organizational politics feel as though work-place decisions, such as resource allocation or promotions, are made via a “good ol’ boy” network rather than through stated organizational policies (Ferris, Russ, & Fandt, 1989). Perceptions of organizational politics pertains to individuals’ awareness of political actions taking place in their organization. It is hypothesized that organization-based identity will be negatively correlated with perceptions of organizational politics, in that individuals who highly identify with their organization will be less

attuned to organizational politics than individuals who do not identify with their employing organization.

Previous research on perceptions of organizational politics gives support for the hypothesized negative relationship between organization-based identity and POPs. Specifically, organization-based identity is synonymous with increased knowledge of the organization, as individuals with high organization-based identity are certain they fit with the organization, have a high degree of attachment to the organization, and have various behavioral ties with the organization. Several researchers have examined the correlation between POPs and various variables that represent familiarity with the organization.

For instance, Cropanzano, Howes, Grandey, and Toth (1997, studies 1 & 2) found a negative correlation between job involvement and POPs. Further, these researchers and Wilson (1995) found a negative correlation between commitment and POPs. Finally, tenure has been found to be negatively correlated with POPs (DuBrin, 1988; Ferris & Kacmar, 1992; Fedor Ferris, Harrell-Cook, & Russ, 1998). Similarly, it is hypothesized that POPs and organization-based identity will have a negative relationship in that as individuals become more familiar with the organization, they become less perceptive of organizational politics.

It should be noted that most commonly studied moderators of the POPs – outcome relationship are a) understanding, b) perceived control, and c) their interaction (Kacmar & Baron, 1999). Ferris et al. (1989) noted that perceptions of organizational politics would not have negative effects for individuals who 1) understand politics are occurring, and 2) perceive they have the capacity to influence the politics. That is, individuals who understand the “game” and feel as though they can control the situation will not be negatively affected by POPs.

However, organization-based identity will not necessarily lead to understanding or perceived control of POPs. In fact, organization-based identity will have the opposite effect, where as identity increases, individuals become less perceptive of the politics in their situation. This is because individuals with a high organization-based identity will feel as though the level of politics in their current organization is the appropriate norm.

Research on leader-member exchange (LMX) supports this notion. Specifically, when members are part of the LMX in-group, they generally feel that there is less political behavior than members who are part of the LMX out-group (Andrews & Kacmar, 2001; Witt, 1995) because “...in-group members perceive a higher level of fairness” (Andrews & Kacmar, 2001, p.

351). As such, a negative relationship will exist between organization-based identity and perceptions of organizational politics.

Hypothesis 10: Organization identity will be negatively correlated to perceptions of organizational politics.

Commitment. Allen and Meyer (1990; Meyer & Allen, 1991) described three types of commitment. For the present discussion, affective commitment is of interest. Meyer, Irving, and Allen (1998) defined affective commitment as a reflection of “employees emotional attachment to, identification with, and involvement in, the organization” (p. 32). As such, a relationship is expected between affective commitment and organization-based collective identity. Specifically, affective commitment will be positively related to organization identity.

It is hypothesized that organization-based identity will be positively related to organizational affective commitment. Past research on commitment and identity support this notion. Based on social exchange theory (Blau, 1964), Eisenberger, Huntington, Hutchinson, and Sowa (1986) noted “that when individuals perceive support from the organization, they feel obligated to repay the organization by becoming affectively committed” (Witt, Kacmar, & Andrews, 2001, p. 506). This is particularly pertinent with regard to identity, in as much as Stryker (1987) defined affective commitment as “affect attached to the potential loss of social relationships and activities associated with a given identity” (Serpe, 1987, p. 45). Although Serpe (1987, p. 51) noted that “identity theory has never denied the reciprocal impact of identity salience on commitment” he empirically found that affective commitment had “a strong effect on identity salience.” Because of the cognitive nature of the two constructs, a positive correlation will exist between organizational affective commitment and organization-based identity. That is, as individuals identify more with their organization, they develop more affective feelings of commitment with the organization. Thus, the following hypothesis is offered:

Hypothesis 11: Organization identity will be positively correlated with affective commitment.

Discriminant Validity

For discriminant validity, three constructs were examined. Specifically, elements of collective identity should differ from dispositional factors. Social desirability, negative affectivity, and positive affectivity are examined in relation to collective identity.

Social desirability. According to Arnold and Feldman (1981, p. 377) social desirability response bias refers to “a tendency for subjects to overestimate the importance...of socially desirable job and organization characteristics (e.g., challenge and responsibility) and to underestimate the importance of less socially desirable characteristics (e.g., pay)”. Marlow and Crowne (1964, 109) noted that social desirability is “a need for social approval and acceptance.” In organizational research, social desirability is often controlled in statistical analysis because it “can act as (a) an unmeasured variable that produces spurious correlations between study variables, (b) a suppressor variable that hides relationships, or (c) a moderator variable that conditions the relationship between two other variables” (Ganster, Hennessey, & Luthans, 1983: 321). Social desirability is controlled so that an individual’s general dispositional nature of “people pleasing” does not bias self-report measures. As such, it is necessary to show that the CIS does not correlate with social desirability so that respondents did not choose responses that are perceived to be positive to the public eye. As Arnold and Feldman (1981) noted; a measure that evokes a bias “threatens the validity of [that] measure” (Ganster et al., 1983, p. 323). Ganster et al. (1983) noted that when a measure correlates with social desirability, the measure may be contaminated with social desirability. Thus, to illustrate the sound psychometric properties of the CIS, it is necessary to illustrate discriminant validity with social desirability. That is, there should not be a significant correlation between the organization, family, or social identity CIS and social desirability.

Hypothesis 12: Organization identity will not be correlated with social desirability.

Hypothesis 13: Family identity will not be correlated with social desirability.

Hypothesis 14: Social identity will not be correlated with social desirability.

Affectivity. Watson and Clark (1984) described negative affect as a tendency for individuals to view themselves and their immediate environment in a negative light. As such, this is a dispositional variable, which taints individuals’ general perceptions. Conversely, Isen and Baron (1991) noted that individuals high in positive affect experience pleasant feelings in a variety of environmental conditions. That is, individuals high in positive affect have a general sense of well-being (Baron, 1996). Positive affect is a dispositional variable that places individuals in a general state of a good mood.

It is here hypothesized that affectivity (i.e., negative and positive affectivity) is a distinct construct from collective identity. That is, by showing there is not an empirical relationship

between collective identity and affect, it is illustrated that the scale of collective identity is not measuring a dispositional construct of general affect. Thus, it is hypothesized that none of the dimensions of collective identity will be related to negative or positive affect.

Hypothesis 15: Organization identity will not be correlated with negative affect.

Hypothesis 16: Family identity will not be correlated with negative affect.

Hypothesis 17: Social identity will not be correlated with negative affect.

Hypothesis 18: Organization identity will not be correlated with positive affect.

Hypothesis 19: Family identity will not be correlated with positive affect.

Hypothesis 20: Social identity will not be correlated with positive affect.

Dissertation Research Studies:

General Conceptual and Research Model for Predictive Validity

Predictive validity is important in scale development to illustrate how the measure of the construct could be causally related to variables in the nomological network. As stated earlier, little research has been conducted on the role of collective identity in the organizational sciences. For the purposes of this dissertation, only portions of a general conceptual model are tested. First, I present the general conceptual model along with testable propositions (Figure 1). The propositions are not empirically tested in this dissertation. Subsequently, I discuss my research model that includes hypotheses that illustrate predictive validity.

Theoretical Model

The following section proposes a conceptual model of the role of collective identity in the organizational stress process, and offers propositions that can be tested. Specifically, various dimensions of collective identity will be more influential in evaluation of stress and cognitive appraisal of coping than other dimensions. The following propositions further illustrate how collective identity plays an important role in the transactional stress process. Specifically, this dissertation proposes that the dimensions of collective identity defined by Ashmore et al. (2004) can be examined to determine three things. First, it is posited that the dimensions of collective identity differentiate between central and peripheral identities. Furthermore, it is proposed that the dimensions of collective identity will influence which stimuli individuals will perceive as stressors. Finally, propositions are offered about how the dimensions of collective identity are instrumental in the activation and use of social support. Although the model that follows is not

to be tested in full, several propositions are offered to explain how understanding the dimensions of collective identity affect the organizational stress process.

Identity theorists (e.g., McCall & Simmons, 1978; Stryker, 1980, etc.) have suggested individuals have a hierarchy of identities that they cognitively arrange in terms of preference. However, little research effort has been focused on why some identities emerge at the top of the identity hierarchy. This dissertation uses the language of Foddy and Kashima (2002), that is, central identities are identities that individuals prefer (i.e., identity that emerges at the top of the identity hierarchy) whereas peripheral identities are remaining identities an individual possesses. A central identity is the identity that emerges if no social cues are present, which would subsequently drive perceptions and behaviors. The model is laid out as follows: Propositions 1 through 3 use the dimensions of collective identity to explain how an identity is deemed central versus peripheral; and the remaining propositions apply the dimensions of collective identity to broaden our understanding of the transactional stress process.

Central versus peripheral identities. Rooted in the works of cognitive psychologists such as Markus (1977) identity theorists proposed that individuals cognitively arrange identities according to commitment (Stryker & Burke, 2000) based on the number of similar characteristics or potential positive outcomes associated with a certain identity (e.g., Burke, 1991; Callero, 1985; McCall & Simmons, 1978; Rosenberg, 1979; Stryker, 1980). The identity that emerges at the top of the hierarchy is here referred to as the central identity.

This is similar to Stryker and Serpe's (1982) term of 'salience'. Identities that are more salient are more likely to be evoked in a variety of situations and act as a lens through which individuals interpret situational information and by which they evaluate appropriate behaviors. Central identities are the identities that individuals prefer, feel most comfortable in, and are a true representation of them.

On the other hand, for the purposes of this dissertation, peripheral identities are the remaining identities that individuals possess. Peripheral identities are identities that individuals recognize and activate when deemed necessary. However, they do not necessarily prefer these identities and will try to remain in such roles for limited amounts of time. In order to differentiate the hypotheses that are tested empirically from the relationships in the conceptual model, the term "proposition" is used.

The first proposition (P1) of the proposed model (see Figure 1) concerns the first dimension of collective identity, self-categorization. In order for a social group to be considered as a central or peripheral collective identity individuals must first place themselves in the social group (i.e., self-categorization). Furthermore, in order for a social group to be considered a central or peripheral collective identity, individuals must also positively evaluate the social group. Thus, the first two dimensions of collective identity (Ashmore et al., 2004) are necessary elements for a social group to be considered a central or peripheral identity.

Proposition 1: In order for a social group to be considered a collective identity, individuals must self-categorize themselves into a social group and hold positive evaluation of the group.

In delineating central collective identities from peripheral collective identities, two additional dimensions of collective identity are examined: importance and attachment (Ashmore et al., 2004). A collective identity must be viewed as important to individuals so that they will internalize the identity as a central identity. That is, individuals must deem the identity as significant in their life. Likewise, the dimension attachment plays a role in differentiating between central and peripheral identities. Individuals who view a social group as central to their sense of self and view their fate as the same of the social group have a high degree of attachment to that social group (Ashmore et al., 2004). In order for a collective identity to be internalized as a central collective identity, individuals must have a high degree of attachment. That is, placing a higher degree of importance on a collective identity, and feeling a high sense of attachment to the social group to which the collective identity is based, will lead to individuals internalizing that identity as a central collective identity. Collective identities (and social groups upon which they are based) that have importance and attachment will be deemed central identities².

Proposition 2: Importance and attachment moderate the relationship between social groups and identity type (i.e., central versus peripheral) such that identities that are high in importance and high in attachment will be considered central identities and identities that are low in importance and low in attachment will be considered peripheral identities.

Finally, the last three elements discussed by Ashmore et al. (2004), social embeddedness, behavioral involvement, and content and meaning, are posited to differentiate between those numerous central identities discussed in P2, and the one central collective identity that

individuals prefer. Drawing from the assertion individuals hierarchically rank their identities (e.g., Burke, 1991; Callero, 1985; McCall & Simmons, 1978; Rosenberg, 1979; Stryker, 1980), it is proposed the degree of social embeddedness, behavioral involvement, and content and meaning of each identity will influence the placement of identities in the hierarchy of identities in their respected groups as proposed by P2. That is, one's central collective identity is the collective identity that qualified as a central collective identity following the assertions made in Propositions 1 and 2 and is high in social embeddedness, behavioral involvement, and content and meaning. Furthermore, the remaining central identities (as deemed by Propositions 1 and 2) will be hierarchically arranged according to the degree of social embeddedness, behavioral involvement, and content and meaning. These identities are now considered peripheral identities.

Proposition 3: Social embeddedness, behavioral involvement, and content and meaning will strengthen the relationship between collective identities and subsequently the collective identity hierarchy. That is, central identities and peripheral identities will be hierarchically arranged dependent upon the extent of social embeddedness, behavioral involvement, and content and meaning toward the group.

Identity and primary appraisal. Many theoretical models of stress exist (e.g., Lazarus, 1968; Karasek, 1979; Hobfoll, 1989; Hobfoll & Freedy, 1993; Hobfoll & Shirom, 1993, etc.), one that has been popular for organizational scientists is the transactional model of stress (e.g., Lazarus, 1968). Lazarus (1968, 1993) and his colleagues (e.g., Lazarus & Folkman, 1984, 1987) posited that individuals go through a multi-step cognitive process when they encounter potentially threatening stimuli. The transactional model of stress notes that at least two appraisals are involved (Perrewé & Zellars, 1999). The first appraisal, the 'primary appraisal,' is where individuals first evaluate the stimuli at hand. Here, research has proposed that one of three reactions results in the primary appraisal. Individuals may dismiss the stimuli as being irrelevant. If this is the case, individuals feel no strain because the potentially threatening stimuli are seen as unimportant. Individuals may deem the stimuli as benign or positive. That is, the stimuli are deemed important, but are seen as either not causing harm, or possibly, bringing about positive effects. If individuals determine the stimuli as benign or positive in nature, again, no strain is felt.

However, if individuals do perceive a threat as potentially bringing about negative consequences, they will determine the significance of the threat, harm, or challenge. That is, they will determine the degree of harm they will experience from the stressor. If this is high, the greater the amount of strain one is expected to experience.

Lewin (1936) noted that individuals react to situations based on their perceptions of reality more so than some objective measure of reality. Such thoughts have driven researchers (e.g., Ferris et al., 1989) to emphasize examining employees' perceptions of organizations. Along these lines, Lazarus (1993) stressed the importance of individuals' evaluation of stressful situations. Furthermore, it has been proposed (e.g., Herriot, 2004) that employees process organization situational cues in regard to their identities. Thus, it is likely that collective identities will influence employees' perceptions of workplace stimuli, influencing determination of stimuli as threatening or benign. It is proposed that central collective identities will be more influential in heightening cognitive arousal.

When stimuli are threatening or likely to negatively affect one's central collective identity, that stimuli will be classified as a stressor. Individuals will rank stressors hierarchically according to perceived potential threat to their well being. Individuals will determine perceived potential threat by how relevant stressors are to one's collective identity hierarchy.

Proposition 4: The higher the central collective identity in the hierarchy the more likely threats to that identity will be perceived as a stressor.

Identity and secondary appraisal. If, during the primary appraisal, a stimulus is deemed to be a stressor, the transactional process model of stress (e.g., Lazarus, 1968; Lazarus & Folkman, 1984) proposes individuals will engage in a secondary appraisal. In this stage, individuals ask themselves, "Do I have the necessary meaning of dealing with the stressor at hand?" (Folkman & Lazarus, 1985). That is, the secondary appraisal is a cognitive analysis of one's belief about his or her competence of successfully dealing with the stressor (Perrewé & Zellars, 1999). Folkman and Lazarus (1980, 1988) asserted that it is the interaction of the stressors at hand, and the ability to cope with such stressors, that will determine the amount of strain experienced.

How effectively an individual is able to cope with stressors is a function of the fit between the stressor and the relevance of the coping mechanism. Several forms of coping have been offered. For instance, Greenberger and Strasser (1986) noted that coping could be personal

control. That is, the greater one's ability to change an environment in a way that is desirable, the more effective one can cope with stressors. Strutton and Lumpkin (1992) examined the difference in coping styles such as optimistic and pessimistic. Likewise, Folkman and Lazarus (1985) distinguished between emotional-based and problem solving coping styles. One form of coping that received much research attention is that of social support.

Social support has been studied from a number of perspectives. In their review of the social support literature, Beehr and Glazer (2001) merged two different conceptual perspectives of social support. Specifically, Cohen and Wills's (1985) structural/functional dichotomy is proposed to house Caplan et al.'s (1975) instrumental/emotional dichotomy. Structural support is similar to possessing a system of supportive others (Cohen & Wills, 1985). Conversely, functional support refers to how individuals use their structural support (Beehr & Glazer, 2001). Beehr and Glazer (2001) suggested that functional support was comprised of Caplan et al.'s (1975) emotional and instrumental support. Emotional support is reliance on others for interactions that make one feel better about him- or herself (Beehr & Glazer, 2001). Instrumental support refers to tangible supports for helping individuals obtain resources to effectively cope with the stressors (Beehr & Glazer, 2001).

This dissertation is focused on the determinants of social support, thus, focusing on structural support (i.e., the structural support can be functional in that it could be either emotional or instrumental). It is proposed that collective identities precede social support systems. That is, members of social groups, which constitute collective identities, act as social supports because individuals will have some social involvement with these members, and place some amount of attachment and importance in the views of other members. In other words, because collective identities involve categorization with other people into groups that are important, which has some degree of social involvement, individuals will view such groups (i.e., which are the basis for collective identities) as social support systems. Thus, individuals will hold as many social support systems as they do collective identities. It is also proposed that the individuals will cognitively rank their social support systems similarly to collective identity hierarchy. The social support system hierarchy will mirror the collective identity hierarchy. In other words, social support systems will be higher in one's social support hierarchy when the collective identity, upon which the social support system is based, is higher in one's collective identity hierarchy.

Proposition 5a: Collective identities have a corresponding social support system.

Proposition 5b: The higher the central collective identity in the collective identity hierarchy, the more likely the corresponding social support system will be high in the social support hierarchy.

Social support can be divided into two categories, central and peripheral, dependent on the degree of social embeddedness, importance, and behavioral involvement of collective identities. Specifically, one central collective identity (i.e., high in importance) that is socially embedded and high in behavioral involvement will act as a central social support system. Conversely, the remaining collective identities that are less socially embedded and contain less behavioral involvement will act as peripheral social supports that are hierarchically arranged according to how socially embedded and how much behavior involvement individuals attach to their collective identities.

Proposition 6: The higher the importance, attachment, social embeddedness, behavioral involvement, and content and meaning one has toward a social support group, the higher that group will be in the social support hierarchy.

There have been several views as to how social support helps in reducing strain. One hypothesis is that social support systems could be conceptualized almost as an antecedent to stressors. That is, social support systems are seen as mechanisms for insulating individuals from stressful stimuli such that individuals with more social support systems do not perceive as many stressors (Beehr, 1994; Viswesvaran, Sanchez, & Fisher, 1999). It is proposed that social groups that are deemed to be central social support systems will be readily accessible to individuals, thus be perceived as optional social support systems. Subsequently, the more central support systems individuals possess, the more social support systems they will perceive as being viable options for coping with stressors. Therefore, the greater the number of central social support systems one perceives, the more likely they will feel as though they are able to adequately cope with strains. In sum, during the secondary appraisal, individuals will evaluate their meaning of coping by the number of central social support systems such that the more central social support systems one perceives, the less strain they will anticipate because she/he's central social support systems will facilitate adequately dealing with the stressors at hand.

Proposition 7: The more central social support groups one perceives, the more likely individuals will perceive they have the means to cope (i.e., secondary appraisal) with a perceived stressor.

Two other conceptualizations of how social support works to relieve stress are the matching hypothesis (Cohen & Wills, 1985) and the moderating hypothesis (e.g., Ganster, Mayes, Sime, & Tharp, 1986). The matching hypothesis notes that there is a necessary element of matching the aspects of the stressor with an appropriate social support system. That is, having a supportive supervisor may not relieve workplace strain when unfavorable affect for the supervisor may be the stressor causing strain (Beehr & Glazer, 2001). Furthermore, the moderating hypothesis notes that social support can mitigate the negative effects of stressors. In this hypothesis, social support acts to moderate the relationship between the stressors and strains (Beehr, 1994, Viswesvaran et al., 1999). For instance, when workplace stressors are high, employees may talk with each other about their discontent, and by venting their frustrations, their negative feelings dissipate. Given these two views of social support, and in the context of the current discussion, one's central social support system will be used to alleviate felt strain such that strain will not be experienced.

Proposition 8: Individuals will employ their social support hierarchy as a means of coping with stress. The central social support should moderate the secondary appraisal – stress relationship such that stress is not experienced or reduced as a function of social support.

Experienced stress and feedback loops. After individuals determine stimuli represent stressors and their central social support system is used to attempt to relieve the felt strain, individuals should not be experiencing strain. When strain is not experienced, individuals will cognitively evaluate why they were able to adequately deal with the stressors. This cognitive evaluation is likely to occur because, as researchers in cognitive psychology (e.g., Heider, 1958) have noted, individuals often act as a “naive psychologist” in an attempt to find the reasons for outcomes that they experience. When outcomes are positive and unexpected, less effort is put in the attributional search process. Thus, when strain is not experienced, subconscious, implicit confirmation will be given to their social support hierarchy. They will not see any need to change the hierarchy because the central social support system worked as anticipated. In other words, individuals will view their social support hierarchy as adequate.

Furthermore, because the social support hierarchy is a reflection of the collective identity hierarchy, this will also be viewed as adequate and positive. When individuals do not experience strain, they will figure all appears to be functioning well; thus they will attempt to maintain their current collective identity and social support hierarchies. As such, when strain is not experienced, individuals will cognitively, subconsciously, reinforce their social support hierarchy, and, subsequently, the factors that compose the social support hierarchy and the social circles of which individuals feel a part.

However, it is possible that the central social support system used in an attempt to reduce experienced strain may not work. Thus, some individuals will experience strain after they employ their central social support system. Individuals may experience several forms of strain, such as increased blood pressure, depression, and/or absences (Kahn & Byosiore, 1992). If individuals do experience strain after the secondary appraisal and the use of their central social support system, it is proposed, that individuals will reappraise their social support hierarchy. Lazarus (1993, 1994) illustrated a feedback process wherein individuals reevaluate their primary and secondary appraisal based on changes in the coping style and/or the situation. It is here posited that this reappraisal (Lazarus, 1993, 1994) will involve a searching for a useful social support system within the social support hierarchy. Individuals will try several social support systems until they find the one that adequately reduces their experienced strain. At this point, individuals will cognitively adjust their social support hierarchy such that their strain will be relieved by a new central social support. In other words, after the central social support system fails, and another support system emerges as relieving their strain, that social support system will now become the central support system.

Proposition 9: Individuals will reassess the elements of their collective identity after a (potentially) stressful event such that the social group associated with the social support most useful in relieving stress will be given higher positive evaluation, importance, attachment, social embeddedness, behavioral involvement, and content and meaning while social groups associated with failed social supports will be given negative evaluations, less importance, attachment, social embeddedness, behavioral involvement, and content and meaning.

Research Model for Predictive Validity

When establishing the psychometric properties of a new measure, it is necessary to illustrate how a construct fits into a nomological network. By showing predictive validity, a scale is partially validated by showing how the construct is related to its consequences. Therefore, the model illustrated in Figure 1 is partially tested to illustrate predictive validity (see Figures 2 & 3). Specifically, this dissertation posits that high collective identities cognitively arouse individuals to be perceptive of stimuli that affect high collective identity. This assertion is drawn from the empirical work that describes how identity salience can influence behaviors (see above review). Given identity's influence in processing of situational information, stimuli that threaten one's central identity will be more relevant to one's central identity; and thus, will be considered a stressor. Furthermore, it is hypothesized in the following section that the support system that aligns with each identity will relieve the negative consequences of typical stressors.

In an organizational context, two types of collective identity have been primarily considered in the literature. First, there are individuals who have a work-based central collective identity. These individuals, who are synonymous with Ashforth and Mael's (1989) conceptualization, are high in organization identity. However, as is evident by the increased research focus on work-family interface/conflict (e.g., Carlson, Kacmar, & Williams, 2000), there are individuals who have a family-based central collective identity. These are the individuals who are highly concentrated on spending time with family members such as their children, spouse, and/or parents/grandparents. Organization-based and family-based collective identity types are the focus of the predictive hypotheses.

However, there are individuals who have a central collective identity that is based in a social group of some sort. These individuals are not examined in this stage of scale development. Social-based identity was not used in this phase of the dissertation because there is not enough knowledge on how social identity and organizational outcomes will interact. That is, there is a growing body of research and literature on the influence of organization identity and organization outcomes, as well as the interplay of work-family conflict and centrality on organization outcomes. However, there is much less research examining the influence of social identities on organization outcomes. Thus, any hypothesis developed at this stage would not be theoretically driven, but rather, based on antidotal evidence and speculation.

Each types of central collective identity described above is likely to serve as a very different perceptual lens. In the follow section, hypotheses are developed regarding the interactive effects of stressors, organization-based and family-based collective identity, and social support.

Organization-based collective identity, role conflict, co-worker support, and outcomes. Role conflict can be described as occurring when there is more than one “set of pressures (p.103)” that are in dialectically opposition (Wolfe & Snoke, 1962). Theoretical and empirical research has long established a positive relationship between role conflict and work-related outcomes. For instance, MacKenzie, Podsakoff, and Ahearne (1998) found that role-conflict predicted job satisfaction and commitment. Stewart and Barling (1996) found inter-role conflict correlated with depressed mood at work. Heinisch and Jex (1997) found similar results in that role conflict was positively related to depressed mood at work. Finally, Boles, Johnston, and Hair et al. (1997) found that role conflict was significantly related to emotional exhaustion.

However, it is hypothesized that the relationship between role conflict and outcomes will be moderated by organization-based collective identity and co-worker support. First, previous work on role salience provides preliminary support for the assertion that organization identity will moderate the relationship between role conflict and outcomes. Specifically, Noor (2004) found that role salience moderated the relationship between conflict type and psychological distress. Individuals with a collective identity that is organization-based are likely to be more concerned with traditional organizational stressors, such as role conflict, than individuals low in organization-based collective identity. That is, individuals who base their sense of self with the organization are probably going to be bothered by role conflict because they will feel ineffective as a worker due to being pulled into multiple obligations at once.

The fundamentals of social identity theory and self-categorization theory provide theoretical support. Specifically, as individuals identify with an organization, they envision and attempt to behave as a prototypical employee. However, under conditions of high role conflict, employees are asked to comply with opposing sets of organizational pressures. This causes the employee to be torn between the various roles they are asked to fulfill. As such, they will feel as though they are unable to act as a prototypical member. Thus, their sense of identity is being threatened. It is likely that individuals will adversely react to this identity threat. Therefore, the

literature supports the notion that individuals with a high organization-based identity will have greater psychological strain as role conflict increases.

In this dissertation, four outcomes are examined: tension, depressed mood at work, burnout, and affective commitment. Because this dissertation focuses on the cognitive aspects of self-definition (i.e., identity), it is logical to examine how identity influences cognitive states. The three negative psychological outcomes (i.e., tension, depressed mood at work, and burnout) are examined because they all represent cognitive states that have been empirically linked to negative organizational outcomes. However, each of the outcomes independently represents a varying degree of discomfort. Whereas tension refers to internal discomfort with job tasks, depressed mood at work is characterized by general distain for work, while burnout represents emotional exhaustion and cognitive defeat at work. It is hypothesized that organization-based identity will moderate the relationship between role conflict and tension, depressed mood at work, and burnout such that role conflict will lead to greater increases in tension, depressed mood at work, and burnout for individuals with a high organization-based identity than for those with a low organization-based identity.

Furthermore, the affective state of commitment will be mutually influenced by role conflict and organization-based identity. Although affective commitment decreases as role conflict increases, this relationship is exacerbated by organization identity. Specifically, affective commitment will decrease more for individuals with a high organization-based identity as role conflict increases than for those with a low organization-based identity.

Hypothesis 21: Organization identity will moderate the relationship between role conflict and tension such that tension will increase as role conflict increases for those high in organization identity but not for those low in organization identity.

Hypothesis 22: Organization identity will moderate the relationship between role conflict and depressed mood at work such that depressed mood at work will increase as role conflict increases for those high in organization identity but not for those low in organization identity.

Hypothesis 23: Organization identity will moderate the relationship between role conflict and burnout such that burnout will increase as role conflict increases for those high in organization identity but not for those low in organization identity.

Hypothesis 24: Organization identity will moderate the relationship between role conflict and affective commitment such that affective commitment will decrease as role conflict increases for those high in organization identity but not for those low in organization identity.

Cushioned in the social support literature, it is here argued that social support will moderate the relationship between stressors and strain such that strain will be reduced when social support is present. Empirical research has examined the influence of support on the traditional role conflict-strain relationship. For instance, Stamper and Johkle (2003) found that perceived organizational support moderated the relationship between role conflict and turnover intentions. Badin and Boles (1996) found that co-worker support reduced stress induced by role conflict. Terry, Neilsen, and Perchard (1993) found that work-based support moderated the relationship between role conflict and psychological well-being. Abdel-Halim (1982) found work group and supervisor support moderated the relationship between role conflict and job satisfaction/anxiety.

Theories on stress and coping provide support for this interactive influence. Specifically, Cohen and Wills (1985) noted that the effectiveness of social support could be understood by the “matching hypothesis.” The matching hypothesis contends that support systems will only mitigate strain if it appropriately corresponds to the stressor. For example, social support from someone not familiar with the organization or job of an employee will not be as effective as social support from a co-worker who is familiar with the employee’s situation.

As such, it is here proposed that support and stressors will interact to mutually influence experienced strain. Specifically, support will be most effective in mitigating felt strain due to stressors when the support corresponds to one’s situation. In other words, individuals dealing with traditional workplace stressors (e.g., role conflict) will likely use their co-workers as a form of social support. Further, when dealing with traditional workplace stressors, co-worker support can best attenuate the relationship between role conflict and negative outcomes.

The transactional model of stress (e.g., Lazarus, 1968) provides support for this notion. As individuals cognitively conduct a secondary appraisal of their situation, they will ask themselves if they have the appropriate means to cope with the stressor at hand. According to the matching hypothesis, individuals will best feel that they have the appropriate means of coping the a stressors when the coping mechanism (i.e., social support) *can* adequately serve to

reduce strain. Concerning role conflict, co-worker support is the most appropriated support system because co-workers are in a position to help and empathize with a fellow worker about workplace conditions. When individuals perceive high levels of co-worker support, role conflict will not have adverse effects because individuals will feel like they have the means to deal with the conflict. Therefore, it is here hypothesized that co-worker support will mitigate the positive relationships between role conflict and tension, role conflict and depressed mood at work, and burnout. Furthermore, it is here hypothesized that co-worker support will attenuate the negative relationship between role conflict and affective commitment.

Hypothesis 25: Co-worker support will moderate the relationship between role conflict and tension such that tension will increase as role conflict increases for individuals with low co-worker support.

Hypothesis 26: Co-worker support will moderate the relationship between role conflict and depressed mood at work such that depressed mood at work will increase as role conflict increases for individuals with low co-worker support.

Hypothesis 27: Co-worker support will moderate the relationship between role conflict and burnout such that burnout will increase as role conflict increases for individuals with low co-worker support.

Hypothesis 28: Co-worker support will moderate the relationship between role conflict and affective commitment such that affective commitment will decrease as role conflict increases for individuals with low co-worker support.

Family-based collective identity, family support, work-family conflict, and outcomes. Work-family conflict is defined as “a form of inter-role conflict in which the role pressures from the work and family domains are mutually non-compatible in some respect” (Greenhaus & Beutell, 1985, p. 76). Theoretical and empirical research has noted a positive relationship between work-family conflict and variables such as turnover intentions, and a negative relationship between work-family conflict and variables such as life satisfaction and psychological well-being. For instance, Mesmer-Magus and Viswesvaran (2003) found that work-family conflict predicted withdraw behaviors ($r=.18$) and life satisfaction ($r=-.26$). Harr (2004) found work-family conflict was positively related to turnover intentions in an sample of Australian workers and Boyar, Maetz, Pearson, and Keough (2003) found similar results using a sample of Southern US employees.

Furthermore, Aycan and Eskin (2005) found that work-family conflict was positively related to psychological well being for Turkish men and women. However, men and women differed in their sources of support. Women relied more on spousal support whereas men relied equally on organizational and spousal support. Burke and Greenglass (2001, 1999) found that work-family conflict was related to psychological health. Furthermore, Richardsen, Burke, and Mikkelsen (1999) found women who reported high levels of work-family conflict had poorer health. Brough (2005) found that Australian Police, Fire, and Ambulance Service employees' psychological health was predicted by work-family conflict. Kato and Kanai (2006) found that home role reduction moderated the relationship between work-family conflict and mental health.

It is posited that individuals who have a high family-based identity will be more attuned to stressors that threaten their family-based identity. Specifically, individuals with a family-based identity are more likely to be negatively affected by work-family conflict. That is, individuals will have negative reactions, while at work, if their work duties run counter to their obligations with their home life, but this relationship will be greater for individuals who have a high family-based identity. This is because individuals with a high family-based identity will view themselves as not acting as a prototypical 'family member' when they are forced to spend 'family time' at work. This causes individuals with a high family-based identity to feel as though their identity is threatened, and thus reactions will be more adverse than for individuals with a low family-based identity. Thus, it is hypothesized that the positive relationships between work-family conflict and tension, work-family conflict and depressed mood at work, and work-family conflict and burnout will be exacerbated for those high in family-based identity. Furthermore, it is hypothesized that the negative relationship between work-family conflict and affective commitment also will be exacerbated for those high in family-based identity.

Hypothesis 29: Family identity will moderate the relationship between work-family conflict and tension such that tension will increase as work-family conflict increases for individuals with a high family identity.

Hypothesis 30: Family identity will moderate the relationship between work-family conflict and depressed mood at work such that depressed mood at work will increase as work-family conflict increases for individuals with a high family identity.

Hypothesis 31: Family identity will moderate the relationship between work-family conflict and burnout such that burnout will increase as work-family conflict increases for individuals with a high family identity.

Hypothesis 32: Family identity will moderate the relationship between work-family conflict and affective commitment such that affective commitment will decrease as work-family conflict increases for individuals with a high family identity.

However, family support will change the relationship between work-family conflict and various outcomes. Family support will act to moderate the relationship between work-family conflict and felt strain in that family support will attenuate the relationship between work-family conflict and outcomes. Specifically, when family support is perceived to be high, work-family conflict will not have negative consequences for individuals. Again referring to the transactional model of stress (e.g., Lazarus, 1968), during the secondary appraisal, due to perceptions of family support, individuals determine that they have the necessary, appropriate means to cope with the work-family conflict. Therefore, during the secondary appraisal, the stressor will not lead to feelings of cognitive discomfort. It is hypothesized that family support and work-family conflict will interactively influence outcomes.

Hypothesis 33: Family support will moderate the relationship between work-family conflict and tension such that tension will increase as work-family conflict increases for individuals with low family support.

Hypothesis 34: Family support will moderate the relationship between work-family conflict and depressed mood at work such that depressed mood at work will increase as work-family conflict increases for individuals with low family support.

Hypothesis 35: Family support will moderate the relationship between work-family conflict and burnout such that burnout will increase as work-family conflict increases for individuals with low family support.

Hypothesis 36: Family support will moderate the relationship between work-family conflict and affective commitment such that affective commitment will decrease as work-family conflict increases for individuals with low family support.

CHAPTER 4 - METHODOLOGY

Exploratory Factor Analysis

Procedures for Exploratory Factor Analysis Studies

Data were collected for three separate identities: organizational-based (thus, the above example item would read “I am a member of this organization”), social-based (e.g., “I am a member of this social group”), and family-based (e.g., “I am a member of this family”). For course credit, undergraduate business students assisted in data collection by distributing surveys to individuals who were at least 25 years of age and had at least 5 years of work experience. Three types of surveys were distributed, each survey measuring one identity (e.g., one survey measured organizational-based identity, one measured social-based identity, and one measured family-based identity) and each was given to a different individual (thus, one person completed an organization-based identity survey; another person completed a social-based identity survey, etc.). Because the covariance matrix for each identity significantly differed from the others, data measuring different identities could not be combined; thus, three data sets were developed. The total sample size for the organization-based identity data set was 117. The total sample size for the social-based identity data set was 127. The total sample size for the family-based identity data set was 125.

Analysis for Exploratory Factor Analysis Studies

Item analyses. Item generation and analyses were initial steps in scale creation. In order to maximize content and construct validity, items were only retained if they provided an adequate representation of the parsimonious dimensions of collective identity. Therefore, four phases of scale development were conducted during item reduction. First, as suggested by Nunnally (1978), items that displayed an item-to-total correlation that were equal to or greater than .40 were retained.

Second, to clarify factor interpretation, items with problematic high cross loadings were examined. This procedure was conducted using SPSS 11.5, with a preliminary principal component analysis with oblique rotation independently for each dimension of collective identity in each data set. Items were eliminated if they either loaded on two or more factors greater than .35 or did not load on any factor with a loading of at least .35. This procedure was repeated for each of the seven dimensions in each of the three data sets.

Third, one of the identity data sets was selected at random. Dimensions were combined that were suspected to be cognitively related and thus overlap in factor analyses. The items retained in the above analyses for the factors, social embeddedness and behavioral involvement, were subjected to a principal component analysis (PCA) with oblique rotation. Again, items were eliminated if they either loaded on two or more factors greater than .35 or did not load on any factor with a loading of at least .35. Following, the items retained from the PCA of evaluation, importance, and attachment were analyzed together via PCA with oblique rotation. Again, items were eliminated if they either loaded on two or more factors greater than .35 or did not load on any factor with a loading of at least .35. Finally, the items retained from the initial PCA for self-categorization and content and meaning were analyzed together via PCA with oblique rotation.

Fourth, principal component analysis was then conducted on the other two identity data sets. Items were deleted if they 1) were not retained for all identity data sets in the first PCA, 2) loaded on two or more factors greater than .35, 3) did not load on any factor with a loading of at least .35, or 4) did not load on appropriate factor.

Dimensionality of collective identity. After conducting the item-reduction procedure described above, a principal axis factor analysis with oblique, direct oblimin factor rotation was performed. As suggested by previous researchers (e.g., Ferris et al., 2005), oblique factor rotation is desirable in early stages of scale development because this rotation method imposes fewer constraints by not forcing orthogonality on the factors. Oblique factor rotation allows factors to correlate, as the theory implies the factors should. The Kaiser-Guttman criterion was used to retain factors; specifically, factors were retained if their eigenvalues exceeded 1.0 (i.e., 1.16-4.64). Using this method of factor retention, 4 factors were retained.

Reliability and factor correlations. Internal consistency measures of reliability ranged were also used to assess psycho-symmetric proprieties of each dimension. Specifically, the recommended internal consistency reliability estimate of .70 level (Nunnally, 1978) was used to demonstrate that the factors displayed adequate reliability. Furthermore, correlations between the collective identity dimensions were examined. Dimensions should not correlate at a level above .40 to illustrate only minimal presence of common method variance.

Additional analysis. Due to sample size limitations, exploratory factor analysis was conducted by examining the factor structure of each factor for each identity-data set and then

combining the factors as items were eliminated (see results for explanation). Because this is not the traditional method for exploratory factor analysis in multi-scale development, a confirmatory analysis (CFA) was conducted on these data sets. Although previous research usually does not conduct EFAs and CFAs on the same data set, because of the sample manipulation during the exploratory phase, this procedure was a necessary check. If the method for extracting factors caused the analysis to react differently than looking at a larger data set, the confirmatory factor analysis will show poor fit. Conversely, adequate fit on this confirmatory factor analysis could suggest that the method of factor extraction did not run counter to the actual data as a whole.

Measures for Exploratory Factor Analysis Studies

Collective identity. This measure contained 47 items, which represented the seven dimensions that compose collective identity (See Appendix A).

Confirmatory Factor Analysis

Procedures for Confirmatory Factor Analysis Studies

The data collection for CFA was similar to EFA. That is, three separate identities (i.e., organizational-based, social-based, & family-based) were measured. For course credit³, undergraduate business students assisted in data collection by distributing surveys to individuals who were at least 25 years of age and had at least 5 years of work experience. Each survey measured one identity (e.g., one survey measured organizational-based identity, one measured social-based identity, and one measured family-based identity) and each was given to a different individual. However, in this data analysis, we wished to keep the identity data sets separate so that a confirmatory factor analysis could be conducted independently on each identity measure.

Analysis for Confirmatory Factor Analysis Studies

LISREL 8.5 was used to conduct the confirmatory factor analysis. In this procedure, the factor model extracted in the EFA was tested on all three data sets. Several indices were used to determine the adequacy of fit for the 4 factor model. First, the Chi-square indices were used. Furthermore, the Goodness of Fit Indices (GFI) and the Root Mean Square Estimate Approximation (RMSEA) were examined to determine adequacy of fit for the four factor model. Fit is illustrated when the Chi-square p-value is significant, GFI is greater than .9 and RMSEA is less than .06.

Measures for CFA Collective Identity

Collective identity. Measure contained 47 items, which represented the seven dimensions that compose collective identity (See Appendix A).

Psychometric Properties of CIS

Procedures for Convergent, Discriminant, and Predictive Validity

Students in an undergraduate business course distributed and collected surveys for course credit. Students were given the specific criteria for respondents; namely, respondents had to be at least 25 years of age, have at least 5 years working experience, and be willing to complete 2 surveys throughout a 6 week period. Each student was given 5 surveys containing measures for organization-based, family-based, and social-based identities and other variables of interest. Three weeks later, each student was given another 5 surveys containing measures for social support and the dependent variables. Survey 1 and Survey 2 were matched by 1) students' full name and 2) respondents first name and birthday. A total of 94 respondents were included in the final sample.

Analysis for Convergent, Discriminant, and Predictive Validity

To analyze convergent and discriminant validity, bivariate correlations were computed SPSS 11.5. Specifically, convergent validity is illustrated when the variables of interest are statistically significantly related in the hypothesized direction whereas discriminant validity is illustrated when the variables of interest are not statistically significantly related in the hypothesized manner.

To analyze the research model (i.e., predictive validity), moderated hierarchical regression was conducted (Cohen & Cohen, 1983). Specifically, a third-step process was conducted to examine each of the hypotheses. Control variables were first entered. Second, main effects were entered into the equation. In the third step, the standardized interactive term was entered into the equation. For the hypotheses to be supported, first, the second step must be significant and provide additional variance explained in the outcomes variable. Second, the beta weights, graphical illustrations, and simple slopes analyses will be used to determine support for each hypothesis.

Measures for Convergent, Discriminant, and Predictive Validity

Organization-based identity. Organization-based identity was measured using the CIS scale. This measure includes the 14 items retained from the EFA and CFA studies, as well as 3

new items. Six additional items were added to the original 14 items to 1) ensure that items were loading on the correct factors when additional, similar variables were examined, and 2) to raise the minimum items of each dimension to 4. After additional Principal Axis Factor Analysis, 17 were retained (see Appendix C – Table 10). Using Cronbach's alpha, reliability of this scale was .87.

Family-based identity. Family-based identity was measured using the CIS scale. This measure included the 14 items retained from the EFA and CFA studies, as well as 3 new items. Six additional items were added to the original 14 items to 1) ensure that items were loading on the correct factors when additional, similar variables were examined, and 2) to raise the minimum items of each dimension to 4. After additional Principal Axis Factor Analysis, 17 were retained (see Appendix C – Table 11). Using Cronbach's alpha, reliability of this scale was .87.

Social-based identity. Social-based identity was measured using the CIS scale. This measure included the 14 items retained from the EFA and CFA studies, as well as 3 new items. Six additional items were added to the original 14 items to 1) ensure that items were loading on the correct factors when additional, similar variables were examined, and 2) to raise the minimum items of each dimension to 4. After additional Principal Axis Factor Analysis, 17 were retained (see Appendix C – Table 12). Using Cronbach's alpha, reliability of this scale was .88.

Co-worker emotional support. Co-worker support was measured by a 3-item scale adapted from King et al.'s (1995) family support inventory. This scale asked individuals to rate (1=rarely; 5=very often) the statements "I can rely on my co-workers to offer advice or other alternative to problems that come up," "I can rely on my co-workers to give an opinion about how to resolve a problem," and "My co-workers engage in problem solving discussions with me." Using Cronbach's alpha, reliability of this scale was .91.

Positive-discussion support. Positive-discussion support was measured by a 3-item scale adapted from Fenlason and Beehr's (1994) scale. This asked individuals to rate (1=rarely; 5=very often) the statements "We talk about the good things about our organization," "We share interesting ideas about learning and performing well on job tasks," and "We talk about the rewarding things about being a worker." Using Cronbach's alpha, reliability of this scale was .80.

Empathetic-discussion support. Empathetic-discussion support was measured by a 5-item scale adapted from Fenlason, Johnson, and Beehr (1997). This scale asked individuals to rate (1=rarely; 5=very often) statements such as “My co-workers tell me they sympathize with what I am saying,” and “My co-workers tell me that they understand how I am feeling.” Using Cronbach’s alpha, reliability of this scale was .83.

Family support. Family support was measured by a 3-itema scale adapted from King et al.’s (1995) family support inventory. This scale asked individuals to rate (1=rarely; 5=very often) the statements “I can rely on my family to offer advice or other alternative to problems that come up,” “I can rely on my family to give an opinion about how to resolve a problem,” and “My family engage in problem solving discussions with me. Using Cronbach’s alpha, reliability of this scale was .94.

Outside-discussion emotional support. Outside-discussion support was measured by a 4 item scale adapted from Fenlason and Beehr’s (1994) scale. This asked individuals to rate (1=rarely’ 5=very often) statements such as “At work, we discuss things that are happening in out personal lives,” “We talk about out-of-work interests we have in common,” and “We share personal information about our backgrounds.” Using Cronbach’s alpha, reliability of this scale was .92.

Instrumental support. Instrumental support was measured by adapting a 17-item resource scale (Hobfoll & Lilly, 1993). Respondents were asked to rate (1=strongly disagree; 7=strongly agree) to statements such as “I have the necessary tools for work,” “I have adequate time to sleep,” and “I have loyal friends.” Using Cronbach’s alpha, reliability of this scale was .87.

Perceptions of organizational politics. Perceptions of organizational politics were measured by 11 items from Kacmar and Carlson’s (1997) POPs scale. Individuals were asked to rate (5=strongly agree; 1=strongly disagree) statements such as “There is a group of people in my deparment who always get things their way because no one wants to challenge them,” and “I have seen changes made to policies here that only serve the purpose of a few individuals, not the whole work unit or organization.” Using Cronbach’s alpha, reliability of this scale was .80.

Commitment. Commitment was measured from an adapted affective commitment scale (Jaros, Jernier, Koehler, & Sincich, 1993). Respondents were asked to determine their feelings toward their employing organization by examining two opposing “feeling words.” For instance,

respondents are asked to choose between 1 and 7 with 1 representing cold while 7 represents warmth. Using Cronbach's alpha, reliability of this scale was .86.

Social desirability. Social desirability was measured on a 10-item abridged version of Marlowe-Crowne (1964) social desirability scale. Respondents were asked to indicate whether statements such as "I never hesitate to go out of my way to help someone in trouble," and "I never intensely dislike anyone" were true or false.

Affectivity. Positive and negative affect were measured on the PANAS scale (Watson & Clark, 1984). Positive affect was measured on a 10-item scale which asked respondents to rate words such as "Interested" and "Enthusiastic" on a 1 (very slightly or not at all) to 5 (extremely) scale. Using Cronbach's alpha, reliability of this scale was .89. Negative affect was measured on a 10-item scale which asked respondents to rate words such as "Nervous" and "Ashamed" on a 1 (very slightly or not at all) to 5 (extremely) scale. Using Cronbach's alpha, reliability of this scale was .84.

Role conflict. Role conflict was measured by a 8-item scale adapted from Rizzo, House, Lirtzman's (1970) role conflict scale. Respondents were asked to rate (1=strongly disagree; 5=strongly agree) statements such as "I must do things that I think should be done differently," and "I have incompatible requests from two or more people." Using Cronbach's alpha, reliability of this scale was .89.

Work-family conflict. Work-family conflict was measured by a 3-item scale developed by Carlson et al. (2000). Respondents were asked to rate (1=strongly disagree; 5=strongly agree) statements such as "When I get home from work, I am often too frazzled to participate in family activities/responsibilities," and "Due to all the pressure at work, sometimes when I come home I am too stressed to do the things that I enjoy with my family." Using Cronbach's alpha, reliability of this scale was .93.

Tension. Tension was measured by a 7-item scale developed by House and Rizzo (1972). Respondents were asked to rate (1=strongly disagree; 5=strongly agree) statements such as "My job tends to directly affect my health," and "I work under a great deal of tension." Using Cronbach's alpha, reliability of this scale was .85.

Depressed mood at work. Depressed mood at work was measured by a 10-item scale developed by Quinn and Sheppard (1974). Respondents were asked to rate (1=never; 4=often)

statements such as “I feel downhearted and blue at work” and “My mind is as clear as it used to be at work (R).” Using Cronbach’s alpha, reliability for this scale was .83.

Burnout. Burnout was measured by 10 items from the Burnout Measure scale which asked respondents how they feel at work overall (Pines & Anderson, 1998). Respondents were asked to rate (1=never; 7=always) words such as “Tired” and “Hopeless.” Using Cronbach’s alpha, reliability of this scale was .91.

CHAPTER 5 – RESULTS

Results for Exploratory Factor Analysis Studies

In scale development, the number of respondents should be 8-10 times the number of items. Because that would require a data sample of 470 for each data set, exploratory factor analysis was run independently on each dimension (thus, our number of respondents for each data set exceeds the minimum required). As such, a series of analyses were conducted on each data set independently. The procedures for such analyses are described below.

Item Analyses

Item generation and analyses were an initial step in scale creation. In order to maximize content and construct validity, items were only retained if they provided an adequate representation of the parsimonious dimensions of collective identity. Therefore, several phases of scale development were conducted. First, as suggested by Nunnally (1978), items that displayed an item-to-total correlation that were equal to or greater than .40 were retained.

Second, to clarify factor interpretation, items with problematic high cross loadings were examined. This procedure was conducted using SPSS 11.5, with a preliminary principal component analysis with oblique rotation independently for each dimension of collective identity in each data set. Items were eliminated if they either loaded on two or more factors greater than .35 or did not load on any factor with a loading of at least .35. This procedure was repeated for each of the seven dimensions in each of the three data sets.

Following, one of the identity data sets was selected at random. We combined dimensions that we suspected may be cognitively related and thus overlap in factor analyses. First, the items retained in the above analyses for the factors social embeddedness and behavioral involvement were subjected to a principal component analysis with oblique rotation. Again, items were eliminated if they either loaded on two or more factors greater than .35 or did not load on any factor with a loading of at least .35. Second, the items retained from the PCA of evaluation, importance, and attachment were analyzed together via PCA with oblique rotation. Again, items were eliminated if they either loaded on two or more factors greater than .35 or did not load on any factor

with a loading of at least .35. Finally, the items retained from the initial PCA for self-categorization and content and meaning were analyzed together via PCA with oblique rotation. This results in 6 distinct factors representing 4 dimensions: self-categorization: placing (items 1, 2, 3), self-categorization: goodness-of-fit (items 4, 6, 7), importance (items 21, 22, 23), attachment: mutual fate (items 25, 26), attachment: interconnection (items 29, 30, 31), behavioral involvement (37, 38, 39, 41).

These items were retained for a second round of PCA on the other two identity data sets. Items were deleted if they 1) were not retained for all identity data sets in the first PCA, 2) loaded on two or more factors greater than .35, 3) did not load on any factor with a loading of at least .35, or 4) did not load on appropriate factor. Resulting, 13 items were retained that showed consistent factor structure for all three identity data sets. These 13 items (items 1, 2, 3, 4, 6, 7, 29, 30, 31, 37, 38, 39, 41) loaded onto 4 factors, representing 3 distinct dimensions of collective identity (e.g., self categorization, attachment, and behavioral involvement).

Dimensionality of Collective Identity

Principal axis factor analysis with oblique, direct oblimin factor rotation was performed after conducting the item-reduction procedure (described above) to examine the factor structure of the collective identity scale. Ferris et al. (2005) noted that oblique factor rotation is desirable in the early stages of scale development because it imposes fewer constraints, which is desirable in early stages of scale development. Also, this rotation method does not impose orthogonality on factors that might be theoretically related. Using the Kaiser-Guttman criterion of only retaining factors with eigenvalues exceeding 1.0, 4 factors emerged, as reported in Table 3a. Table 3b reports Eigenvalues and the variance explained by each factor in each data set (as well as reliabilities). Next, each factor was named by examining the items. The 4 factors were named: 1) self-categorization: placing (items 1, 2, 3), 2) self categorization: goodness-of-fit (items 4, 6, 7), 3) attachment (items 29, 30, 31), and 4) behavioral involvement (items 37, 38, 39, 41).

Reliability and Factor Correlations

As noted in Table 4, internal consistency measures of reliability ranged from .67 to .96. Although two of the factor's internal consistency reliability estimates fell below the recommended .70 level (Nunnally, 1978), the remaining factors displayed adequate

reliability indices. Furthermore, as reported in Table 5, correlations between the collective identity dimensions ranged from .14 to .52. These correlations are modest in magnitude.

Additional Analysis

Due to sample size limitations, I had to examine the factor structure of each factor for each identity data set and then combine the factors as items were eliminated. Because this is not the traditional method for exploratory factor analysis in multi-scale development, I ran a confirmatory analysis on these data sets. Although previous research usually does not conduct EFAs and CFAs on the same data set, I felt that this procedure was a necessary check. If my method for extracting factors caused the analysis to react differently than looking at a larger data set, we would expect the confirmatory factor analysis to show poor fit. Conversely, adequate fit on this confirmatory factor analysis could suggest that the method of factor extraction did not run counter to the actual data as a whole. Results are reported in Table 6.

LISREL 8.5 was used to conduct the confirmatory factor analyses on each identity data set. As is shown in Table 6, the four-factor model illustrated adequate fit to the data for each of the identity data sets. Specifically, the four-factor model was significant for each data set. For the family-identity data set ($\chi^2=81.75$, $p<.05$), the goodness of fit index (GFI, 0.91) was above the minimum acceptable level (0.90), and root mean square error of approximation (RMSEA, .056) was below the maximum limit (.06). For the organization-identity data set ($\chi^2=78.97$, $p<.05$), the GFI (.091) and RMSEA (0.054) were at acceptable levels. For the social-identity data set ($\chi^2=90.50$, $p<.01$) GFI (0.90) was adequate, yet RMSEA (0.065) was just barely above the maximum limit.

Results for Confirmatory Factor Analysis Studies

As shown in Table 4, LISREL 8.5 results illustrate that a four-factor model fit the data for the organizational-identity data set ($\chi^2=128.03$, $p<.001$) and social-identity data set ($\chi^2=119.70$, $p<.001$). Although the Chi-square for the family-identity data set did not illustrate significant fit ($\chi^2=64.03$, $p=.30$), the GFI (0.94) and RMSEA (0.024) illustrate an adequate fit of this data set with the four-factor model. Previous research (e.g., Marsh Balla, & Hau, 1996) has noted that fit indices should be used in conjunction with

statistical tests of invariance among groups. However, since the 4-factor model in each identity data set failed to meet at least one of the adequate fit criteria, I conducted an equivalence test on the data collected in Phase I to see where the data may differ.

Specifically, four different models were run in LISREL 8.5. Results are displayed in Table 7. In the baseline model, data for each identity data set were examined free of constraints. In Model 1, the item-to-factor paths for identity data sets 2 and 3 were forced to be equal to that of identity data set 1. In Model 2, the item-to-factor paths and factor-to-factor correlations for identity sets 2 and 3 were forced to be equal to that of identity data set 1. In Model 3, the item-to-factor, factor-to-factor correlations, and the unique error variance for each item for identity data sets 2 and 3 were forced to be equal to that of identity data set 1.

In order for the data sets to be equivalent at each analysis, the models should not differ significantly from the one above. As shown in Table 7, Model 1 was significantly different from the Baseline model, thus respondents viewed the item-to-factor relationship to be different for each identity data set. However, upon examination of the covariance matrix, it was noticed that the first three items in the family-identity data set were radically different from the first three items for the organization-identity data set and the family-identity data set. It appeared as if there was little to no variance in the self-categorization: placing factor. However, this makes intuitive sense. That is, all people belong to a family, thus we would expect little variance in this factor.

As a result of this discovery, two additional sets of models were tested. First, a three factor model was tested, that did not contain the first three items (i.e., self-categorization: placing factor). As shown in Table 8, we see that the Baseline model and Model 1 did not significantly differ. However, Model 1 did significantly differ from Model 2. These results imply that respondents viewed the item-to-factor relationship similarly across all three identity data sets but did not view the factor-to-factor relationship equivalently across data sets.

Furthermore, a final set of models was tested. In this set, the four-factor model was tested on just the organizational-identity and social-identity data sets. As shown in Table 9, although the Baseline model did significantly differ from Model 1, Model 1

provided additional adequate fit statistics, again implying that respondents viewed the item-to-factor relationship similarly across organizational- and social-identity data sets.

Results for Convergent, Discriminant, and Predictive Validity

Tables 13-17 show the bivariate correlations between the variables of interest. Table 13 shows the correlation for the major variables for the final data set. Table 14 reports the correlations between the aggregate measure of organization identity, the 4 dimensions of organization identity, and support. As predicted, organization identity was positively correlated with reward-discussion support ($r=.45$; $p < .001$), co-worker support ($r=.25$; $p < .001$), and empathetic-discussion support ($r=.20$; $p < .05$), lending support to Hypothesis 2, Hypothesis 3, and Hypothesis 4.

Although not specifically hypothesized, the relationships between the 4 sub-dimensions of organization identity were also correlated with types of support. This analysis revealed that self-categorization: goodness-of-fit ($r=.28$, $p < .001$) and attachment ($r=.25$, $p < .05$) were significantly and positively correlated with co-worker support. Furthermore, self-categorization: goodness-of-fit ($r=.22$, $p < .05$) was significantly and positively correlated with outside discussion support, whereas self-categorization: placing ($r=.24$, $p < .05$), attachment ($r=.42$, $p < .001$), and behavioral involvement ($r=.36$, $p < .001$) were significantly and positively correlated with reward discussion support. Interestingly, although the aggregate measure of organization identity significantly correlated with empathetic discussion support, none of the sub-dimensions, independently, were significantly correlated with empathic discussion support.

Table 15 reports the correlations between the aggregate measure of family identity, the 4 dimensions of family identity, and support. As predicted, family identity was positively correlated with family support ($r=.26$, $p < .05$), Hypothesis 5 was supported. Again, although not specifically hypothesized, the 4 sub-dimensions of family identity were correlated with types of support. First, self-categorization: goodness-of-fit ($r=.22$, $p < .001$) was significantly and positively correlated with co-worker support. Self-categorization: goodness-of-fit ($r=.28$, $p < .001$) was also significantly and positively correlated with family support as was attachment ($r=.32$, $p < .001$).

Table 16 reports the correlations between the aggregate measure of social identity, the 4 dimensions of social identity, and support. As predicted, social identity was

positively correlated with outside-discussion support ($r=.23, p <.05$), thus Hypothesis 6 was supported. Although not specifically hypothesized, the aggregate measure of family identity ($r=.21, p <.05$) was significantly and positively correlated with empathetic discussion support. Again the 4 sub-dimensions of social identity were correlated with types of support. First, only self-categorization: goodness-of-fit ($r=.23, p <.05$) was significantly and positively correlated with outside discussion support. Furthermore, although the aggregate measure of family support was significantly and positively correlated with empathic discussion support, none of the sub-dimensions was independently (significantly) correlated with this type of support. Lastly, behavioral involvement ($r=.22, p <.05$) was significantly and positively correlated with reward discussion support.

Table 17 reports the correlations between the aggregate measure of organization, family, social identity, and the remaining variables of interest. As predicted in Hypothesis 7 and Hypothesis 8, organization ($r=.27, p <.001$) and family ($r=.46, p <.001$) were positively correlated with self-reports of resources. However, contrary to Hypothesis 9, social identity ($r=.20, p =.105$) was not positively correlated with self-reports of resources. Thus, Hypothesis 7 and Hypothesis 8 were supported, whereas Hypothesis 9 was not. Furthermore, organization identity ($r=-.42, p <.001$) was negatively correlated with perceptions of organization politics; thus providing support for hypothesis 10. Although not hypothesized, family identity ($r=-.21, p <.001$) and social identity ($r=-.40, p <.001$) were also significantly and negatively correlated with perceptions of organizational politics. Lastly, in the convergent validity hypothesis, Hypothesis 11 was supported as organization identity was positively correlated with affective commitment ($r=.44, p <.001$). Although not hypothesized, social identity was also positively correlated with affective commitment to their employing organization ($r=.34, p <.001$).

Providing support for discriminant validity, organization ($r=-.00, p =.97$), family ($r=-.05, p =.61$), and social ($r=-.09, p =.35$) identity were not significantly correlated with measures of social desirability. As such, Hypothesis 12, Hypothesis 13, and Hypothesis 14 were supported. Furthermore, family ($r=.12, p =.23$) and social ($r=.18, p =.09$) identity were not significantly correlated with positive affect, thus providing support for

Hypothesis 16 and Hypothesis 17. However, Hypothesis 15 was not supported as organization identity was significantly correlated to positive affect ($r=.23, p <.001$). Hypothesis 18, Hypothesis 19, and Hypothesis 20 were supported, for organization ($r=-.05, p=.65$), family ($r=.01, p=.90$), and social ($r=-.08, p=.43$) identity were not significantly correlated to negative affect.

To test the model, hierarchical moderated regression was conducted in SPSS 11.5 (see Tables 18-33). In step 1, control variables were entered. In the second step, the main effects were entered into the equation. Finally, in the third step, the interactive variables were also regressed on the dependent variable. In order for Hypotheses 21-35 to be supported, the third step must be significant and provide additional variance explained in the dependent variable.

To test Hypotheses 21-24, two control variables (i.e., gender and co-worker support) were entered in the first step. In the second step, the main effects were entered (i.e., role conflict and organization identity). Finally, in the third step, the standardized interactive term (i.e., role conflict*organization identity) was entered into the equation. Hypothesis 21 (Table 18) was not support as step 2 failed to be statistically significant ($\beta=-.16, p=.12$). The interactive term ($\beta=-.22, p<.05$) for Hypothesis 22 (Table 19) was statistically significant providing an additional 4.6% variance explained in depressed mood at work beyond the main effects and controls. However, because the beta weight sign was in the opposite direction as hypothesized, this hypothesis was not supported. Furthermore, the interactive term ($\beta=-.22, p<.05$) for Hypothesis 23 (Table 20) was statistically significant, providing an additional 4.6% variance explained in burnout. However, the sign of the beta weight for Hypothesis 23 was also in the opposite direction than hypothesized. Thus, Hypothesis 23 was also not supported. Finally, Hypothesis 24 (Table 21) was not supported as the interactive term ($\beta=.05, p=.55$) failed to be statistically significant.

To test Hypotheses 25-28, two control variables (i.e., gender and organization identity) were entered in the first step. In the second step, the main effects (i.e., role conflict and co-worker support) were entered into the equation. In step 3, the standardized interactive term (i.e., role conflict*co-worker support) was entered into the equation. Hypothesis 25 (Table 22) and Hypothesis 26 (Table 23) were not supported as

the interactive terms ($\beta = -.14, p = .19$; $\beta = -.09, p = .35$) were not significant. Hypothesis 27 (Table 24) was supported as the interactive term ($\beta = -.18, p < .10$) provided an additional 3.1% variance explained in burnout beyond the controls and main effects. Finally, Hypothesis 28 (Table 25) was also supported as the interactive term ($\beta = .17, p < .05$) explained an additional 2.9% variance explained in affective commitment beyond that of the control variables and main effects.

To test Hypothesis 29-32, two control variables (i.e., gender and family support) were entered in the first step. In the second step, the main effects (i.e., work-family conflict and family identity) were entered into the equation. In final step, the standardized interactive term (i.e., work-family conflict*family identity) was entered into the equation. None of the Hypotheses 29-32 (Tables 26-29) were supported ($\beta = -.17, p = .13$; $\beta = -.17, p = .12$; $\beta = -.18, p = .12$; $\beta = -.04, p = .74$).

To test Hypotheses 33-36, two control variables (i.e., gender and family identity) were entered in the first step. In the second step, the main effects (i.e., work-family conflict and family support) were entered into the equation. In step 3, the standardized interactive term (i.e., work-family conflict*family support) were entered into the equation. The interactive term ($\beta = .21, p < .05$) for Hypotheses 33 (Table 30) was statistically significant, providing an additional 4% variance explained in tension beyond the control variables and main effects. However, because the sign of the beta weight was in the opposite direction as hypothesized, Hypothesis 33 was not supported. Furthermore, Hypothesis 34 ($\beta = .05, p = .65$), 35 ($\beta = .16, p = .13$), and 36 ($\beta = .02, p = .83$) were not supported (Tables 31-33).

Additional Analysis

To further explore the nature of the significant interactions, two additional steps were taken. First, the interactions were graphed using an excel program (Dawson, 2006). Figures 4-8 illustrate the nature of the interaction. Figure 4 depicts the effects of role conflict on depressed mood at work for both high and low organization identity. Figure 5 depicts the effects of role conflict on burnout for both high and low organization identity. Figure 6 depicts the effects of role conflict of burnout for both high and low co-worker support. Figure 7 depicts the effects of role conflict on affective commitment for both

high and low co-worker support. Figure 8 depicts the effects of work-family conflict on tension for high and low family support.

Second, a simple slopes test was conducted for each of the significant interactions. This test, which partitions data by the moderator, was conducted as suggested by George and Jones (1996). In these analyses, high sub-groups were determined by adding one standard deviation to the mean of the moderator while low sub-groups were determined by subtracting one standard deviation from the mean. This sub-group division was used instead of a mean-split so that each sub-group truly represented the high and low on the moderator.

The simple slopes test is conducted to see if the dependent variable of each sub-group changes (i.e., slope differs significantly from zero) as the independent variable changes. For Hypothesis 22, the high sub-group was not statistically significant ($\beta = -.30$, $p = .34$) indicating that depressed mood at work does not change as role conflict increases for individuals high in organization identity. For Hypothesis 22, the low sub-group was statistically significant ($\beta = .62$, $p < .05$) indicating that depressed mood at work increased as role conflict increases for individuals low in organization identity. Although the interactive term was significant in the original regression, these simple slopes analyses indicate that organization identity moderates the relationship between role conflict and depressed mood at work in the opposite manner as hypothesized.

For Hypothesis 23, the high sub-group was not statistically significant ($\beta = -.19$, $p = .59$) indicating that burnout does not change as role conflict increases for individuals high in organization identity. Conversely, the low sub-group was statistically significant ($\beta = .67$, $p = .05$) indicating that burnout increases as role conflict increases for individuals low in organization identity. Again, although the interactive term was significant in the original regression, the sub-group analyses indicate that organization identity moderates the relationship between role conflict and burnout in the opposite direction as hypothesized.

For Hypothesis 27, the high sub-group was statistically significant ($\beta = .36$, $p < .10$) indicating that burnout increases as role conflict increases for individuals with high co-worker support. Conversely, the low sub-group was not statistically significant ($\beta = .44$, $p = .17$) indicating that burnout was unaffected by role conflict for individuals with low

co-worker support. This result is surprising and contrary to Hypothesis 27. The sub-group simple slopes analyses indicate that co-worker support is positively related to burnout as role conflict increases.

For Hypothesis 28, the high sub-group was statistically significant ($\beta = -.41, p < .05$) indicating that affective commitment decreases as role conflict increases for individuals with high co-worker support. Furthermore, the low sub-group was statistically significant ($\beta = -.76, p < .01$) indicating that affective commitment also decreases as role conflict increases for individuals with low co-worker support. By comparing the beta weights of the sub-groups, the simple slopes tests indicate that individuals with high co-worker support experience less decreases in affective commitment as role conflict increases than individuals with low co-worker support, as originally hypothesized.

For Hypothesis 33, the high sub-group was statistically significant ($\beta = .44, p < .05$) indicating that tension increases as work-family conflict increases for individuals with high family support. Conversely, the low sub-group was not statistically significant ($\beta = -.10, p = .71$) indicating that tension was unaffected by work-family conflict for individuals with low family support. These simple slopes sub-group analyses indicate that the moderating effect is in the opposite direct as originally hypothesized.

CHAPTER 6 - DISCUSSION

The purpose of this dissertation was to develop and validate a measure of collective identity that was multi-dimensional and amenable to any identity type. Collective identity was conceptualized, as described by Ashmore et al. (2006), as an individual phenomena pertaining to a subjective claim and self-definition of one's self based on a group (e.g., an organization, one's family, or a social group). By following the scale development procedures used by previous researchers, a 17-item measure was developed to measure organization-based, family-based, and social-based collective identities. For each identity type, items loaded on four dimensions representing self-categorization: placing, self-categorization: goodness-of-fit, attachment, and behavioral involvement. Confirmatory analyses and convergent and discriminant validity were demonstrated in additional samples. Furthermore, a preliminary empirical research model was tested to illustrate predictive validity.

There was support for the scale development and partial support for the preliminary empirical model. However, there are several aspects of the scale development that warrant discussion. The following discussion will be divided into several sections. First, the contributions of the scale development and research model are discussed. Next, the limitations of this dissertation are outlined, followed by suggestions for future research agendas. Lastly, business implications are highlighted before a general, overall discussion of the dissertation is provided.

Contributions

The primary purpose of this dissertation was to develop a scale of collective identity that is self-report and representative of the various dimensions illustrated by Ashmore et al. (2004), which can be adapted to measure any identity type. A hypothesis was offered about the factor structure of the scale (H1). Results from three identity samples revealed support for the hypothesis tested.

Hypothesis 1 received support, in that a factor structure did emerge. However, it was originally hypothesized (in the pilot study) that seven dimensions (i.e., self-categorization, evaluation, attachment, importance, social embeddedness, behavioral involvement, and content and meaning) would be represented by seven distinct factors. Results from several phases of construct development such as item-to-total correlation,

principal component analysis and principle axis factor analysis, confirmatory factor analysis, and internal consistency were undertaken. In the final factor structure, four-factors emerged, representing the collective identity dimensions of self-categorization: placing (F1) and goodness-of-fit (F2), attachment (F3), and behavioral involvement (F4).

Not all of the theoretical dimensions, as described by Ashmore et al. (2004), emerged. Notably, the dimensions of evaluation, importance, social embeddedness, and content and meaning failed to emerge as independent factors. However, the emergence of the three main dimensions is consistent with previous research. Specifically, Lembke and Wilson (1998) noted that team identification was comprised of alignment of three elements: cognitive, behavioral, and emotional. These factors are conceptually similar to the dimensions found in this dissertation. Furthermore, when measured in conjunction with each other, respondents may have difficulty cognitively differentiating between some of the dimensions set forth by Ashmore et al. (2004).

However, at the very minimum, the obtained factor structure does give credence to the CIS and adds to the empirical investigation of identities in organizations. First, factor analyses illustrated that two categories of self-categorization are cognitively different. That is, the CIS measures not only the “placing” of one’s self into a group, but also the “goodness-of-fit” to that group. This is an important distinction that builds beyond previous measures of identity, which focused more on “placing.” The CIS allows researchers to not only examine if individuals feel as though they are part of a group, but also how sure they are if the group represents their internal self.

Second, factor analyses illustrated that the scale can be amenable to the measurement of several identities. That is, a similar factor structure emerged for an organization-based identity, a family-based identity, and a social-based identity. This is a paramount contribution to the organizational sciences. To date, measures have been developed to measure various identities such as organization-based and family-based, but have been limited in examining other identities. The CIS can be amenable to measure identity-types that reside outside of the organization, as well as looking at the various identity-types that reside inside of the organization (e.g., workgroup-based identity, departmental-based identity, etc.).

Confirmatory factor analysis on three additional data sets (i.e., organization-identity data set, family-identity data set, and social-identity data set) generally supported the four-factor model found in the exploratory analysis. Further, additional analyses showed that the item-to-factor paths were equivalent across the three identity data sets when the self-categorization: placing factor in the family-identity data set was isolated. Taken together, the exploratory and confirmatory analyses studies provide support for the CIS scale, which captures three of the dimensions of collective identity proposed by Ashmore et al. (2004). Convergent and discriminant validity hypotheses, overall, were supported, giving more credence that the CIS holds sound psychometric properties.

To demonstrate predictive validity, a research model was tested with the CIS. This preliminary empirical model was developed from a larger, more complex theoretical model proposed in this dissertation. Although some of Hypotheses 21-36 were supported, testing of the research model opens more doors to alternative interpretation than conclusive support for the preliminary empirical model. Specifically, as illustrated by several hypotheses, organization identity influenced the role conflict – strain relationship in a *mitigating* manner rather than the hypothesized *exacerbating* manner. That is, it appears that organization identity actually acts as a resource for individuals when dealing with role conflict. Individuals who have a high organization identity are more resilient to role conflict than those who have a low organization identity.

Furthermore, contrary to the hypotheses, it appears that support actually exacerbated “felt strain” from conflict rather than mitigating strain. Again, this finding is surprising, but previous research on social support provides a theoretical perspective as to how support could positively influence felt strain outcomes as conflict increases. Specifically, Beehr (1994) noted that support can have a reverse buffering effect, where using support actually increases felt strain by adding proverbial fuel to the fire. By examining the items used to measure support, it is possible to conclude that support may have had a reverse buffering effect in the preliminary empirical model. That is, support was measured by members’ willingness to offer advice, which may be ineffective in relieving workplace stressors. Employees may feel that their family members or co-workers are “nagging” them to attempt to change the conflict despite the fact that the members have no real perspective of the conditions.

Additionally, there are several strengths of the predictive validity. Specifically, the research model was tested while controlling for identity or support (whichever was not being tested as a moderator). This process of control allowed examination of the independent effects of identity and support. This is important to note because the theoretical model noted that, although identity and support influence each other, each would have their own main and moderating effects (independent of the other). By finding support for several hypotheses with the controls, it shows that identity and support may be related, yet have their own influence on workplace outcomes.

The second strength of the predictive study was the composition of the sample. Respondents were truly representative of a cross-section of the working population, as the data were not limited to one organizational setting or industry. Thus, the results of the predictive study are, arguably, more generalizable than data collected from a homogeneous group.

Limitations

The main limitation of the exploratory and confirmatory factor analyses is that only three of the seven dimensions outlined by Ashmore et al. (2004) emerged across three separate identity data sets. Although the original goal was to capture all seven dimensions, it is not surprising (after the initial exploratory pilot study) that only three dimensions were found. Albeit a weakness of this dissertation, the findings may simply be a result of the limitation of self-report Likert-type measures. First, it is likely that individuals have trouble cognitively differentiating between social embeddedness and behavioral involvement when addressed in the same survey. Similarly, it is likely that individuals have trouble cognitively differentiating between evaluation, importance, and attachment when addressed in the same survey. Finally, it is doubtful that self-report Likert-type measures could adequately capture the complexity of the content and meaning dimension specified by Ashmore et al. (2004). However, the dimensions that did emerge were consistent with previous research (Lembke & Wilson, 1998).

The second main limitation with the factor analyses is the small sample sizes in each identity data set. Because the covariance matrices significantly differed from each other, the three identity data sets could not be combined. As a result, the adequate number of respondents to conduct an exploratory factor analysis on all of the items

together was not viable. In an untraditional method, exploratory factor analyses were conducted on each of the dimensions independently; and then the reduced scale was combined to an aggregate. Despite the untraditional method, confirmatory factor analyses on the same data sets showed that the final factor structure did fit the original data.

The modest sample size is also one of the main limitations in the predictive study. Due to the small sample size and, thus, lack of statistical power (i.e., power ranged from .02-.27), the results from the preliminary empirical model may be spurious. For instance, when conducting the simple slope analyses, sub-group samples were limited to fewer than 25 respondents. Thus, conclusions and interpretations of these results should be taken cautiously until future researchers are able to replicate this study with a larger sample.

Future Research

Future researchers should continue to investigate the role of identity, support, and workplace stressors on psychological and behavioral outcomes 1) with larger samples, and 2) in alternative models. A larger sample with more statistical power could provide more conclusive evidence regarding the adequacy of the preliminary empirical model. It could be that with more respondents, more of the predictive validity hypotheses will be statistically significant. Just as plausible, it could be that with more respondents, the predictive hypotheses supported in this dissertation will fall short of statistical significance.

For instance, larger samples will allow for alternative and more robust analyses of simple slopes for the interactions. This dissertation reports subgroup analyses when subgroups are composed of respondents that are one standard deviation above or below the mean. Although using this method to determine subgroups minimizes the influence of “on the fence” respondents, the sample size in each group is drastically lower than when using a mean split to determine subgroups. It should be noted that for three of the five interactions, mean split subgroup analyses and mean plus/minus one standard deviation subgroup analyses provided similar results. However, because subgroup analyses for two the interactions differ based on the method of subgroup determination, there is evidence that a larger sample size does influence the interpretation of the

interactions during simple slope analyses. Therefore, future researchers should replicate the preliminary empirical model with larger samples, thus allowing for larger samples during subgroup analyses.

Furthermore, although the preliminary empirical model examined the independent effects of identity and support, irrespective of the other (through control variables), in the theoretical model it is proposed that these two variables will have an influence on each other. Thus, it maybe fruitful to examine more complex models encompassing empirical investigation of three-way interactions between conflict, identity, and support.

This primary goal of this dissertation was to develop a new measure of identity which could be easily amenable to various identity-types. This is an important step on which future researchers should build. With the CIS, researchers can explore the effects of various identity-types on several organizational variables. For instance, leadership scholars could examine various identities in the leadership process. Perhaps transformational or charismatic leadership is a more effective style when leaders and followers have similar central salient identities while transactional leadership is a more effective style when leaders and followers have differing central salient identities.

Furthermore, examining a variety of identity-types could be useful in understanding motivational processes. For instance, motivational researchers could explore the differences in reward preferences based on central identities. Perhaps employees with an organization-based central salient identity will be more receptive to intrinsic rewards (e.g., recognition) than employees with a family- or social-based central salient identity. Perhaps employees with a family-based central salient identity are more responsive to family friendly human resource policies (e.g., “flextime”) than employees who have an organization-based central salient identity.

Finally, exploring various identities could be useful for explaining ethical and unethical behavior in the workplace. The results of many organizational identity studies, as well as the results of this dissertation, note that there are benefits to employing individuals with high organization-based identity. These employees tend to be more psychologically resilient to workplace stressors. However, it could be that organizations that are homogeneous with high organization-based identity have a higher degree of unethical behavior. That is, because individuals with high identity tend to behave in a

similar manner, any unethical behavior occurring would appear to be the norm. Therefore, unethical behavior would be more likely to spread through an organization when all employees have a high organization-based identity. Perhaps employing individuals with diverse identity-types would act as an ethical checks and balances for organizations.

These are just a few examples of how future researchers could extend the progress made in this dissertation. Exploring various identities outside of the organization is an area of research in infancy. Future research should continue to explore the role of various identities in the workplace in other areas such as understanding and perceptions of organizational politics, turnover intentions, in-role and extra-role behaviors, etc.

Implications for Business

From a managerial perspective, this dissertation's findings are paramount. First, managers should be aware that individuals develop salient central identities that are not limited to the workplace. These salient identities are likely to influence workplace behaviors and cognitive states, as illustrated in the predictive hypotheses. By being aware that a vast array of identities influence employees at work, managers can better recognize what factors motivate and demotivate their employees.

Second, the results from the predictive hypotheses do highlight the importance of matching the appropriate social support with the stressor causing strain. Managers should be aware of this, noting that sometimes they might not be in the best position to help relieve employee strain. That is, if managers are able to recognize sources of strain (perhaps based on employees' identities), then they may be able to better guide their employees to the appropriate support. For instance, the predictive validity study showed that family support may not be the best source of support when dealing with work-family conflict. When a manager recognizes that an employee is feeling strain due to work-family conflict, managers may lead the troubled employees to fellow workers with a similar family identity. In doing so, the manager can match the stressor with a support system that can actively help relieve strain (e.g., co-workers who can empathize).

General Conclusion

Taken together, the eight studies in this dissertation empirically illustrate the sound psycho-symmetric properties of a new scale of identity: the Collective Identity

Scale (CIS). The CIS is designed to be easily amenable to any identity type, as this dissertation illustrated with an organization-based identity, a family-based identity, and a social-based identity. Further, this dissertation partially tests a theoretical model that examines the interactive influence of identity, support, and strain.

End Notes

¹ Percentage calculated by dividing 40 working hours per week/[$(24\text{hours per day} - 8\text{ hours of sleep}) \times 7\text{ days per week}$] = 35.7%; 60 working hours per week/[$(24\text{hours per day} - 8\text{ hours of sleep}) \times 7\text{ days per week}$]=53.6%

² In the transition from P2 to P3, there is a need for clarification of terms. First, here I refer to central collective identities, in the plural, where earlier in the text it is implied that individuals prefer one collective identity (i.e., one central collective identity). It is here proposed that individuals cognitively whittle down their collective identities to arrive at one central collective identity. So, first there is a distinction between general central identities and peripheral identities (P2); then, there is a distinction between the central identities in P2 and the one central collective identity (P3).

³ Confirmatory Factory Analyses Studies were conducted in a subsequent semester to Exploratory Factory Analyses Studies. Any student had participated in Exploratory Factory Analyses Studies was given an alternative opportunity to gain course credit, such that no one student participated in data collection in Exploratory Factory Analyses Studies and Confirmatory Factory Analyses Studies.

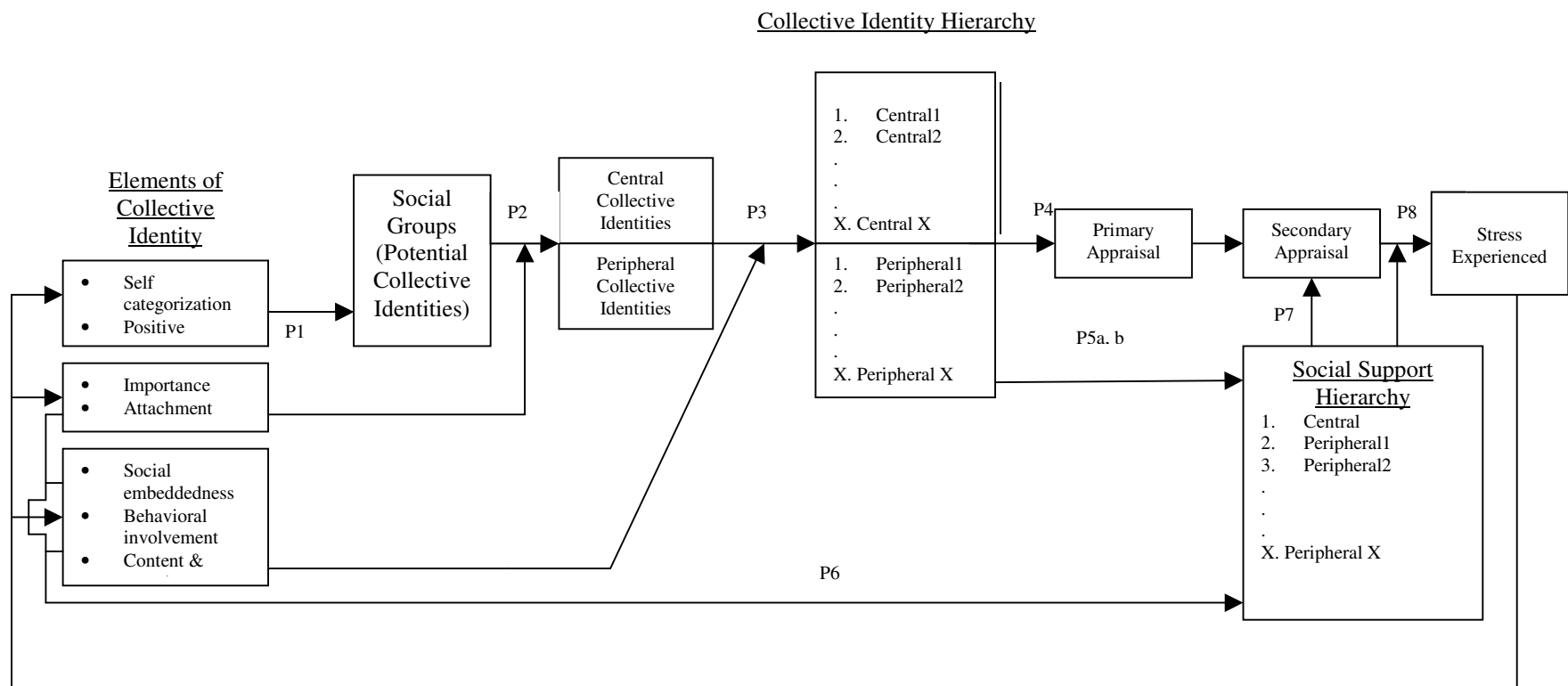


Figure 1. Theoretical Model

p9

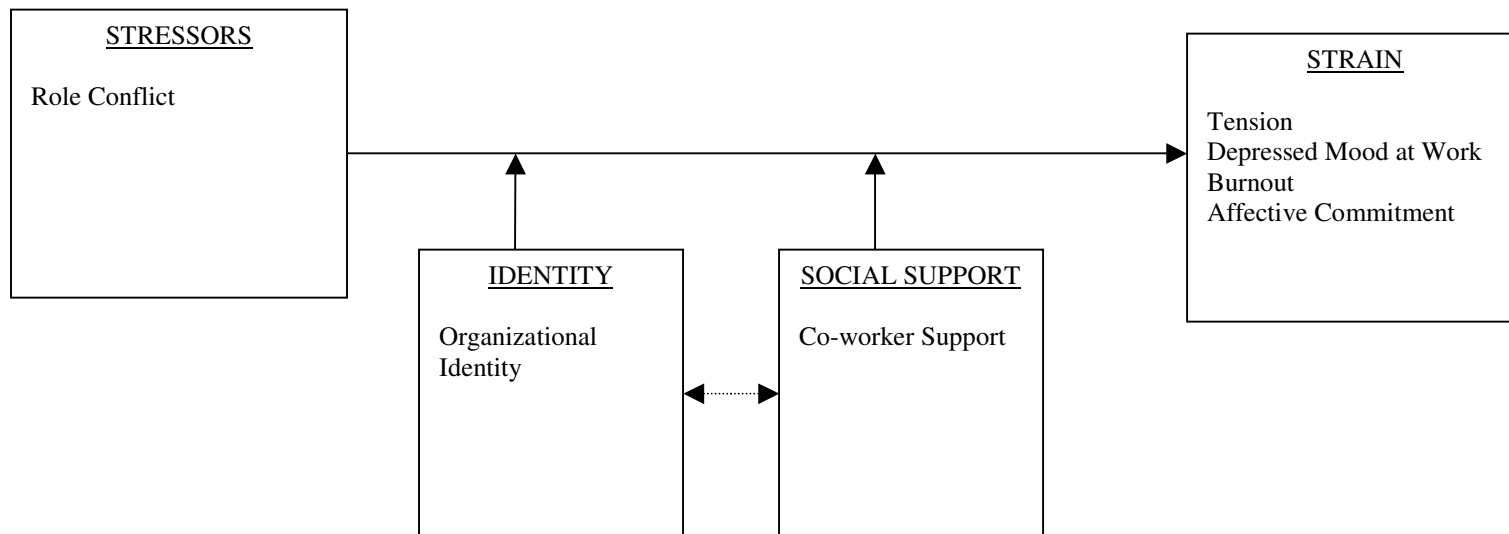


Figure 2: Model for Predictive Validity: Organizational Antecedents

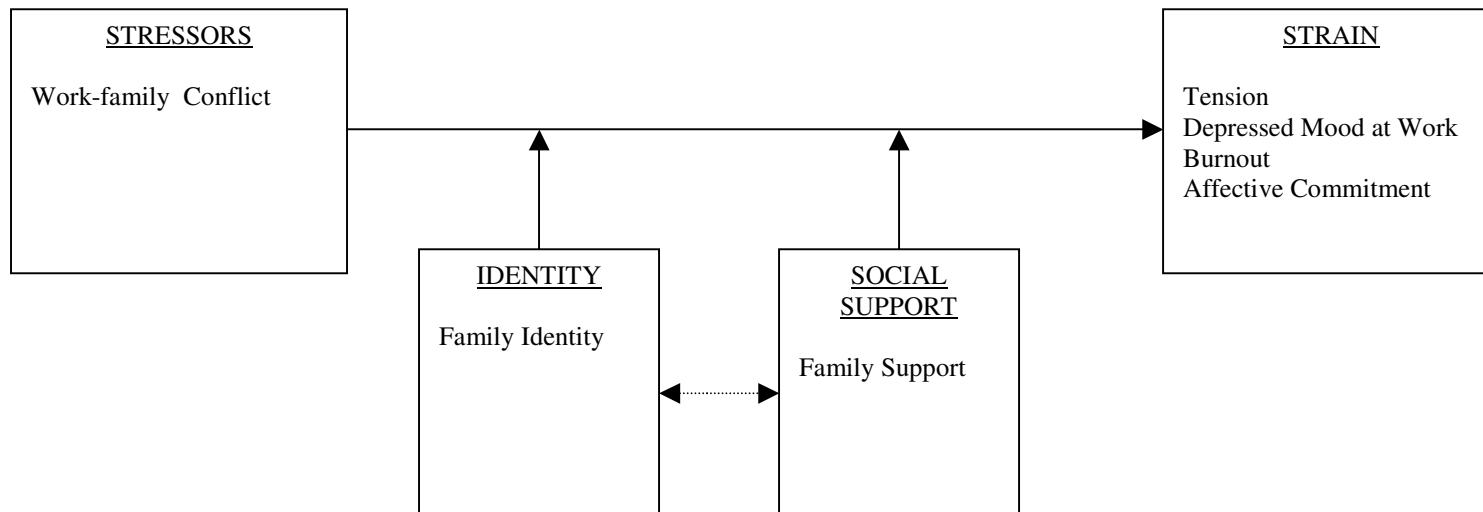


Figure 3: Model for Predictive Validity: Family Antecedents

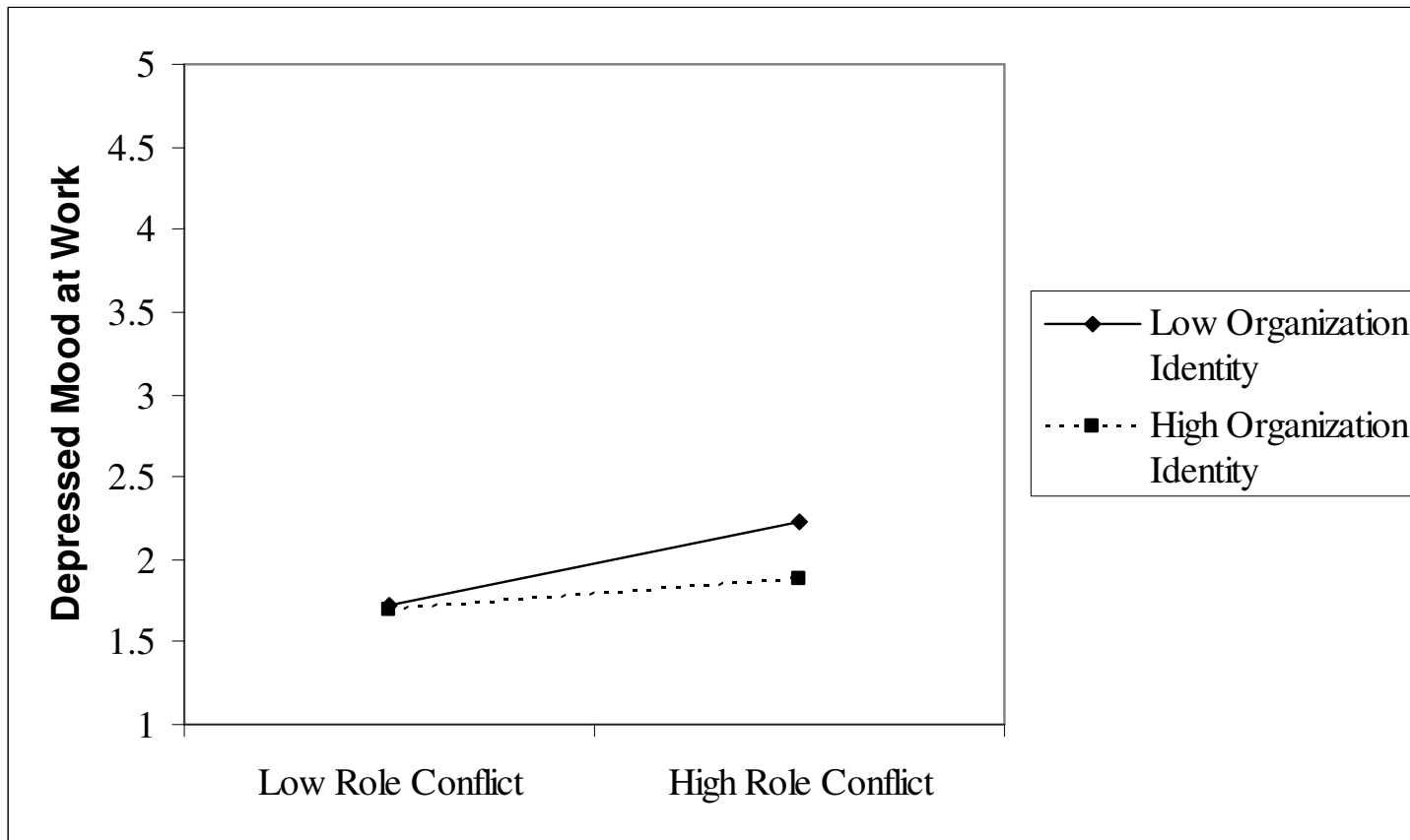


Figure 4. Role Conflict, Organization Identity and Depressed Mood at Work,

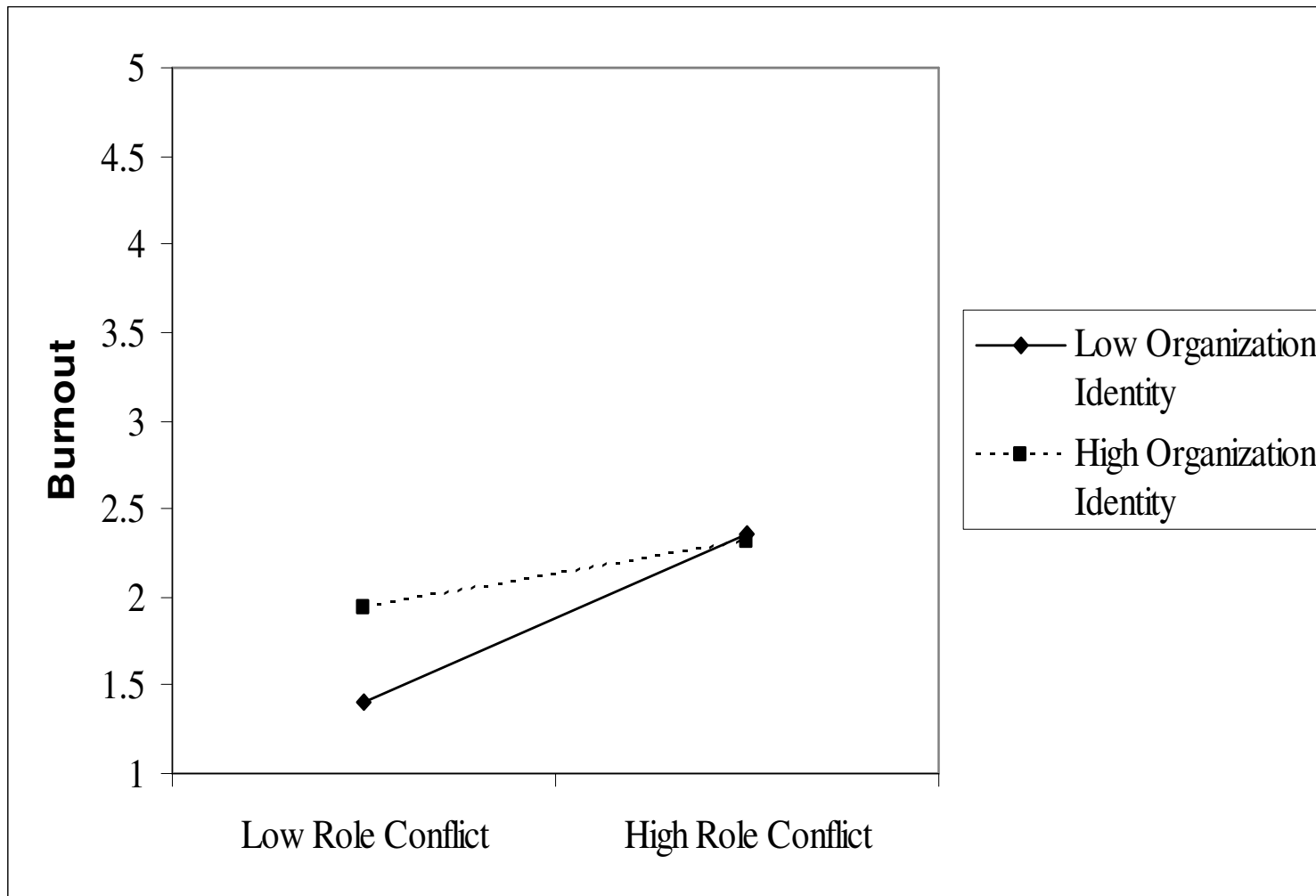


Figure 5. Role Conflict, Organization Identity, and Burnout (Constant moved from 1.168 to 2.000 for graphing.)

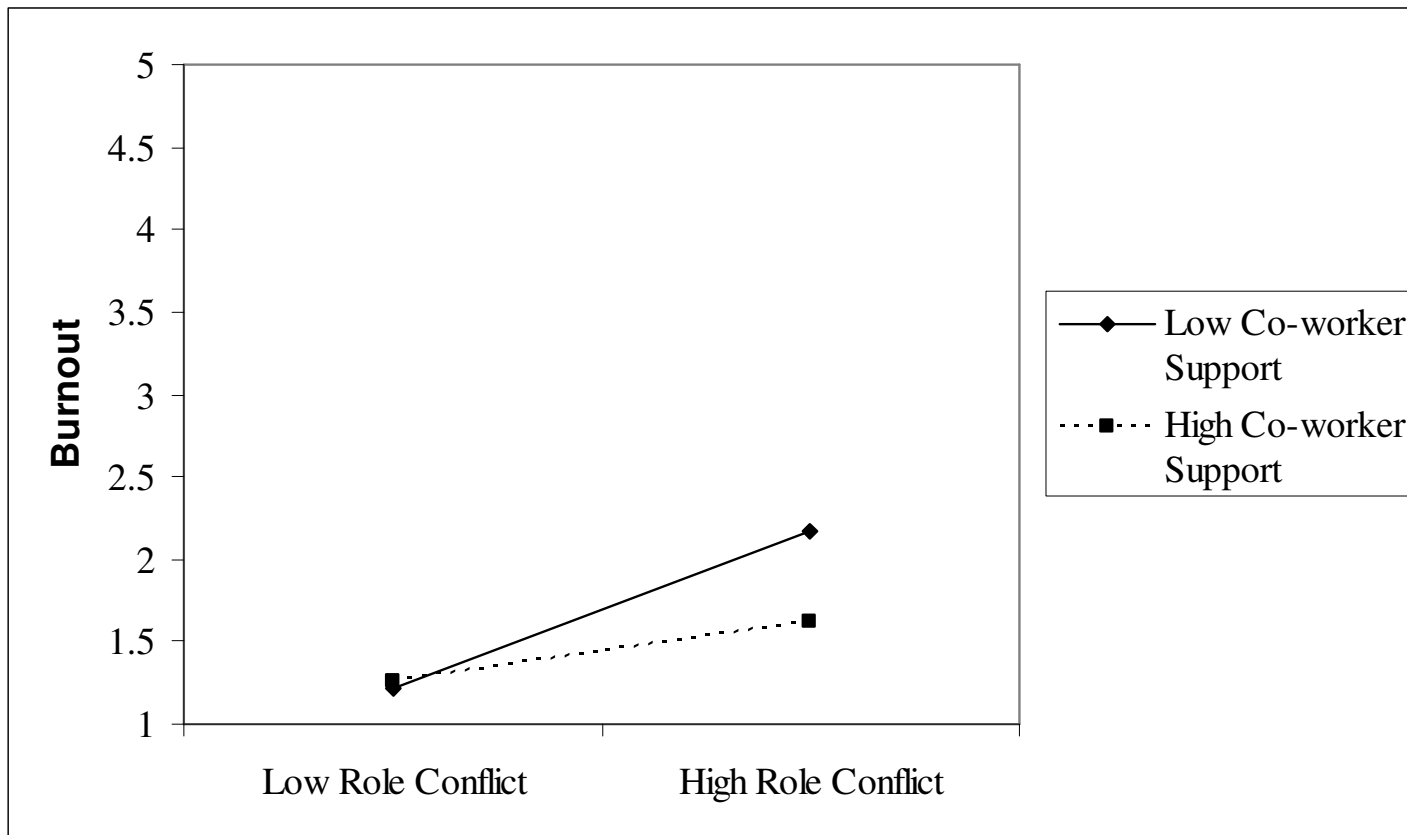


Figure 6. Role Conflict, Co-worker Support, and Burnout

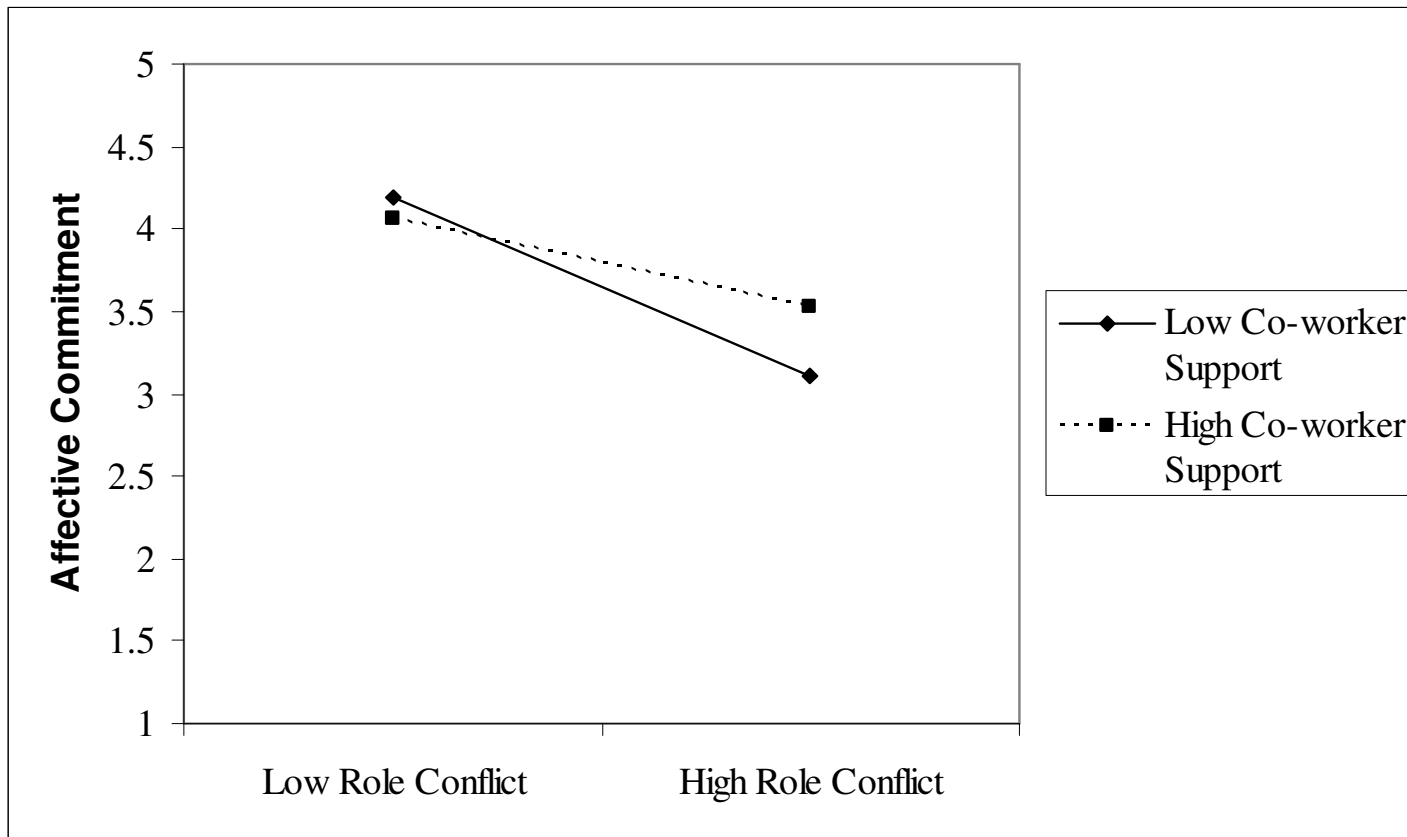


Figure 7. Role Conflict, Co-worker Support, and Affective Commitment

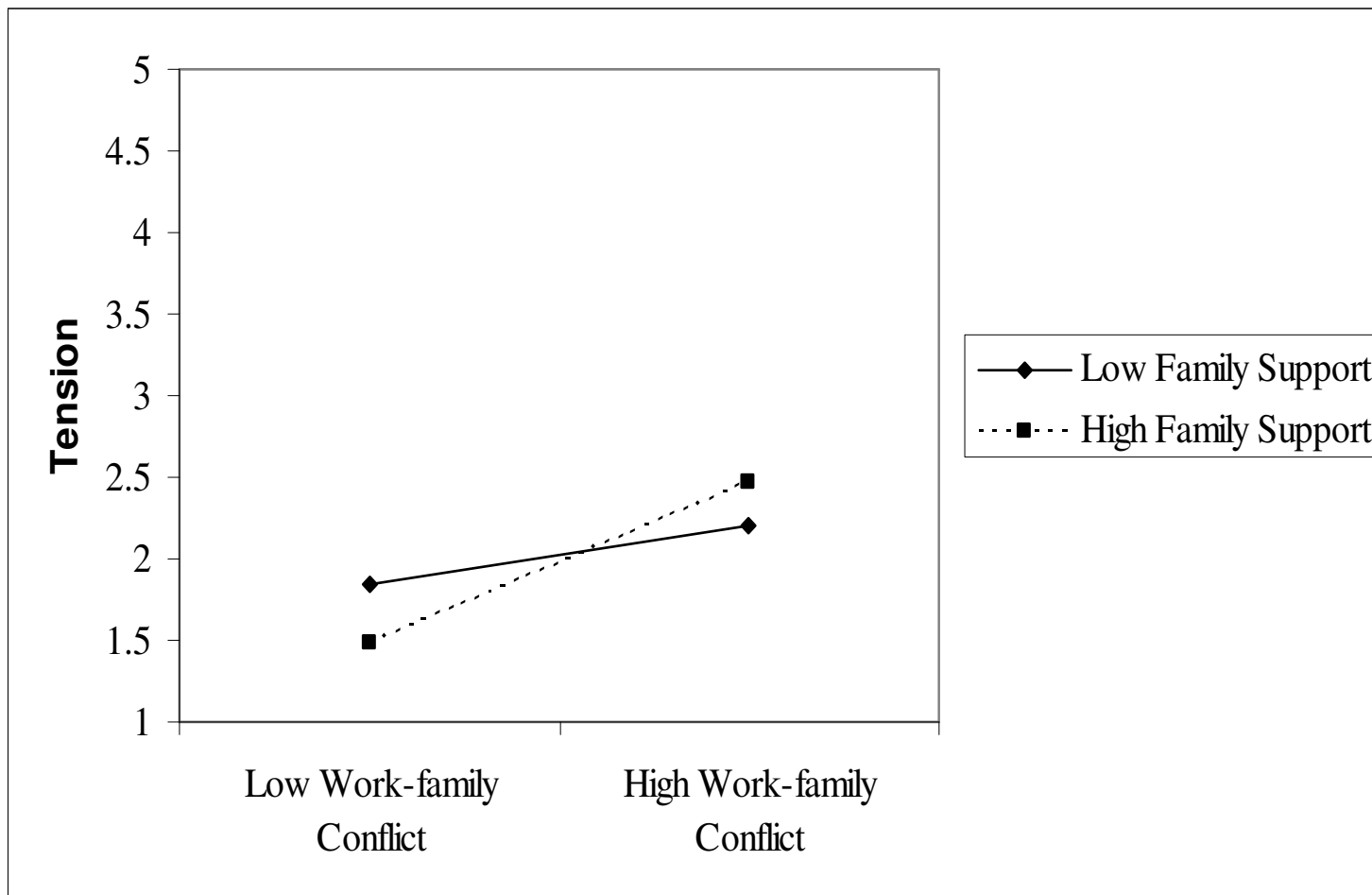


Figure 8. Work-family Conflict, Family Support, and Tension (Constant moved from 1.480 to 2.000 for graphing.)

APPENDIX A - COLLECTIVE IDENTITY SCALE

In this section, please indicate how you feel about the following statements using the scale provided.

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

1. **I am a member of the student body** _____
2. **I consider myself a student** _____
3. **If asked if I belonged at school, I would say “yes”** _____
4. **I perceive myself to be similar to other students** _____
5. **I am a typical member of the student body** _____
6. **I have attitudes, traits, features, and behaviors that are normal for a student** _____
7. **I represent a typical student** _____
8. **I feel as though I belong in school** _____
9. **I am certain that I should belong to the student body** _____
10. I feel as though other may think that I am not a member of the student body _____
11. Sometimes I wonder if I am in the right ‘job’ _____
12. I like being a member of the student body _____
13. Student are a good group _____
14. I view students in a negative light _____
15. **When I think of other students, I predominately think good thoughts** _____
16. **My friends/family view students positively** _____
17. No one I know likes students _____
18. I feel that students have a good reputation _____
19. I am weary of telling people I am a student because of the negative reaction I often receive _____
20. **I define myself as a student** _____
21. **Being a student is the most significant dimension of me** _____
22. **Above everything else in the world, being a student is the most important to me** _____
23. I derive the most meaning and internal satisfaction from events that occur at school _____
24. What is bad for students is bad for me _____
25. I am often treated a certain way because I am a student _____
26. I feel as though individuals apply general stereotypes to because I am a student _____
27. I feel as though I belong with other students _____
28. I am emotionally attached to school _____
29. When something bad happens students, I personally feel hurt _____
30. When students succeeds, I feel as though I have succeeded _____

- | | |
|--|-------|
| 31. When students are in pain, I empathize | _____ |
| 32. I spend most of my time with other students | _____ |
| 33. I enjoy interacting with other students | _____ |
| 34. When I have a problem, I will call another student first for advice | _____ |
| 35. On the weekends, I would prefer to associate to with other students | _____ |
| 36. When associating with students, I opening engage in conversation | _____ |
| 37. I often wear clothing that reflects that I am a student | _____ |
| 38. At work, I decorate my “office space” with pictures of school | _____ |
| 39. At home, I have lots of school paraphernalia | _____ |
| 40. I enjoy going to “student social functions” | _____ |
| 41. I have a bumper sticker that illustrates that I am a student | _____ |
| 42. I have many of the characteristics of a typical student | _____ |
| 43. As with many students, I would note that I am studious | _____ |
| 44. I have a general understanding of the history of my school | _____ |
| 45. I understand students’ place in society | _____ |
| 46. I have an unique story of my associating with school | _____ |
| 47. I remember when I became a student | _____ |

Bold Faced Items Retained in Final Factor Structure

Table 1. Pattern Matrix from Principal Component with Oblimin Rotation

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7
CI4	.82	.01	-.07	-.10	.06	.01	.01
CI5	.80	-.12	-.03	.01	.01	-.03	.05
CI7	.789	-.07	-.15	.11	.01	-.03	.05
CI6	.67	-.17	.00	.04	.14	-.13	-.05
CI3	.123	-.84	.09	.04	.14	.08	.03
CI1	.03	-.77	-.17	-.20	-.04	-.03	.030
CI8	.11	-.72	.18	.23	.08	-.30	.01
CI2	.08	-.69	-.22	-.10	-.23	-.04	.02
CI9	.067	-.66	-.00	.12	.20	-.05	.07
CI12	.13	-.46	-.24	.19	.06	-.23	-.03
CI16	.08	-.13	-.79	-.05	.06	.09	.04
CI15	.09	.03	-.78	.13	-.04	.012	-.04
CI24	.156	.06	-.41	.09	.3	-.17	.06
CI20	.11	-.27	-.03	.68	-.26	-.26	-.14
CI21	.30	.06	-.06	.67	-.10	.02	.11
CI22	-.03	-.04	-.00	.66	.10	.24	.36
CI31	-.25	.01	-.23	.58	.30	-.13	-.02
CI44	.01	-.25	.06	-.11	.79	-.02	.10
CI45	.17	.10	-.07	-.04	.71	-.10	-.12
CI30	-.02	.10	-.27	.33	.49	-.09	.06
CI18	.25	-.14	-.16	.07	.48	.32	.15
CI35	.16	-.05	.21	.10	.12	-.69	.14
CI33	.20	.23	-.06	.00	.02	-.60	.21
CI37	-.00	-.40	-.04	.17	-.03	-.60	-.05
CI34	.21	-.11	.14	.09	.06	-.44	.15
CI25	-.12	-.16	-.19	-.19	-.10	-.47	.18
CI38	-.01	-.09	-.04	-.02	-.11	.05	.90
CI39	.11	.02	-.03	-.01	-.03	-.17	.70
CI41	-.02	.07	.15	.12	.15	-.18	.66
Eigenvalues	9.13	2.64	2.08	1.62	1.34	1.20	1.06
Percentage Explained	31.47	9.09	7.18	5.57	4.61	4.12	3.66
Cum. Percentage Explained	31.47	40.56	47.74	53.31	57.92	62.05	65.70

Table 2. Pattern Matrix from Principal Axis Factor with Oblimin Rotation

	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7
CI3	.83	.00	-.07	.03	-.13	.02	-.08
CI1	.73	.05	.14	-.19	-.03	-.05	.03
CI8	.65	-.03	-.13	.22	-.10	-.08	-.07
CI2	.63	.03	.18	-.07	-.05	-.04	.15
CI9	.61	.04	-.00	.156	-.07	-.00	-.23
CI38	.07	.77	.06	-.01	-.00	-.01	.10
CI39	-.01	.59	.03	.017	-.09	-.12	-.05
CI41	-.07	.51	-.13	.17	-.00	-.15	-.14
CI16	.08	.08	.84	-.02	.02	.04	-.11
CI15	-.05	-.04	.59	.11	-.10	-.01	-.05
CI22	.03	.22	.02	.61	.01	.134	-.10
CI20	.18	-.18	.10	.59	.01	-.37	.18
CI21	-.08	.06	.101	.56	-.20	-.08	.03
CI7	-.02	.02	.07	.07	-.91	-.02	.09
CI5	.09	.03	-.06	-.00	-.88	.02	.03
CI4	.00	.02	.03	-.05	-.72	.05	-.07
CI6	.10	-.05	.00	.00	-.63	-.16	-.09
CI35	-.09	.15	-.09	-.06	.07	-.79	-.12
CI33	.27	.00	.10	.05	.02	-.56	.01
CI34	.01	.14	.00	.02	-.10	-.51	-.05
CI44	.19	.07	.04	-.04	.01	-.06	-.70
CI45	-.09	-.06	.14	.02	-.08	-.05	-.64
α	.86	.72	.73	.70	.90	.74	.67
Eigenvalues	7.41	2.25	1.71	1.42	1.20	1.07	1.00
Percentage Explained	33.66	10.21	7.77	6.64	5.44	4.86	4.55
Cum. Percentage Explained	33.66	43.87	51.04	58.07	63.51	68.37	72.23

APPENDIX B – EXPLORITORY AND CONFIRMITORY ANALYSES

Table 3a. Pattern Matrix from Principle Axis Factor with Oblimin Rotation

	SC: Placing	SC: Goodness- of-fit	Attachment	Behavioral Involvement
Org. Data Set				
Item 1	0.89			
Item 2	0.82			
Item 3	0.48			
Item 4		-0.41		
Item 6		-0.69		
Item 7		-0.85		
Item 29			0.84	
Item 30			0.85	
Item 31			0.81	
Item 37				0.47
Item 38				0.66
Item 39				0.65
Item 41				0.59
Soc Data Set				
Item 1	0.91			
Item 2	1.00			
Item 3	0.84			
Item 4		0.68		
Item 6		0.70		
Item 7		0.67		
Item 29			-0.80	
Item 30			-0.79	
Item 31			-0.70	
Item 37				0.74
Item 38				0.64
Item 39				0.60
Item 41				0.81
Fam Data Set				
Item 1	-0.89			
Item 2	-0.85			
Item 3	-0.99			
Item 4		0.79		
Item 6		0.68		
Item 7		0.79		
Item 29			-1.04	
Item 30			-0.69	
Item 31			-0.70	
Item 37				0.56
Item 38				0.52
Item 39				0.35
Item 41				0.82

Table 3b: Eigenvalues, Variance Explained, and Reliabilities
% of Variance

	Eigenvalues	Explained	Reliabilities
Org Data Set			
Attachment	3.74	28.79	0.87
SC: Placing	1.97	15.18	0.77
Behavioral			
Involvement	1.62	12.46	0.69
SC: Goodness-of-fit	1.43	10.97	0.69
Soc Data Set			
SC: Placing	4.64	35.73	0.96
Behavioral			
Involvement	2.37	18.22	0.78
Attachment	1.60	12.29	0.82
SC: Goodness-of-fit	1.16	8.96	0.79
Fam Data Set			
SC: Goodness-of-fit	4.48	34.49	0.93
SC: Placing	2.20	16.93	0.81
Behavioral			
Involvement	1.49	11.45	0.68
Attachment	1.23	9.44	0.86

Table 4: Correlations between Factors

	SC: Placing	SC: Goodness- of-fit	Attachment
Org Data Set			
SC: Placing	1		
SC: Goodness-of-fit	.31**	1	
Attachment	.22*	.23*	1
Behavioral Involvement	0.18	.20*	.28**
Soc Data Set			
SC: Placing	1		
SC: Goodness-of-fit	.53**	1	
Attachment	.38**	.31**	1
Behavioral Involvement	0.14	0.15	.26**
Fam Data Set			
SC: Placing	1		
SC: Goodness-of-fit	.43**	1	
Attachment	.22*	.36**	1
Behavioral Involvement	.2*	.25**	.38**
** p-value<.01 (2-tailed)			
* p-value<.05 (2-tailed)			

Table 5: CFA on Exploratory Data Sets

	χ^2	df	GFI	RMSEA
Org Data Set	78.97*	59	0.91	0.054
Soc Data Set	90.5**	59	0.9	0.065
Fam Data Set	81.75*	59	0.91	0.056

**p-value<.01

*p-value<.05

df=degrees of freedom

GFI=Goodness of Fit Index

RMSEA=Root Mean Square Error of
Approximation

Table 6: CFA on Confirmatory Data Sets

	χ^2	df	GFI	RMSEA
Org Data Set	128.03**	59	0.88	0.09
Soc Data Set	119.70**	59	0.89	0.081
Fam Data Set	64.03	59	0.94	0.024

**p-value<.01

df=degrees of freedom

GFI=Goodness of Fit Index

RMSEA=Root Mean Square Error of
Approximation

Table 7, 8, and 9: Convergence Between Data Sets

Table 7

3 IDs/13 items	Model	χ^2	df	$\Delta \chi^2$	Δdf	GFI	RMSEA
	Base	263.57	177	NA	NA	0.9	0.057
	1: LX=IN	332.46	195	68.89	18	0.89	0.067
	2: LX=IN, PH=IN	457.02	215	124.56	20	0.87	0.083
	3: LX=IN, PH=IN, TD=IN	1011.77	241	554.75	26	0.82	0.14

Table 8

3 IDs/10 items	Model	χ^2	df	$\Delta \chi^2$	Δdf	GFI
	Base	157.48	96	NA	NA	0.92
	1: LX=IN	175.86	110	18.38	14	0.91
	2: LX=IN, PH=IN	198.54	122	22.68	12	0.91
	3: LX=IN, PH=IN, TD=IN	290.48	142	91.94	20	0.89

Table 9

2 ID

(org/soc)/13

items	Model	χ^2	df	$\Delta \chi^2$	Δdf	GFI	RMSEA
	Base	174.28	118	NA	NA	0.9	0.058
	1: LX=IN	211.52	127	37.24	9	0.9	0.069
	2: LX=IN, PH=IN	221.47	137	9.95	10	0.89	0.064
	3: LX=IN, PH=IN, TD=IN	373.92	150	152.45	13	0.82	0.091

APPENDIX C - CIS ITEMS AND PAF RESULTS FOR RESEARCH SAMPLE

Self-categorization: placing

1. I am a member of this _____.
2. I consider myself a member of this _____.
3. If asked if I belong to this _____, I would say “yes”.
4. I would categorize myself as a member of this _____.
5. I do not consider myself a member of this _____. (**Reverse Coded**)

Self-categorization: goodness-of-fit

1. I perceive myself to be similar to other members of this _____.
2. I have attributes, traits, features, and behaviors that are normal for a member of this _____.
3. I represent a typical member of this _____.
4. I am like other members of this _____.

Attachment

1. When something bad happens to this _____, I personally feel hurt.
2. When this _____ is in pain, I empathize.
3. I have a feeling of connection with this _____.
4. I am personally concerned about what happens to other members of this _____.

Behavioral Involvement

1. I often wear clothing that reflects that I am a member of this _____.
2. At work, I decorate my “office space” with pictures pertaining to this _____.
3. At home, I have lots of _____ paraphernalia.
4. I display objects (i.e., bumper sticker, pins, tee-shirts, etc.) that illustrate that I am member of this _____.

Table 10. Pattern Matrix(a) – Organization-based Identity

	Component			
	1	2	3	4
OCIS3	.87			
OCIS5	.87			
OCIS1	.83			
OCIS2	.70			
OCIS4	.37			
OCIS19		.84		
OCIS18		.79		
OCIS17		.75		
OCIS16		.30		
OCIS6			.82	
OCIS8			.80	
OCIS7			.78	
OCIS10			.73	
OCIS13				-.93
OCIS11				-.85
OCIS15				-.74
OCIS14				-.70

Extraction Method: Principal Component Analysis. Rotation Method: Oblimin with Kaiser Normalization.

a Rotation converged in 7 iterations.

Table 11. Pattern Matrix(a) – Family-based Identity

	Factor		
	1	2	3
FCIS10	.95		
FCIS6	.78		
FCIS8	.75		
FCIS7	.68		
FCIS19		.76	
FCIS16		.65	
FCIS18		.64	
FCIS17		.58	
FCIS13			-.83
FCIS11			-.68
FCIS14			-.63
FCIS15			-.62

Extraction Method: Principal Axis Factoring. Rotation Method: Oblimin with Kaiser Normalization.

a Rotation converged in 8 iterations. Self-categorization: placing was not included because including these 5 items prevented convergence (assumedly because of the lack of variance for this dimension for this identity type).

Table 12. Pattern Matrix(a) – Social-based Identity

	Factor			
	1	2	3	4
SCIS13	.85			
SCIS14	.84			
SCIS15	.82			
SCIS11	.69			
SCIS2		-.97		
SCIS1		-.97		
SCIS3		-.96		
SCIS4		-.84		
SCIS5		-.72		
SCIS19			.92	
SCIS18			.83	
SCIS17			.54	
SCIS16			.51	
SCIS8				-.94
SCIS10				-.90
SCIS6				-.75
SCIS7				-.63

Extraction Method: Principal Axis Factoring. Rotation Method: Oblimin with Kaiser Normalization.

a Rotation converged in 10 iterations.

APPENDIX D: CONVERGENT, DISCRIMINAT, AND PREDICTIVE HYPOTHESES

Table 13. Bi-variate Correlations between Main Variables of Interest

	Gen	Ten	Org Id	Fam Id	Soc Id	Role Con	WF Con	POPs	Cowrk Sup	Fam Sup	PA	NA	Aff Com	DMW	Brnout	Tnsn
μ	1.52	10.25	3.75	4.35	3.82	2.29	2.21	2.65	3.85	3.94	3.81	1.66	4.52	1.72	2.37	2.86
S.D.	0.50	08.90	0.62	0.47	0.60	0.82	1.06	0.66	0.95	1.05	0.61	0.52	0.83	0.48	0.89	0.89
Gen	1															
Ten	-.19	1														
OrgId	-.07	.21*	1													
FamId	-.01	.24*	.53*	1												
SocId	-.08	.03	.42**	.20*	1											
Role Con	.16	-.14	-.43**	-.27**	-.37**	1										
WF Con	.12	-.12	-.05	-.05	-.01	.19	1									
POPs	.15	-.14	-.42**	-.21*	-.40**	.55**	.18	1								
Cowrk Sup	.06	.28**	.26*	.18	.07	-.17	-.17	-.27**	1							
Fam Sup	-.07	.05	.17	.26*	.13	-.21*	-.28**	-.12	.27**	1						
PA	-.03	.10	.23*	.13	.18	-.39**	-.36**	-.23*	.21**	.26*	1					
NA	-.06	-.04	-.05	.01	-.08	.28**	.18	.14	-.17	-.02	-.35**	1				
Aff Com	.00	.12	.44**	.15	.34**	-.53**	-.24*	-.37**	.18	.20	.59**	-.26*	1			
DMW	-.03	-.09	-.27**	-.09	-.18	.38**	.32**	.32**	-.14	-.02	-.47**	.47**	-.44**	1		
Brnt	.03	.01	-.08	-.02	-.16	.31**	.29**	.20	-.13	-.16	-.46**	.52**	-.37**	.64**	1	
Tnsn	.03	.23*	-.00	.03	-.15	.20*	.34**	.12	.10	-.08	-.24*	.41**	-.26**	.49**	.62**	1

Table 14: Bi-variate Correlations of Organization Identity, Sub-dimensions, and Support

	Total Organization Identity	SC: placing	SC: goodness-of- fit	Attachment	Behavioral Involvement
Co-worker Support	.255**	.121	.283**	.254*	.056
Family Support	.169	.174	.087	.136	.088
Outside- discussion Support	.171	-.059	.222*	.098	.135
Reward- discussion Support	.448**	.236*	.190	.416**	.357**
Empathetic- discussion Support	.205**	.128	.089	.168	.163

**p-value<.001; *p-value<.05; ^t p-value<.10

Table 15: Bi-variate Correlations of Family Identity, Sub-dimensions, and Support

	Total Family Identity	SC: placing	SC: goodness-of-fit	Attachment	Behavioral Involvement
Co-worker Support	.176	.085	.217**	.159	.079
Family Support	.261*	.126	.276**	.320**	.102
Outside-discussion Support	-.027	-.069	.079	-.019	-.082
Reward-discussion Support	.137	-.007	.133	.152	.109
Empathetic-discussion Support	.087	-.033	.105	.142	.037

**p-value<.001; *p-value<.05; ^t p-value<.10

Table 16: Bi-variate Correlations of Social Identity, Sub-dimensions, and Support

	Total Social Identity	SC: placing	SC: goodness-of-fit	Attachment	Behavioral Involvement
Co-worker Support	.068	-.170	.025	.195	.152
Family Support	.131	.056	.111	.111	.093
Outside-discussion Support	.226*	.146	.232*	.184	.108
Reward-discussion Support	.167	.004	.065	.173	.219*
Empathetic-discussion Support	.208*	.116	.142	.152	.190

**p-value<.001; *p-value<.05; ^t p-value<.10

Table 17: Bi-variate Correlations of Organization Identity, Family Identity, Social Identity, and Other Convergent and Discriminant Validity Variables

	Total Organization Identity	Total Family Identity	Total Social Identity
Resources	.273**	.456**	.196
Perceptions of Organization Politics	-.423**	-.215**	-.398**
Affective Commitment	.436**	.145	.338**
Social Desirability	-.004	-.052	-.095
Positive Affect	.233**	.125	.176
Negative Affect	-.051	.013	-.083

**p-value<.001; *p-value<.05; ^t p-value<.10

Table 18: Role Conflict, Organization Identity, and Tension

Step and Variable	β	F	Total R^2	ΔR^2
Step 1: Controls		.513	.011	.011
Gender	-.03			
Co-worker Support	.13			
Step 2: Main Effects		2.586	.065	.054
Role Conflict (A)	.24*			
Organization Identity (B)	.09			
Step 3: Two-way Interaction		2.434	.090	.025
A x B	-.16			

N=94; **p-value<.001; *p-value<.05; ^t p-value<.10

β =Standardized Coefficients

Table 19: Role Conflict, Organization Identity, and Depressed Mood at Work

Step and Variable	β	F	Total R^2	ΔR^2
Step 1: Controls		.876	.019	.019
Gender	-.09			
Co-worker Support	-.04			
Step 2: Main Effects		8.029	.167	.149
Role Conflict (A)	.29**			
Organization Identity (B)	-.11			
Step 3: Two-way Interaction		5.207	.213	.046
A x B	-.22*			

N=94; **p-value<.001; *p-value<.05; ^t p-value<.10

β =Standardized Coefficients

Table 20: Role Conflict, Organization Identity, and Burnout

Step and Variable	β	F	Total R^2	ΔR^2
Step 1: Controls		.900	.019	.019
Gender	-.02			
Co-worker Support	-.09			
Step 2: Main Effects		4.490	.109	.090
Role Conflict (A)	.30*			
Organization Identity (B)	.10			
Step 3: Two-way Interaction		4.820	.156	.046
A x B	-.22*			

N=93; **p-value<.001; *p-value<.05; ^t p-value<.10

β =Standardized Coefficients

Table 21: Role Conflict, Organization Identity, and Affective Commitment

Step and Variable	β	F	Total R^2	ΔR^2
Step 1: Controls		1.572	.033	.033
Gender	.07			
Co-worker Support	.05			
Step 2: Main Effects		20.757	.338	.305
Role Conflict (A)	-.42**			
Organization Identity (B)	.24*			
Step 3: Two-way Interaction		.352	.341	.003
A x B	.05			

N=94; **p-value<.001; *p-value<.05; ^t p-value<.10

β =Standardized Coefficients

Table 22: Role Conflict, Co-worker Support, and Tension

Step and Variable	β	F	Total R^2	ΔR^2
Step 1: Controls		.030	.001	.001
Gender	-.03			
Organization Identity	.09			
Step 2: Main Effects		3.085	.065	.064
Role Conflict (A)	.24*			
Co-worker Support (B)	.10			
Step 3: Two-way Interaction		1.709	.082	.018
A x B	-.14			

N=94; **p-value<.001; *p-value<.05; ^t p-value<.10

β =Standardized Coefficients

Table 23: Role Conflict, Co-worker Support, and Depressed Mood at Work

Step and Variable	β	F	Total R^2	ΔR^2
Step 1: Controls		4.005	.080	.080
Gender	-.08			
Organization Identity	-.13			
Step 2: Main Effects		4.711	.167	.087
Role Conflict (A)	.31*			
Co-worker Support (B)	-.06			
Step 3: Two-way Interaction		.869	.175	.008
A x B	-.09			

N=94; **p-value<.001; *p-value<.05; ^t p-value<.10

β =Standardized Coefficients

Table 24: Role Conflict, Co-worker Support, and Burnout

Step and Variable	β	F	Total R^2	ΔR^2
Step 1: Controls		.397	.009	.009
Gender	-.01			
Organization Identity	.09			
Step 2: Main Effects		5.027	.109	.101
Role Conflict (A)	.30*			
Co-worker Support (B)	-.13			
Step 3: Two-way Interaction		3.178	.140	.031
A x B	-.18 ^t			

N=93; **p-value<.001; *p-value<.05; ^t p-value<.10

β =Standardized Coefficients

Table 25: Role Conflict, Co-worker Support, and Affective Commitment

Step and Variable	β	F	Total R^2	ΔR^2
Step 1: Controls		10.749	.189	.189
Gender	.08			
Organization Identity	.23*			
Step 2: Main Effects		10.122	.338	.149
Role Conflict (A)	-.40**			
Co-worker Support (B)	.08			
Step 3: Two-way Interaction		4.017	.367	.029
A x B	.17*			

N=94; **p-value<.001; *p-value<.05; ^t p-value<.10

β =Standardized Coefficients

Table 26: Work-family Conflict, Family Identity, and Tension

Step and Variable	β	F	Total R^2	ΔR^2
Step 1: Controls		.324	.007	.007
Gender	-.03			
Family Support	-.03			
Step 2: Main Effects		5.888	.121	.114
Work-family Conflict (A)	.38**			
Family Identity (B)	.13			
Step 3: Two-way Interaction		2.282	.142	.022
A x B	-.17			

N=95; **p-value<.001; *p-value<.05; ^t p-value<.10

β =Standardized Coefficients

Table 27: Work-family Conflict, Family Identity, and Depressed Mood at Work

Step and Variable	β	F	Total R^2	ΔR^2
Step 1: Controls		.075	.002	.002
Gender	-.08			
Family Support	.06			
Step 2: Main Effects		6.102	.120	.118
Work-family Conflict (A)	.38**			
Family Identity (B)	-.00			
Step 3: Two-way Interaction		2.433	.143	.023
A x B	-.17			

N=95; **p-value<.001; *p-value<.05; ^t p-value<.10

β =Standardized Coefficients

Table 28: Work-family Conflict, Family Identity, and Burnout

Step and Variable	β	F	Total R^2	ΔR^2
Step 1: Controls		1.273	.027	.027
Gender	-.01			
Family Support	-.13			
Step 2: Main Effects		3.268	.093	.066
Work-family Conflict (A)	.30*			
Family Identity (B)	.11			
Step 3: Two-way Interaction		2.468	.117	.024
A x B	-.18			

N=94; **p-value<.001; *p-value<.05; ^t p-value<.10

β =Standardized Coefficients

Table 29: Work-family Conflict, Family Identity, and Affective Commitment

Step and Variable	β	F	Total R^2	ΔR^2
Step 1: Controls		1.888	.039	.039
Gender	.03			
Family Support	.11			
Step 2: Main Effects		2.332	.086	.047
Work-family Conflict (A)	-.20 ^t			
Family Identity (B)	.11			
Step 3: Two-way Interaction		.107	.087	.001
A x B	-.04			

N=95; **p-value<.001; *p-value<.05; ^t p-value<.10

β =Standardized Coefficients

Table 30: Work-family Conflict, Family Support, and Tension

Step and Variable	β	F	Total R^2	ΔR^2
Step 1: Controls		.069	.001	.001
Gender	-.03			
Family Identity	.10			
Step 2: Main Effects		6.169	.121	.119
Work-family Conflict (A)	.40**			
Family Support (B)	-.03			
Step 3: Two-way Interaction		4.264	.160	.040
A x B	.21*			

N=95; **p-value<.001; *p-value<.05; ^t p-value<.10

β =Standardized Coefficients

Table 31: Work-family Conflict, Family Support, and Depressed Mood at Work

Step and Variable	β	F	Total R^2	ΔR^2
Step 1: Controls		.406	.009	.009
Gender	-.07			
Family Identity	-.07			
Step 2: Main Effects		5.739	.120	.111
Work-family Conflict (A)	.36**			
Family Support (B)	.08			
Step 3: Two-way Interaction		.198	.122	.002
A x B	.05			

N=95; **p-value</.001; *p-value<.05; ^t p-value<.10

β =Standardized Coefficients

Table 32: Work-family Conflict, Family Support, and Burnout

Step and Variable	β	F	Total R^2	ΔR^2
Step 1: Controls		.067	.001	.001
Gender	-.02			
Family Identity	.06			
Step 2: Main Effects		4.533	.093	.091
Work-family Conflict (A)	.31*			
Family Support (B)	.12			
Step 3: Two-way Interaction		2.381	.116	.024
A x B	.16			

N=94; **p-value<.001; *p-value<.05; ^t p-value<.10
 β =Standardized Coefficients

Table 33: Work-family Conflict, Family Support, and Affective Commitment

Step and Variable	β	F	Total R^2	ΔR^2
Step 1: Controls		.995	.021	.021
Gender	.31			
Family Identity	.10			
Step 2: Main Effects		3.231	.086	.065
Work-family Conflict (A)	-.20 ^t			
Family Support (B)	.11			
Step 3: Two-way Interaction		.048	.086	.000
A x B	.02			

N=95; **p-value<.001; *p-value<.05; ^t p-value<.10
 β =Standardized Coefficients

APPENDIX E: COPY OF SURVEY



June, 2006

Dear Friend or Family Member,

You have been asked to complete a survey that will assist me in collecting data to help understand a number of issues about how people perceive and behave in organizations.

The following survey asks a number of individual questions about you, your feelings, and your behaviors. Please be assured that your responses will be combined with others, ensuring complete confidentiality.

This survey will take about 25-30 minutes. I realize the survey is long but it has been designed to address several issues of importance. Please fill out all of the items in the survey. Please do not feel as if the questions are intended to trick you, for I assure you this is not the case. Please respond as honestly and candidly as possible.

Thank you very much for taking the time to complete this survey.

Sincerely,

Jason Stoner, Ph.D. Candidate
Florida State University

I freely, voluntarily, and without element of force or coercion, consent to be a participant in the research project entitled “Development of Collective Identity Scale.”

Jason Stoner, who is a Ph.D. candidate in the College of Business at Florida State University, is conducting this research. I understand the purpose of his research project is to better understand how individuals behave in organizations. I understand that if I participate in the project I will be asked questions about my feelings toward others and myself and general information about my behaviors.

I understand I will be asked to fill out a paper and pencil questionnaire. I understand my participation is totally voluntary and I may stop participation at any time. All of my answers to the questions will be kept confidential to the extent allowed by law, and identified only by a subject code number during statistical analysis. My name will not appear on any of the results. No individual responses, only group findings, will be reported.

I understand there are benefits from participating in this research project. Specifically, facilitating research on human behavior in organizations will help practitioners address important issues that many individuals face in the workplace.

I understand that this consent may be withdrawn at any time without prejudice, penalty, or loss of benefits to which I am otherwise entitled.

I understand that I may contact Jason Stoner, Florida State University, College of Business, Room 336A, (850) 644-1861, his major professor, Dr. Pamela Perrewé, Florida State University, College of Business, 350RBA, (850) 644-7848, or Florida State University’s Human Subjects Committee, (850) 644-8673 for answers to questions about his research or my rights. Group results will be sent to me upon my request.

I have read and understand this consent form.

(Subject Signature)

(Date)

Section 1. The first section of this survey is designed to assess your views of the *social group* (i.e., not family or colleagues from work) that is ***MOST IMPORTANT*** to you. It may be a group of friends with whom you participate in similar extracurricular activities. It may be a group of friends with whom you spend a significant amount of time outside of work. First, please specify what social group is most important to you by completing the statement below. Then, please, indicate how you feel about the following statements using the scale provided.

The social group that is most important to me is _____.

- 1 = Strongly Disagree**
- 2 = Disagree**
- 3 = Neither Agree nor Disagree**
- 4 = Agree**
- 5 = Strongly Agree**

1. I am a member of this social group. _____
2. I consider myself a member of this social group. _____
3. If asked if I belong to this social group, I would say “yes”. _____
4. I would categorize myself as a member of this social group. _____
5. I do not consider myself a member of this social group. _____
6. I perceive myself to be similar to other members of this social group. _____
7. I have attributes, traits, features, and behaviors that are normal for a member of
this social group. _____
8. I represent a typical member of this social group. _____
9. I “fit” with this social group. _____
10. I am like other members of this social group. _____
11. When something bad happens to this social group, I personally feel hurt. _____
12. When this social group succeeds, I feel as though I have succeeded. _____
13. When this social group is in pain, I empathize. _____
14. I have a feeling of connection with this social group. _____
15. I am personally concerned about what happens to other members
of this social group. _____
16. I often wear clothing that reflects that I am a member of this social group. _____

Section 1 (*cont'd*). This section of this survey is designed to assess your views of the *social group* (i.e., not family or friends from work) that is ***MOST IMPORTANT*** to you. Please indicate how you feel about the following statements using the scale provided.

- 1 = Strongly Disagree**
- 2 = Disagree**
- 3 = Neither Agree nor Disagree**
- 4 = Agree**
- 5 = Strongly Agree**

- 17. At work, I decorate my “office space” with pictures pertaining to this social group. _____
- 18. At home, I have lots of social group paraphernalia. _____
- 19. I display objects (i.e., bumper sticker, pins, tee-shirts, etc.) that illustrate that I am member of this social group. _____
- 20. Because I am a member of this social group, I often do things like a typical member. _____

Section 2. In this section, please indicate how you feel about your *family* by rating the following statements using the scale provided.

- 1 = Strongly Disagree**
- 2 = Disagree**
- 3 = Neither Agree nor Disagree**
- 4 = Agree**
- 5 = Strongly Agree**

- 1. I am a member of my family. _____
- 2. I consider myself a member of my family. _____
- 3. If asked if I belong to my family, I would say “yes”. _____
- 4. I would categorize myself as a member of my family. _____
- 5. I do not consider myself of this family. _____
- 6. I perceive myself to be similar to other family members. _____
- 7. I have attributes, traits, features, and behaviors that are normal for members of my family. _____
- 8. I represent a typical family member. _____
- 9. I “fit” with my family. _____
- 10. I am like other members of my family. _____

Section 2 (*cont'd*). In this section, please indicate how you feel about your *family* by rating the following statements using the scale provided.

- 1 = Strongly Disagree**
2 = Disagree
3 = Neither Agree nor Disagree
4 = Agree
5 = Strongly Agree

11. When something bad happens to my family, I personally feel hurt. _____
12. When my family succeeds, I feel as though I have succeeded. _____
13. When my family is in pain, I empathize. _____
14. I have a feeling of connection with my family. _____
15. I am personally concerned about what happens to other members of my family. _____
16. I often wear clothing that reflects that I am “family person”. _____
17. At work, I decorate my “office space” with pictures of my family. _____
18. At home, I have lots of family “paraphernalia”. _____
19. I display objects (i.e., bumper sticker, pins, tee-shirts, etc.) that illustrate that I am a “family person”. _____
20. Because I am a member of my family, I often do things like a typical member. _____

Section 3. In this section, please indicate how you feel about your *employing organization* using the following statements and the scale provided.

- 1 = Strongly Disagree**
2 = Disagree
3 = Neither Agree nor Disagree
4 = Agree
5 = Strongly Agree

1. I am a member of this organization. _____
2. I consider myself an employee at this organization. _____
3. If asked if I belong to this organization, I would say “yes”. _____
4. I do not consider myself a member of this organization. _____
5. I would categorize myself as a member of this organization. _____

Section 3 (cont'd.) In this section, please indicate how you feel about your *employing organization* using the following statements and the scale provided.

- 1 = Strongly Disagree**
2 = Disagree
3 = Neither Agree nor Disagree
4 = Agree
5 = Strongly Agree

6. I perceive myself to be similar to other members of this organization. _____
7. I have attributes, traits, features, and behaviors that are normal for an employee at
this organization. _____
8. I represent a typical employee. _____
9. I “fit” with this organization. _____
10. I am like other members of this organization. _____
11. When something bad happens to this organization, I personally feel hurt. _____
12. When this organization succeeds, I feel as though I have succeeded. _____
13. When this organization is in pain, I empathize. _____
14. I have a feeling of connection with this organization. _____
15. I am personally concerned about what happens to other members of this organization. _____
16. I often wear clothing that reflects that I am employed at this organization. _____
17. At work, I decorate my “office space” with pictures pertaining to my employing
organization. _____
18. At home, I have lots of work paraphernalia. _____
19. I display objects (i.e., bumper sticker, pins, t-shirts, etc.) that illustrate that I am an
employee of this organization. _____
20. Because I am a member of this organization, I often do things like a typical member. _____

Section 4. In this section, please indicate how you feel about your *employing organization* using the following statements and the scale provided.

- 1 = Strongly Disagree**
2 = Disagree
3 = Neither Agree nor Disagree
4 = Agree
5 = Strongly Agree

Strongly Agree	Agree	Neural	Disagree	Strongly Disagree	There is a group of people in my department who always get things their way because no one wants to challenge them.
Strongly Agree	Agree	Neural	Disagree	Strongly Disagree	Since I have worked in this department, I have never seen the pay and promotion policies applied politically.
Strongly Agree	Agree	Neural	Disagree	Strongly Disagree	Rewards come only to those who work hard in this organization.
Strongly Agree	Agree	Neural	Disagree	Strongly Disagree	I have seen changes made in policies here that only serve the purposes of a few individuals, not the whole work unit or organization.
Strongly Agree	Agree	Neural	Disagree	Strongly Disagree	I can't remember when a person received a pay increase or promotion that was inconsistent with the published policies.
Strongly Agree	Agree	Neural	Disagree	Strongly Disagree	People in this organization tend to build themselves up by tearing others down.
Strongly Agree	Agree	Neural	Disagree	Strongly Disagree	Employees are encouraged to speak out frankly even when they are critical of well-established ideas.
Strongly Agree	Agree	Neural	Disagree	Strongly Disagree	Favoritism rather than merit determines who gets ahead around here.
Strongly Agree	Agree	Neural	Disagree	Strongly Disagree	People here usually don't speak up for fear of retaliation by others.
Strongly Agree	Agree	Neural	Disagree	Strongly Disagree	Promotions in this department generally go to top performers.
Strongly Agree	Agree	Neural	Disagree	Strongly Disagree	There has always been an influential group in this department that no one ever crosses.

Section 5. Using the scale below, please indicate whether you agree or disagree with the following statements about your workplace

Strongly Disagree Disagree Neutral Agree Strongly Agree
1-----2-----3-----4-----5

I must do things that I think should be done differently.	1	2	3	4	5
I work under incompatible policies and guidelines.	1	2	3	4	5
I have to oppose a rule or policy in order to carry out assignments.	1	2	3	4	5
I receive assignments without the manpower to complete them.	1	2	3	4	5
I receive incompatible requests from two or more people.	1	2	3	4	5
I have to work under vague directions or orders.	1	2	3	4	5
I receive assignments without adequate resources and materials to execute them.	1	2	3	4	5
I work on many unnecessary things.	1	2	3	4	5

**Section 6. This section is designed to assess the interaction between your work and your family.
Using the scale provide below, please indicate your agreement with the following statement.**

Strongly Agree Agree Neutral Disagree Strongly Disagree
SA-----A-----N-----D-----SD

SA	A	N	D	SD	When I get home from <i>work</i> , I am often too frazzled to participate in <i>family</i> activities/responsibilities.
SA	A	N	D	SD	I am often so emotionally drained when I get home from <i>work</i> that it prevents me from contributing to my <i>family</i> .
SA	A	N	D	SD	Due to all the pressure at <i>work</i> , sometimes when I come home I am too stressed to do the things that I enjoy with my <i>family</i> .

Section 7. Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is true or false as it pertains to you personally. Please circle your response.

T F	I never hesitate to go out of my way to help someone in trouble.
T F	I have never intensely disliked anyone.
T F	There have been times when I was quite jealous of the good fortune of others.
T F	I would never think of letting someone else be punished for my wrong doings.
T F	I sometimes feel resentful when I don't get my way.
T F	There have been times when I felt like rebelling against people in authority even though I knew they were right.
T F	I am always courteous, even to people who are disagreeable.
T F	When I don't know something I don't at all mind admitting it.
T F	I can remember "playing sick" to get out of something.
T F	I am sometimes irritated by people who ask favors of me.

Section 8. Please provide us with the following demographic information. This information will be used for research purposes only.

A. What type of job do you currently hold? (Please check one.)

Clerical Worker _____
 First Level Employee _____
 Middle Management _____
 Management _____
 Upper Management _____
 Other (_____) _____

*B. How long have you been employed **full-time** at your **current** organization?* _____ years, _____ months

*C. How long have you been working **full-time**?* About _____ years

D. What is your age? _____

E. Gender: Male _____ Female _____

F. Race _____

Section 8 (cont'd). Please provide us with the following demographic information. This information will be used for research purposes only.

G. What is your marital status?

Single/divorced without children _____

Single/divorced with children _____

Married without children _____

Married with children _____

Other _____

H. Please indicate the number of children living in your household _____

I. Please indicate the number of elder dependents for which you are responsible _____

J. For purposes of matching survey #1 with survey #2, please provide you first name and birth date.

(First Name)

(Birthday - day/month/year)

Thank you very much for your time. Have a good day.



August, 2006

Dear Friend or Family Member,

You have been asked to complete a survey that will assist me in collecting data to help understand a number of issues about how people perceive and behave in organizations.

The following survey asks a number of individual questions about you, your feelings, and your behaviors. Please be assured that your responses will be combined with others, ensuring complete confidentiality.

This survey will take about 20-25 minutes. I realize the survey is long but it has been designed to address several issues of importance. Please fill out all of the items in the survey. Please do not feel as if the questions are intended to trick you, for I assure you this is not the case. Please respond as honestly and candidly as possible.

Thank you very much for taking the time to complete this survey.

Sincerely,

Jason Stoner, Ph.D. Candidate
Florida State University

I freely, voluntarily, and without element of force or coercion, consent to be a participant in the research project entitled “Development of Collective Identity Scale.”

Jason Stoner, who is a Ph.D. candidate in the College of Business at Florida State University, is conducting this research. I understand the purpose of his research project is to better understand how individuals behave in organizations. I understand that if I participate in the project I will be asked questions about my feelings toward others and myself and general information about my behaviors.

I understand I will be asked to fill out a paper and pencil questionnaire. I understand my participation is totally voluntary and I may stop participation at any time. All of my answers to the questions will be kept confidential to the extent allowed by law, and identified only by a subject code number during statistical analysis. My name will not appear on any of the results. No individual responses, only group findings, will be reported.

I understand there are benefits from participating in this research project. Specifically, facilitating research on human behavior in organizations will help practitioners address important issues that many individuals face in the workplace.

I understand that this consent may be withdrawn at any time without prejudice, penalty, or loss of benefits to which I am otherwise entitled.

I understand that I may contact Jason Stoner, Florida State University, College of Business, Room 336A, (850) 644-1861, his major professor, Dr. Pamela Perrewé, Florida State University, College of Business, 350RBA, (850) 644-7848, or Florida State University’s Human Subjects Committee, (850) 644-8673 for answers to questions about his research or my rights. Group results will be sent to me upon my request.

I have read and understand this consent form.

(Subject)

(Date)

Section 1. Using the scale below, please indicate how often each item below describes your work environment.

Rarely **Occasionally** **Sometimes** **Fairly Often** **Very Often**
 1-----2-----3-----4-----5

1	2	3	4	5	I can rely on my <i>co-workers</i> to offer advice or other alternatives to problems that come up.
1	2	3	4	5	I can rely on my <i>co-workers</i> to give an opinion about how to resolve a problem.
1	2	3	4	5	My <i>co-workers</i> engage in problem solving discussions with me.
1	2	3	4	5	I can rely on my <i>family</i> to offer advice or other alternatives to problems that come up.
1	2	3	4	5	I can rely on my <i>family</i> to give an opinion about how to resolve a problem.
1	2	3	4	5	My <i>family</i> engages in problem solving discussions with me.

Section 2. This section concerns how often you talk with and what issues you discuss with your *co-workers*.

1	2	3	4	5	At work, we discuss things that are happening in our personal lives.
1	2	3	4	5	We talk about out-of-work interests we have in common.
1	2	3	4	5	We share personal information about our backgrounds.
1	2	3	4	5	We talk about out-of-work social events.
1	2	3	4	5	We talk about the bad things about our work.
1	2	3	4	5	We talk about the good things about our organization.
1	2	3	4	5	We share interesting ideas about learning and performing well on job tasks.
1	2	3	4	5	We talk about the rewarding things about being a worker.
1	2	3	4	5	My co-workers tell me they sympathize with what I am saying.
1	2	3	4	5	My co-workers express confidence in me.
1	2	3	4	5	My co-workers say things that help me keep things in perspective.
1	2	3	4	5	My co-workers tell me that they understand how I am feeling.
1	2	3	4	5	My co-workers reassure me about the actions I've taken or my feelings.

Section 3. The following section consists of a number of words that describe different feelings and emotions. In the space provided next to each word, indicate the degree to which you generally feel this way – that is, how you feel on average. Please give each response a number using the scale below.

Very Slightly or Not At All 1	A Little 2	Moderately 3	Quite a Bit 4	Extremely 5
_____ Interested	_____ Hostile	_____ Nervous	_____ Guilty	
_____ Distressed	_____ Enthusiastic	_____ Determined	_____ Ashamed	
_____ Excited	_____ Proud	_____ Attentive	_____ Afraid	
_____ Upset	_____ Irritable	_____ Jittery	_____ Scared	
_____ Strong	_____ Alert	_____ Active	_____ Inspired	

Section 4. Most people have specific feelings about their employing organization. When you think of your employing organization, what feelings do you experience? Please circle the number that best represents your feelings.

Cold	1	2	3	4	5	6	7	Warmth
Hate	1	2	3	4	5	6	7	Love
Affection	1	2	3	4	5	6	7	Contempt
Detachment	1	2	3	4	5	6	7	Belonging
Loyalty	1	2	3	4	5	6	7	Disloyalty
Boredom	1	2	3	4	5	6	7	Excitement
Sadness	1	2	3	4	5	6	7	Happiness
Disgust	1	2	3	4	5	6	7	Fondness
Comfort	1	2	3	4	5	6	7	Discomfort
Lifelessness	1	2	3	4	5	6	7	Spiritedness
Anger	1	2	3	4	5	6	7	Peace
Ecstasy	1	2	3	4	5	6	7	Agony
Pleasure	1	2	3	4	5	6	7	Pain
Despair	1	2	3	4	5	6	7	Hope

Section 5. Using the scale below, please indicate whether you agree or disagree with the following statements

Strongly Agree **Agree** **Neutral** **Disagree** **Strongly Disagree**
SA **A** **N** **D** **SD**

SA	A	N	D	SD	My job tends to directly affect my health.
SA	A	N	D	SD	I work under a great deal of tension.
SA	A	N	D	SD	I have felt fidgety or nervous as a result of my job.
SA	A	N	D	SD	If I had a different job, my health would probably improve.
SA	A	N	D	SD	Problems associated with my job have kept me awake at night.
SA	A	N	D	SD	I have felt nervous before attending meeting in the company.
SA	A	N	D	SD	I often “take my work home with me” in the sense that I think about it when doing other things.

Section 6. Using the scale below, please indicate how you have felt during the past month when you think about your job.

Often **Sometimes** **Rarely** **Never**
O-----S-----R-----N

I feel downhearted and blue at work.	O	S	R	N
I get tired for no reason at work.	O	S	R	N
I find myself restless and can't keep still at work.	O	S	R	N
My mind is as clear as it used to be at work.	O	S	R	N
I find it easy to do the things I used to at work.	O	S	R	N
I feel hopeful about the future at work.	O	S	R	N
I find it easy to make decisions at work.	O	S	R	N
I am more irritable than usual at work.	O	S	R	N
I still enjoy the things I used to at work.	O	S	R	N
I feel that I am useful and needed at work.	O	S	R	N

Section 7: Using the scale provide, please indicate whether you agree or disagree with the following statements.

	Strongly <u>Disagree</u>	<u>Disagree</u>	Slightly <u>Disagree</u>	Neutral	Slightly Agree	Agree	Strongly Agree
I have the necessary tools for work.	1	2	3	4	5	6	7
I have stable employment.	1	2	3	4	5	6	7
I have support from co-workers.	1	2	3	4	5	6	7
I feel that I am successful.	1	2	3	4	5	6	7
I have a sense of pride in myself.	1	2	3	4	5	6	7
I have adequate time to sleep.	1	2	3	4	5	6	7
I have adequate time for work.	1	2	3	4	5	6	7
I have enough free time.	1	2	3	4	5	6	7
I have family stability.	1	2	3	4	5	6	7
I have a good relationship with my spouse/partner.	1	2	3	4	5	6	7
I have loyal friends.	1	2	3	4	5	6	7
I have adequate income.	1	2	3	4	5	6	7
I have adequate credit.	1	2	3	4	5	6	7
I have financial stability.	1	2	3	4	5	6	7
I have enough savings for an emergency.	1	2	3	4	5	6	7
I have enough assets.	1	2	3	4	5	6	7

Section 8: Please use the following scale to answer the question: When you think about your work overall, how often do you feel the following?

1	2	3	4	5	6	7
Never	almost never	Rarely	Sometimes	often	very often	always

Tired	_____
Disappointed with people	_____
Hopeless	_____
Trapped	_____
Helpless	_____
Depressed	_____
Physically weak/Sickly	_____
Worthless/Like a failure	_____
Difficulties sleeping	_____
"I've had it"	_____

Section 9: Please provide your first name and birth date so that your responses can be matched to survey #1.

(First Name)

(Birthday - day/month/year)

Thank you for completing this survey. Have a good day.

REFERENCES

- Abdel-Halim, A.A. (1982) Social support and managerial affective responses to job stress. *Journal of Occupational Behaviour*, 3, 281-295.
- Abrams, D., & Hogg, M.A. (1988). Comments on the motivational status of self-esteem in social identity and intergroup discrimination. *European Journal of Social Psychology*, 18, 317-334.
- Allen, N.J., & Meyer, J.P. (1990). The measurement and antecedents of affective, continuance, and normative commitment. *Journal of Occupational Psychology*, 63, 1-18.
- Allen, V.L., Wilder, D.A., & Atinson, M.L. (1983). Multiple group membership and social identity. In T.R. Sarbin, & K.E. Scheibe (Eds.), *Studies in social identity* (pp. 92-115). New York: Praeger.
- Andrews, M.C., & Kacmar, K.M. (2001). Discriminating among organizational politics, justice, and support. *Journal of Organizational Behavior*, 22, 347-366.
- Arnold, H.J., & Feldman, D.C. (1981) Social desirability response bias in self-report choice situations. *Academy of Management Journal*, 24, 377-385.
- Aron, A., & McLaughlin-Volpe, T. (2001). Including others in the self: Extensions to own and partner's group membership. In M. Brewer & C. Sedikides (Eds.), *Individual self, relational self, and collective self: Partners, opponents, or strangers* (pp. 89-108). Mahwah, NJ: Erlbaum.
- Ashforth, B.E. (2001). *Role transitions in organizational life: An identity-based perspective*. Mahwah, NJ: Erlbaum.
- Ashforth, B.E., & Mael, F. (1989). Social identity theory and the organization. *Academy of Management Review*, 14, 20-39.
- Ashmore, R. D., Deaux, K., & McLaughlin-Volpe, T. (2004). An organizing framework for collective identity: Articulation and significance of multidimensionality. *Psychological Bulletin*, 130, 80-114.
- Aycan, Z., & Eskin, M. (2005). Relative contributions of childcare, spousal support, and organizational support in reducing work-family conflict for men and women: The case of Turkey. *Sex Roles*, 53, 453-471.
- Babin, B., & Boles, J.S. (1996). The effects of perceived co-worker involvement and supervisor support on service provider role stress, performance and job satisfaction. *Journal of Retailing*, 72, 57-75.

- Baron, R.A. (1996). Interpersonal relations in organizations. In K. R. Murphy (Ed.), *Individual differences and behavior in organizations* (pp. 334-370). San Francisco: Jossey-Bass.
- Baumeister, R.F., & Leary, M.K. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, 117, 497-529.
- Beehr, T.A. (1994). *Meta-analysis of occupational stress and social support*. Paper presented at the annual meeting of the Midwestern Psychological Association, Chicago, IL.
- Beehr, T.A. (1995). *Psychological stress in the workplace*. London: Routledge.
- Beehr, T.A., & Glazer, S. (2001). A cultural perspective of social support in relation to occupational stress. In P.L. Perrewé & D.C. Ganster (Eds.), *Research in occupational stress and well being* (Vol. 1, pp. 97-102) Oxford, UK: Elsevier Science Ltd.
- Beehr, T.A., King, L.A., King, D.W., (1990). Social support and occupational stress: Talking to supervisors. *Journal of Vocational Behavior*, 36, 61-81.
- Blau, P.M. (1964). *Exchange and power in social life*. Wiley: New York.
- Boles, J.S., Johnston, M.W., & Hair, J. F. Jr. (1997). Role stress, work-family conflict and emotional exhaustion: Inter-relationships and effects on some work-related consequences. *Journal of Personal Selling & Sales Management*, 17, 17-28.
- Boyar, S.L., Maertz, C.P. Jr., Pearson, A.W., & Keough, S. (2003). Work-family conflict: A model of linkages between work and family domain variables and turnover intentions. *Journal of Managerial Issues*, 15, 175-190.
- Brewer, M.B. (1988). A dual process model of impression formation. In T.K. Srull & R.S. Wyer, Jr. (Eds.), *A dual model of impression formation: Advances in social cognition* (Vol. 1, pp. 1-36), Hillsdale, NJ: Lawrence Erlbaum Associates.
- Brewer, M.B., & Gardner, W. (1996). Who is the “we”? Levels of collective identity and self representations. *Journal of Personality and Social Psychology*, 71, 83-93.
- Brickson, S.L. (2000). The impact of identity orientation on individual and organizational outcomes in demographically diverse settings. *Academy of Management Review*, 25, 82-101.
- Brough, P. (2005). A comparative investigation of the predictors of work-related psychological well-being within police, fire, and ambulance workers. *New Zealand Journal of Psychology*, 34, 127-134.

- Brown, M.E. (1969). Identification and some conditions of organizational involvement. *Administrative Science Quarterly*, 14, 346-355.
- Brubaker, R., & Copper, F. (2000). Beyond "identity." *Theory and Society*, 29, 1-47.
- Burke, P.J. (1991). Attitudes, behavior, and the self. In J.A. Howard, & P.L. Callero (Eds.), *The Self-society interface: Cognition, emotion and action* (pp. 189-208). New York: Cambridge University Press.
- Burke, R.J., & Greenglass, E.R. (1999). Work-family conflict, spouse support, and nursing staff well-being during organizational restructuring. *Journal of Occupational Health Psychology. Special Issue: Relationship between work and family life*, 4, 327-336.
- Burke, R.J., & Greenglass, E.R. (2001). Hospital restructuring stressors, work-family concerns and psychological well-being among nursing staff. *Community, Work & Family*, 4, 49-62.
- Calhoun, C. (1994) *Social theory and the politics of identity*. Cambridge, MA: Blackwell.
- Callero, P.L. (1985). Role-identity salience. *Social Psychology Quarterly*, 48, 203-214.
- Caplan, R.D., Cobb, S., French, J.R.P.Jr., Harrison, R.V., & Pinneau, S.R. (1975). *Job demands and worker health: Main effects and occupational differences*. Washington, D.C: US Government Printing Office.
- Carlson, D.S. (1995). *Value/situation incongruence: An alternate perspective of work-nonwork conflict*. Unpublished doctoral dissertation, College of Business, The Florida State University.
- Carlson, D.S., & Kacmar, K.M. (2000). Work-family conflict in the organization: Do life role values make a difference. *Journal of Management*, 26, 1034-1057.
- Carlson, D.S., Kacmar, K.M., & Williams, L.J. (2000). Construction and initial validation of a multidimensional measure of work-family conflict. *Journal of Vocational Behavior*, 56, 249-276.
- Cohen, J. & Cohen, P. (1983). *Applied multiple regression/correlation analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.
- Cohen, S. & Wills, T.A. (1985) Stress, social support, and buffering hypothesis, *Psychological Review*, 98, 310-357.
- Cooley, C. H. (1902). *Human nature and social order*. New York: Charles Scribner's Sons.

- Coppersmith, S. (1967). *The antecedents of self esteem*. San Francisco, Ca: Freeman.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16, 297-334.
- Cropanzano, R.S., Howes, J.C., Grandey, A.A., & Toth, P. (1997). The relationship of organizational politics and support to work behaviors, attitudes, and stress. *Journal of Organizational Behavior*, 18, 159-181.
- Dawson, J.F. (2006). Retrieved on April 2, 2007, from www.jeremydawson.co.uk/slopes.htm.
- Deaux, K. (1996). Social identification. In E.T. Higgins & A.W. Kruglanski (Eds.), *Social psychology: Handbook of basic principles* (pp. 777-798). New York: Guilford Press.
- DuBrin, A.J. (1988). Career maturity, organizational rank, and political behavioral tendencies: A correlational analysis of organizational politics and career experiences. *Psychological Reports*, 63, 531-537.
- Dukerich, J.M., Kramer, R., & McLean Parks, J. (1998). The dark side of organizational identification. In D.A. Whetten, & P.C. Godfrey (Eds.), *Identity in organizations: Building theory through conversations* (pp. 245-256). Thousand Oaks, CA: Sage.
- Dutton, J.E., Dukerich, J.M., & Harquail, C.V. (1994). Organizational images and member identification. *Administrative Science Quarterly*, 39, 239-263.
- Eby, L.T., & Dobbins, G.H. (1997). Collectivistic orientation in teams: An individual and group-level analysis. *Journal of Organizational Behavior*, 18, 275-295.
- Eisenberger, R., Huntington, R., Hutchinson, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology*, 71, 500-507.
- Elsbach, K.D. (1999) An expanded model of organizational identification. *Research in Organizational Behavior*, 21, 163-200.
- Elsbach, K.D. (2001). Coping with hybrid identities: Evidence from California legislative staff. *Advances in Qualitative Organization Research*, 3, 59-90.
- Elsbach, K.D., & Bhattacharya, C.B. (2001). Defining who you are by what you're not: Organizational disidentification and the National Rifle Association. *Organization Science*, 12, 393-413.

- England, G.W., Coetsier, P., & Spoelders-Claes, R. (1987). Meaning of working/model and concepts in Mow International Research Team (Eds.) *The Meaning of Working*. Orlando, FL: Academic Press, Inc.
- Fedor, D., Ferris, G.R., Harrell-Cook, G., & Russ, G.S. (1998). The dimensions of politics perceptions and their organizational and individual predictors. *Journal of Applied Social Psychology*, 28, 1760-1797.
- Fenlason, K.J., & Beehr, T.A. (1994). Social support and occupational stress: Effects of talking to others. *Journal of Organizational Behavior*, 15, 157-175.
- Fenlason, K.J., Johnson, J.W., & Beehr, T.A. (1997). *Social support, stressors, and strains: Support for cognitive model of job stress*. Paper presented at 12th Annual Conference of the Society for Industrial and Organizational Psychology, St. Louis, MO.
- Ferris, G.R., & Kacmar, K.M. (1992). Perceptions of organizational politics. *Journal of Management*, 18, 93-116.
- Ferris, G.R., Russ, G.S., & Fandt, P.M. (1989) Politics in organizations. In R.A. Giacalone & P. Rosenfeld (Eds.), *Impression management in the organization* (pp. 143-170). Hillsdale, NJ: Erlbaum.
- Ferris, G.R., Treadway, D.C., Kolodinsky, R.W., Hochwarter, W.A., Kacmar, C.J., Douglas, C., & Frink, D.D. (2005). Development and validation of the political skill inventory. *Journal of Management*, 31, 126-152.
- Fiske, S.T., & Neuberg, S.L. (1990). A continuum of impression formation, from category-based to individuating processes: Influences of information and motivation on attention and interpretation. *Advances in Experimental Social Psychology*, 23, 1-74.
- Fiske, S.T., & Taylor, S.E. (1991). *Social cognition* (2nd ed.). New York: McGraw-Hill.
- Foddy, M., & Kashima, Y. (2002). Self and identity: What is the conception of the person assumed in the current literature? In Y. Kashima, M. Foddy, & M. Platow (Eds.), *Self and identity: Personal, social, and symbolic* (pp. 3-25). Mahwah, NJ: Lawrence Erlbaum Associates.
- Folkman, S., & Lazarus, R.S. (1980). An analysis of coping in middle-aged community sample. *Journal of Health and Social Behavior*, 21, 219-239.
- Folkman, S., & Lazarus, R.S. (1985). If it changes it must be a process: Study of emotion and coping during three stages of a college examination. *Journal of Personality and Social Psychology*, 48, 150-170.

- Folkman, S., & Lazarus, R.S. (1988). Coping as a mediator of emotion. *Journal of Personality and Social Psychology*, 54, 466-475.
- Ganster, D. C., Hennessey, H.W., & Luthans, F. (1983). Social desirability response effects: Three alternative models. *Academy of Management Journal*, 26, 321-331.
- Ganster, D.C., Mayes, B.T., Sime, W.E., & Tharp, G.D. (1982). Managing organizational stress: A field experiment. *Journal of Applied Psychology*, 67, 102-110.
- George, J.M., & Jones, G.R. (1996). The experience of work and turnover intentions: Interactive effects of value attainment, job satisfaction, and positive mood. *Journal of Applied Psychology*, 81, 318-325.
- Gleason, P. (1983). Identifying identity: A semantic history. *Journal of American History*, 69, 910-931.
- Gouldner, A.W. (1957). Cosmopolitans and locals: Toward an analysis of latent social roles – I. *Administrative Science Quarterly*, 2, 281-306.
- Greenberger, D.B., & Strasser, S. (1986). Developing and application of a model of personal control in organizations. *Academy of Management Review*, 11, 164-177.
- Greenhaus, J.H., & Beutell. N.J. (1985). Sources of conflict between work and family roles, *Academy of Management Review*, 10, 76–88.
- Haar, J. M. (2004). Work-family conflict and turnover intention: Exploring the moderation effects of perceived work-family support. *New Zealand Journal of Psychology*, 33, 35-39.
- Hair, J.E., Anderson, R.E., & Tatham, R.L. (1987). *Multivariate analysis*. New York: Macmillan Publisher.
- Hall, D.T., Schneider, B., & Nygren, H.T. (1970). Personal factors in organizational identification, *Administrative Science Quarterly*, 15, 176-190.
- Heider, F. (1958). *The psychology of interpersonal relations*. Oxford: Wiley.
- Heinisch, D.A., & Jex, S.M. (1997). NA and gender as moderators of the relationship between work related stressors and depressed mood at work. *Work and Stress*, 11, 146-157.
- Herriot, P. (2004). Social identities and applicant reactions. *International Journal of Selection Assessment*, 12, 75-83.
- Hinkin, T.R. (1995). A review of scale development practices in the study of organizations. *Journal of Management*, 21, 967-988.

- Hobfoll, S.E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44, 513-524.
- Hobfoll, S.E., & Freedy, J. (1993). Conservation of resources: A general stress theory applied to burnout. In W.B. Schaufelo, C. Maslach, & T. Mark (Eds.), *Professional burnout: Recent development in theory and research* (pp. 115-129). Washington, D.C.: Taylor & Francis.
- Hobfoll, S. E., & Lilly, R. S. (1993). Resource conservation as a strategy for community psychology. *Journal of Community Psychology*, 21, 128-148.
- Hobfoll, S.E., & Shirom, A. (1993). Stress and burnout in the workplace: Conservation of resources. In Golombiewski (Ed.), *Handbook of organizational behavior* (pp. 41-61). New York: Marcel Dekker.
- Hogg, M. A. (2000). Social processes and human behavior: Social psychology. In K. Pawlik, & M.R. Rosenzweig (Eds.), *International handbook of psychology* (pp. 305-327). London: Sage Publications Ltd.
- Hogg, M. A. (2001). Self categorization and subjective uncertainty resolution: Cognitive and motivational facets of social identity and group membership. In J.P. Forgas, K.D. Williams, & L. Wheeler (Eds.) *The social mind: Cognitive and motivational aspects of interpersonal behavior* (pp. 323-349). New York: Cambridge University Press.
- Hogg, M. A., & Mullin, B. (1999). Joining groups to reduce uncertainty: Subjective uncertainty reduction and group identification. In D. Abrams, & M.A. Hogg (Eds.), *Social identity and social cognition* (pp. 249-279). Malden, MA: Blackwell Publishers.
- Hogg, M.A., & Terry, D.J. (Eds.) (2001). *Social identity process in organizational contexts*. Philadelphia: Psychology Press.
- House, R.J., & Rizzo, J.R.. (1972). Toward the measurement of organizational practices: Scale development and validation. *Journal of Applied Psychology*, 56, 388-396.
- Isen, A.M., & Baron, R.A. (1991). Positive affect as a factor in organizational behavior. In B.M. Staw, & L.L. Cummings (Eds.), *Research in organizational behavior* (Vol. 12, pp.1-53). Greenwich, CT: JAI Press.
- James, W. (1890). *Principles of psychology*. New York: Holt Rinehart and Winston.
- Jaros, S.J., Jernier, J.M., Koehler, J.W., & Sincich, T. (1993). Effects of continuance, affective, and moral commitment on the withdrawal process: An evaluation of 8 structural equation models. *Academy of Management Journal*, 36, 951-995.

- Kacmar, K.M., & Baron, R.A. (1999). Organizational politics: The state of the field, links to related processes, and an agenda for future research. In G.R. Ferris (Ed.) *Research in personnel and human resources management* (Vol. 17, pp. 1-39). Stamford, CT: JAI Press.
- Kacmar, K.M., & Carlson, D.S. (1997). Further validation of Perceptions of Politics Scale (POPS): A multi-sample approach. *Journal of Management*, 23, 627-658.
- Kahn, R.L., & Byosiére, P. (1992). Stress in organizations. In M.D. Dunnette, & L.M. Hough (Eds.), *Handbook of industrial and organizational psychology* (Second edition, Vol. 2, pp. 571-650). Palo Alto, Ca: Consulting Psychologists Press.
- Kanter, R.M. (1977). Some effects of proportions on group life: Skewed sex ratios and responses to token women. *American Journal of Sociology*, 82, 965-990.
- Karasck, R.A. Jr. (1979). Job demands, job decision latitude, and mental strain: Implications for job redesign. *Administrative Science Quarterly*, 24, 285-310.
- Kato, Y., & Kanai, A. (2006). The effect of coping behavior with work-family conflict in dual-career couples. *Japanese Journal of Psychology*, 76, 511-518.
- King, L.A., Mattimore, L.K., King, D.W., & Adams, G.A. (1995). Family support inventory for workers: A new measure of perceived social support from family members. *Journal of Organizational Behavior*, 16, 235-258.
- Kreiner, G.E., & Ashforth, B.E. (2004). Evidence toward an expanded model of organizational identification. *Journal of Organizational Behavior*, 25, 1-27.
- Lazarus, R.S. (1968). Emotions and adaptation: Conceptual and empirical relations. In W. J. Arnold (Ed.), *Nebraska symposium on motivation* (pp. 175-266). University of Nebraska Press, Lincoln, USA.
- Lazarus, R.S. (1993). From psychological stress to the emotions: A history of changing outlooks. *Annual Review of Psychology*, 44, 1-21.
- Lazarus, R.S. (1994). Psychological stress in the workplace. In R. Crandall & P. L. Perrewé (Eds.), *Occupational stress: A handbook*. New York: Taylor & Francis.
- Lazarus, R.S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer.
- Lazarus, R.S., & Folkman, S. (1987). Transactional theory and research on emotions and coping. *European Journal of Personality*, 1, 141-169.
- Lee, S.M. (1971) An empirical analysis of organizational identification. *Academy of Management Journal*, 14, 213-226.

- Lembke, S. & Wilson, M.G. (1998). Putting the “team” into teamwork: Alternative theoretical contributions for contemporary management practice. *Human Relations*, 51, 927-944.
- Lewin, K. (1936). *A dynamic theory of personality*. New York: McGraw-Hill.
- MacKenzie, S., Podsakoff, P.M., & Ahearne, M. (1998). Some possible antecedents and consequences of in-role and extra-role salesperson performance. *Journal of Marketing*, 62, 87-98.
- Markus, H. (1977). Self –schemata and processing information about the self. *Journal of Personality and Social Psychology*, 35, 63-78.
- Marlow, D. & Crowne, D.P. (1964). Social desirability and response to perceived situational demands. *Journal of Consulting Psychology*, 25, 109-115.
- Marsh, H.W., Balla, J.R., & Hau, K.T. (1996). An evaluation of incremental fit indices: A clarification of mathematical and empirical processes. In G.A. Marcoulides & R.E. Schumacker (Eds.), *Advanced structural equation modeling techniques* (pp. 315-353). Hillsdale, NJ: Erlbaum.
- McCall, G. J., & Simmons, J. L. (1978). *Identities and interactions*. Revised ed. New York: Free Press.
- Mead, G. H. (1934). *Mind, self, and society*. Chicago: University of Chicago Press.
- Mehra, A., Kilduff, M., & Brass, D.J. (1998). At the margins: A distinctiveness approach to the social identity and social networks of underrepresented groups. *Academy of Management Journal*, 41, 441-452.
- Mesmer-Magus, J.R., & Viswesvaran, C. (2003). Convergence between measures of work-to-family and family-to-work conflict: A meta-analytic examination. *Journal of Vocational Behavior*, 67, 215-232.
- Meyer, J.P., & Allen, N.J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review*, 1, 61-89.
- Meyer, J.P. Irving, P.G., & Allen, N.J. (1998). Examination of the combined effects of work values and early work experiences on organizational commitment. *Journal of Organizational Behavior*, 19, 29-52.
- Noor, N. (2004). Work-family conflict, work- and family-role salience, and women's well-being. *Journal of Social Psychology*, 144, 389-405.
- Nunnally, J.C. (1978). *Psychometric theory* (2nd ed.). New York: McGraw-Hill.

- Nuttbrock, L., & Freudiger, P. (1991). Identity salience and motherhood: A test of Stryker's theory. *Social Psychology Quarterly*, 54, 146-157.
- Oakes, P., & Turner, J.C. (1986). Distinctiveness and the salience of social category memberships: Is there an automatic perceptual bias towards novelty? *European Journal of Social Psychology*, 16, 325-344.
- Oakes, P.J., & Turner, J.C. (1990). Is limited information processing the cause of social stereotyping. *European Review of Social Psychology*, 1, 111-135.
- Oakes, P.J., Haslam, S.A., & Turner, J.C. (1994). *Stereotyping and social reality*. Oxford: Blackwell.
- O'Reilly, C., III., & Chatman, J. (1986). Organizational commitment and psychological attachment: The effects of compliance, identification, and internalization on prosocial behavior. *Journal of Applied Psychology*, 71, 492-499.
- Patchen, M. (1970). *Participation, achievement and involvement on the job*. Englewood Cliffs, NJ: Prentice-Hall.
- Perrewé, P.L., & Zellars, K.L. (1999). An examination of attributions and emotions in the transactional approach to the organizational stress process. *Journal of Organizational Behavior*, 20, 739-752.
- Phinney, J.S. (1995). Ethnic identity and self esteem: A review of research. *Psychological Bulletin*, 118, 499-514.
- Pines, A., & Anderson, E. (1998). *Career burnout: Causes and cures*. New York: Free Press.
- Pratt, M.G., & Doucet, L. (2000). Ambivalent feelings in organizational relationships. In S. Fineman (Ed.), *Emotion in organizations* (Second edition, pp. 204-226). London: Sage.
- Quinn, R., & Shepard, L. (1974). *The 1972-1973 quality of employment survey*. University of Michigan, Ann Arbor, MI: Institute for Social Research.
- Richardsen, A.M., Burke, R. J., & Mikkelsen, A. (1999). Job pressures, organizational support, and health among Norwegian women managers. *International Journal of Stress Management*, 6, 167-177.
- Rizzo, J., House, R., & Lirtzman, S. (1970). Role conflict and ambiguity in complex organization. *Administrative Science Quarterly*, 15, 150-163.
- Rosenberg, M. (1979). *Conceiving the self*. New York: Basic Books.

- Rotondi, T., Jr. (1975). Organizational identification: Issues and implications. *Organizational Behavior and Human Performance*, 13, 95-109.
- Schwab, D.P. (1980). Construct validity in organizational behavior In B.M Staw, & L.L. Cummings (Eds.), *Research in organizational behavior* (Vol. 2, pp.3-43). Greenwich, CT: JAI Press.
- Segal, L.M., & Sullivan, D.G. (1997). The growth of temporary services work. *Journal of Economic Perspectives*, 11, 117-136.
- Serpe, R.S. (1987). Stability and change in self: A structural symbolic interactionist explanation. *Social Psychology Quarterly*, 50, 44-55.
- Sias, P.M. & Jablin, F.M. (1995). Differential superior-subordinate relations, perceptions of fairness, and coworker communication. *Human Communication Research*, 22, 5-38.
- Simon, B., & Klandermans, B. (2001). Politicized collective identity: A social psychological analysis. *American Psychologist*, 56, 319-331.
- Sluss, D.M., & Ashforth, B.E. (2006). Relational identity and identification: Defining ourselves through work relationship. *Academy of Management Review*, 32, 9-32.
- Stamper, C. L., & Johlke, M. C. (2003). The impact of perceived organizational support on the relationship between boundary spanner role stress and work outcomes. *Journal of Management*, 29, 569-588.
- Stewart, W., & Barling, J. (1996). Father's work and children's behavior. *Journal of Organizational Behavior*, 17, 221-232.
- Strutton, D., & Lumpkin, J. (1992). Relationship between optimism and coping strategies in the work environment. *Psychological Reports*, 71, 1179-1186.
- Stryker, S. (1980). *Symbolic interactionism: A social structural version*. Menlo Park, CA: Benjamin/Cummings.
- Stryker, S. (1987). Identity theory: Developments and extensions. In K. Yardley & T. Homes (Eds.), *Self and identity: Psychosocial perspectives* (pp. 89-103). New York: Wiley.
- Stryker, S., & Burke, P. J. (2000). The past, present, and future of an identity theory. *Social Psychology Quarterly*, 63, 284-297.

- Stryker, S., & Serpe, R.T. (1982). Commitment, identity salience, and role behavior: A theory and research example. In W. Ickes & E.S. Knowles (Eds.), *Personality, roles, and social behavior* (pp. 199-218). New York: Springer-Verlag.
- Stryker, S., & Serpe, R.T. (1994). Identity salience and psychological centrality: Equivalent, overlapping, or complementary concepts? *Social Psychology Quarterly*, 57, 16-35.
- Tajfel, H. (1972). Social categorization (English translation of “La Catégorisation sociale”). In S. Moscovici (Ed.), *Introduction à la psychologie sociale* (pp. 272-302), Vol. 1. Paris: Larousse.
- Tajfel, H. (1978). Social categorization, social identity, and social comparison. In H. Tajfel (Ed.), *Differentiation between social groups: Studies in social psychology of intergroup relations* (pp. 61-76). London: Academic Press.
- Tajfel, H. (1981). *Human groups and social categories: Studies in social psychology*. Cambridge, England: Cambridge University Press.
- Tajfel, H. (1982). *Social identity and intergroup relations*. Cambridge, UK: Cambridge University Press.
- Tajfel, H., & Terry, J.C. (1985). The social identity theory of intergroup behavior. In S. Worchel & W.G. Austin (Eds.), *Psychology of intergroup relations* (2nd ed., pp. 7-24). Chicago: Nelson-Hall.
- Tolman, E.C., (1943). Identification and the post-war world. *Journal of Abnormal and Social Psychology*, 38, 141-148.
- Tropp, L.R., & Wright, S.C. (2001). Ingroup identification as the inclusion of ingroup in the self. *Personality and Social Psychology Bulletin*, 27, 585-600.
- Turner, J.C. (1975). Social comparison and social identity: Some prospects for intergroup behavior. *European Journal of Social Psychology*, 5, 5-34.
- Turner, J.C. (1982). Towards a cognitive redefinition of the social group. In H. Tajfel (Ed.), *Social identity and intergroup relations* (pp. 66-101). Chicago: University of Chicago Press.
- Turner, J.C. (1984) Social identification and psychology group formation. In H. Tajfel (Ed.), *The social dimension: European developments in social psychology* (Vol. 2, pp. 518-538). Cambridge, England: Cambridge University Press.
- Turner, J.C., (1985). Social categorization and the self-concept: A social cognitive theory of group behavior. In E.J. Lawler (Ed.), *Advances in group processes* (Vol. 2, pp. 77-122). Greenwich, CT: JAI Press.

- Turner, J.C. (1987). *Rediscovering the social group: A self-categorization theory*. Oxford England: Blackwell.
- Turner, J.C., Hogg, M.A., Oakes, P.J., Reicher, S.D., & Wetherell, M.S. (1987). *Rediscovering the social group: A self-categorization theory*. Oxford, England: Blackwell.
- Viswesvaran, C., Sanchez, J.I., & Fisher, J. (1999). The role of social support in the process of work stress: A meta-analysis. *Journal of Vocational Behavior*, 54, 314-334.
- Washington, S.K. (2000). *The role-based identity scale: Development and field tests involving stock options and skill-based pay applications*. Dissertation for Cornell, University.
- Watson, D., & Clark, L.A. (1984). Negative affectivity: The disposition to experience aversive emotional states. *Psychological Bulletin*, 96, 465-490.
- Wilson, P.A. (1995). The effects of politics and power on the organizational commitment of federal executives. *Journal of Management*, 21, 101-118.
- Witt, L.A. (1995). Influences of supervisor behaviors on the levels and effects of workplace politics. In R. Cropanzano & K.M. Kacmar (Eds.), *Organizational politics, justice, and support: Managing social climate at work* (pp. 37-53). Westport, CT: Quorum Press.
- Witt, L.A., Kacmar, K.M., & Andrews, M.C. (2001). The interactive effects of procedural justice and exchange ideology on supervisor-rated commitment. *Journal of Organizational Behavior*, 22, 505-515.
- Zellars, K. L. (1998). *Vulnerable to job burnout: The influence of personality, social support, role stressors, and moods*. Dissertation for Doctor of Philosophy at the Florida State University.

BIOGRAPHICAL SKETCH

Born in Louisiana, Jason Stoner grew up in Peoria, Illinois. After graduating from Illinois Valley Central High School, Jason attended Bradley University, where he graduated with a BS ('99) and an MBA ('02). In the fall of 2002, Jason began his Ph.D. work at Florida State University in the College of Business studying Organizational Behavior.
