MULITIPLE IDENTITIES, SELF-CONCEPT, AND PSYCHOLOGICAL DISTRESS

A dissertation submitted to Kent State University in partial fulfillment of the requirements for the degree of Doctor of Philosophy

by

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CHAPTER 1

INTRODUCTION

Mood and anxiety disorders are increasingly prevalent among adults in the United States (Kessler et al. 2005), and even relatively mild, subclinical levels of psychological distress can interfere with everyday life (Gotlib, Lewinsohn, and Seeley 1995) and put one at risk of experiencing more severe forms of mental illness (Ingram and Siegle 2009). Stress researchers (e.g., Pearlin, Lieberman, Menaghan, and Mullan 1981) emphasize the importance of studying factors that contribute to various forms of psychological distress, and acknowledge the central role that self-concept plays in understanding the relationship between social arrangements and mental illness. In fact, Thoits (1999) argues that self and identity processes are not only important for understanding the etiology of mental illness, but that it is “virtually impossible” to ignore self and identity in theorizing about mental illness (345).

Identity scholars who study mental health (e.g., Thoits 1991; Burke 1991; Simon 1992, 1995, 1997; Large and Marcussen 2000) give much theoretical attention to the ways in which social roles structure individuals’ everyday lives and self-concepts, and how identity processes can produce stressors that contribute to psychological distress."
behavior of individuals who occupy those positions (Stryker 1968). Identities are self-meanings that individuals attribute to themselves as occupants of particular social roles (Stryker 1968). These self-meanings, or identities, are shaped, in part, by individuals’ perceptions of how others see and evaluate them. Following the work of James (1890), identity theorists (e.g., Stryker 1980; Burke 1991) argue that individuals have an identity for every role they occupy and that each identity is comprised of a set of meanings (that may or may not overlap with that of their other identities). Given that identities are rooted in role relationships that are relatively permanent, the meanings associated with them also tend to be relatively stable (Rosenberg 1979). Thus, problems that occur within identities may become persistent sources of stress that can have negative consequences for individuals in the form of diminished self-concept and psychological distress (Thoits 1991, 1995; Burke 1991; Simon 1992, 1995, 1997). As such, for scholars interested in the link between social roles and psychological distress (e.g., Burke 1991, Large and Marcussen 2000), identity processes are of central concern.

This study examines the relationships among identities, self-concept and psychological distress in the context of voluntary and obligatory identities. While much of the early research investigating the impact of social roles on psychological well-being focuses on the number of roles one possesses (e.g., Thoits 1991, 1992), more recent work has moved beyond simply counting roles (e.g., Thoits 1995; Burke 2003) to consider differences in the identity meanings associated with the different types of roles one holds, and how these differences might better explain their influence on well-being (Thoits 2003). One way to categorize roles is to determine the extent to which individuals who
hold them view them as obligatory or voluntary. Obligatory identities are characterized by long-term, affectively intense ties to others that include strong mutual rights and responsibilities among role partners (Thoits 2003). Voluntary identities are characterized by relatively shorter-term, less affectively intense ties to others that include fewer responsibilities to role partners (Thoits 2003).

Identity research suggests that individuals are motivated to verify their self-conceptions (e.g., Cast and Burke 2002). Thus, when people feel that others evaluate them differently than they evaluate themselves with respect to any of their identities, that difference (or discrepancy) can be conceived of as a stressor that could contribute to or exacerbate psychological distress and/or damage self-concept. However, identity discrepancies that occur within obligatory and voluntary identities may affect particular components of self-concept and psychological distress to different degrees. For instance, Burke and Stets (2009) suggest that evaluations of one’s performance in obligatory identities have implications for one’s sense of self as being able to act efficaciously or exercise mastery. This is consistent with Burke and Reitzes’ (1981) assertion that identities are related to role performances and other outcomes through shared meanings. Since obligatory identities share meanings with mastery (i.e., meanings related to what one does or is capable of doing), it is likely that discrepancies associated with them are related to mastery more so than self-esteem. By contrast, Burke and Stets (2009) suggest that evaluations of one’s performance in voluntary identities have implications for one’s sense of self-worth or esteem. Again, consistent with the notion that identities are connected to outcomes through shared meanings (Burke and Reitzes 1981), meanings
that are common to voluntary identities and self-esteem (i.e., meanings concerning *who one is*) likely connect them such that discrepancies associated with voluntary identities affect self-esteem more so than mastery.

Although the theoretical differences between obligatory and voluntary identities have been specified in the literature, they have not been empirically examined. Specifically, previous studies classify identities as either obligatory or voluntary based on researchers’ judgments about the category in which a given identity should be placed (e.g., Thoits 2003). This poses a problem for theory testing, because research has yet to verify whether certain identities are actually comprised of meanings that distinguish them in terms of the degree to which they fit more clearly into obligatory or voluntary categories. Therefore, hypotheses based on the obligatory-voluntary identity distinction cannot be falsified. For instance, if study results indicate that discrepancies in an obligatory identity such as spouse do not affect outcomes in the expected ways, one can simply conclude that the spouse identity must not be an obligatory identity. Measures that assess the meanings of these identities would help to better empirically distinguish these seemingly important types of identities and clarify their impact on distress.

To address this gap in the literature, I assess meanings associated with voluntary and obligatory identities using both new and established measures. Specifically, I test new measures that are designed (as part of this dissertation research) to capture key features of obligatory and voluntary identities, and the extent to which individuals rate them in ways that are consistent with their theoretical meanings. I also use measures of concepts that have played a central role in previous identity research, in particular
commitment and psychological centrality, to examine whether obligatory and voluntary identities can be distinguished in terms of how respondents rate them on these established measures of identity meaning.

Commitment refers to both the close feelings people have for those associated with a particular identity (intensive commitment) and the number of people with which one is associated as a result of holding a particular identity (extensive commitment) (Stryker and Serpe 1982; Serpe 1987). In its more contemporary usage, extensive commitment is called interactional commitment and affective commitment refers to the emotional cost of losing a particular identity (Owens 2003). Centrality refers to the importance of an identity for defining who one is (Stryker and Serpe 1982, 1994).

Definitions of identity commitment and centrality overlap with Thoits’ (2003) description of obligatory identities as being characterized by long-term, affectively intense ties to role partners.

Although I follow Thoits (2003) in categorizing certain identities as voluntary or obligatory, I do not claim or expect that these categories are mutually exclusive. Rather, I use them as theoretical tools with which to classify and attempt to understand the general nature of certain identities in terms of the meanings that are likely to be associated with them and the contexts in which they are likely to be evoked relative to other types of identities (Thoits 2003). Such differences may influence the relationship between identity discrepancies and distress, but empirical questions remain with respect to whether obligatory and voluntary identities actually have distinct meanings, and whether they
differentially affect self-concept and psychological distress. These are key questions that I examine, drawing from identity theoretical models of distress.

In this dissertation, I investigate identity discrepancies in the context of obligatory and voluntary identities. The analysis chapters (chapters two through four) of my dissertation are not meant to represent stand-alone studies, but rather, are intended to structure the presentation of background literature and empirical findings around my three main research questions. Thus, the remaining chapters of my dissertation are organized as follows. In chapter two, I examine the extent to which identities that are theoretically obligatory or voluntary can be empirically distinguished in terms of the meanings respondents attribute to them. In chapter three, I focus on the relationships between discrepancies related to obligatory (worker, family member, and spouse/partner) and voluntary (friend, religious/spiritual, and volunteer) identities, self-concept, and psychological distress. A secondary aim of chapter three is to address two key methodological issues by investigating different identity discrepancy measurement strategies and examining multiple identities. In chapter four, I test the structural invariance (equivalence) of the theoretical relationships examined in chapter three across different racial/ethnic and gender groups. Finally, in chapter five, I discuss theoretical, methodological, and empirical contributions of my dissertation as well as limitations and directions for future research. All of the analyses in this dissertation use data from two studies. To avoid repeating a general description of each study in subsequent analysis chapters, I present general descriptions of the data sources and samples below.
Data and Sample Characteristics

Data

The data for this dissertation are from two independent studies. I describe the specific measures that I use to investigate my research questions in the analysis chapters, but here I briefly introduce the two data sources for this dissertation, the demographic characteristics of each sample, and a detailed account of missing data.

The first study, funded by a National Science Foundation Dissertation Improvement grant (SES-1129879), was designed specifically for this project. The data for this study come from a random-digit-dialing telephone survey that examined obligatory and voluntary identity meanings, self-concept, and distress among 475 individuals who are 18 or older and living in the 48 contiguous United States. Data were collected at the Survey Research Laboratory at Kent State University in Kent, Ohio between January and May 2012. Hereafter, I refer to this study as the U.S. study or data.

In the U.S. study, I sampled adults to investigate a wide range of adult identities and to avoid the limitations of studying a convenience sample of college students (e.g., the inability to study certain adult identities such as spouse or full-time employee, because most college students may not yet occupy those roles). Each respondent was asked about two of the six identities (one obligatory and one voluntary). Given that respondents differ with respect to which of the six identities they hold, they were questioned about two identities that were randomly assigned from the total number of obligatory and voluntary identities for which they were screened as eligible. To ensure a
relatively equal number of cases for each identity, I capped the more common identities (i.e., friend and family member) at approximately 170 cases.

The length of each interview was approximately 15 minutes. The sample was purchased from Survey Sampling, Inc., a reputable vendor for phone surveys, and was screened for disconnected numbers and businesses before it was sent to the SRC. The SRC made eight dialings to a number before retiring it. The sample was a cluster sample of the 48 continuous United States. There were 861 clusters with 25 numbers per cluster. The response rate was 55 percent with approximately 111 dialings for each completed interview. The response rate was calculated using the American Association for Public Opinion Research (AAPOR) response rate 4 (American Associate for Public Opinion Research 2009).

The second study is a random-digit-dialing telephone survey that examined aspects of self-concept among 1,107 individuals who were 18 or older and living in Los Angeles County, California. Data were collected by the Social and Behavioral Research Institute at California State University, San Marcos in 2000. Hereafter, I refer to this study as the California study or data. The California data is unique in that certain racial/ethnic groups were over-sampled to produce a final sample consisting of about one-third white, black, and Latino respondents (Stets and Harrod 2004). It also includes respondents’ evaluations of themselves in the friend (a voluntary identity) and worker (an obligatory identity) roles and their perceptions of how a select group of significant others evaluate them in those roles.
Sample Characteristics

U.S. Study Sample Demographics. The U.S. study sample was comprised of 475 cases, but due to missing data, the final analysis sample was reduced. Specifically, 63 (13.3 percent) respondents did not report their income, eight (1.7 percent) respondents were missing one or more distress items, 33 (6.9 percent) respondents were missing one or more mastery items, 21 (4.4 percent) respondents were missing one or more self-esteem items, 25 (5.3 percent) respondents were missing one or more obligatory-voluntary meaning items, nine (1.9 percent) were missing one or more centrality items, 14 (2.9 percent) were missing one or more interactional commitment items, and six (1.3 percent) were missing one or more affective commitment items.

As table 1.1 illustrates, the U.S. study analysis sample is comprised of 376 respondents who gave valid responses on all study variables. Eighty-five percent of the respondents are white, nine percent are black, three percent are Latino, and four percent reportedly identify as a member of a racial/ethnic group other than those three. Seventy percent of respondents are female, 56 percent are employed, 28 percent are single, four percent are cohabiting, and 69 percent are married. The average age of the sample is 54.53 years. The average education of the sample is 15.53 years, which corresponds to about three years beyond high school. Income is measured in eight categories, and the mean income is 5.56, which corresponds to $45,000 to $59,999.
Table 1.1. Descriptive Statistics for U.S. Study Demographic Characteristics (N= 376)

<table>
<thead>
<tr>
<th></th>
<th>mean/ proportion</th>
<th>SD</th>
<th>range</th>
</tr>
</thead>
<tbody>
<tr>
<td>White</td>
<td>.85</td>
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<td>0-1</td>
</tr>
<tr>
<td>Black</td>
<td>.09</td>
<td></td>
<td>0-1</td>
</tr>
<tr>
<td>Latino</td>
<td>.03</td>
<td></td>
<td>0-1</td>
</tr>
<tr>
<td>Other</td>
<td>.04</td>
<td></td>
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</tr>
<tr>
<td>Female</td>
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<td></td>
<td>0-1</td>
</tr>
<tr>
<td>Age (in years)</td>
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<td>14.45</td>
<td>18-88</td>
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<tr>
<td>Education (in years)</td>
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<tr>
<td>Income (categories)</td>
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</tr>
<tr>
<td>Single</td>
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<tr>
<td>Cohabiting</td>
<td>.04</td>
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<td>0-1</td>
</tr>
<tr>
<td>Married</td>
<td>.69</td>
<td></td>
<td>0-1</td>
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</table>

California Study Sample Demographics. The California study sample was comprised of 1,107 cases, 420 of whom were employed (had a worker identity), but due to missing data, the analysis sample was further reduced. Specifically, 32 (7.6 percent) respondents did not report their income, 13 (3.1 percent) did not report their age, 3 (.7 percent) did not report their education, five (1.2 percent) were missing one or more distress outcome items, eight (1.9 percent) were missing one or more self-esteem items, 10 (2.4 percent) were missing one or more mastery items, and 31 (7.4 percent) were missing one or more worker identity items. The California study analysis sample is comprised of 335 respondents who gave valid responses on all study variables. Demographic characteristics for the California study sample are displayed in table 1.2.

Given that one of the goals of the study for which the California data was collected was to examine racial/ethnic differences in self-concept, the study over-sampled
black and Latino respondents to obtain a final sample that was equal proportions white, black, and Latino. As a result, the sample is 27 percent white, 33 percent black, and 31 percent Latino. Fifty-two percent of the respondents are female, 37 percent are single, 10 percent are cohabiting, and 53 percent are married. Since the worker identity is the only obligatory identity in the California data, 100 percent of the sample is employed at least part time. Unfortunately, respondents were not asked the average number of hours they worked in a week or whether they worked full or part time. The average age of the sample is 38.98 years. The average education of the sample is 13.82 years, which corresponds to one year of education beyond high school. Income is measured in 12 categories, and the mean income was 5.90, which corresponds to $45,000 to $60,000.

<table>
<thead>
<tr>
<th>Demographic Characteristics</th>
<th>mean/proportion</th>
<th>SD</th>
<th>range</th>
</tr>
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<td></td>
<td>0-1</td>
</tr>
<tr>
<td>Black</td>
<td>.33</td>
<td></td>
<td>0-1</td>
</tr>
<tr>
<td>Latino</td>
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<tr>
<td>Other</td>
<td>.09</td>
<td></td>
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<td>Female</td>
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<tr>
<td>Age (in years)</td>
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<td>Education (in years)</td>
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<tr>
<td>Income (categories)¹</td>
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<td>3.34</td>
<td>1-12</td>
</tr>
<tr>
<td>Employed²</td>
<td>1.00</td>
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<td></td>
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<tr>
<td>Single</td>
<td>.37</td>
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<tr>
<td>Cohabiting</td>
<td>.10</td>
<td></td>
<td>0-1</td>
</tr>
<tr>
<td>Married</td>
<td>.53</td>
<td></td>
<td>0-1</td>
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</table>

¹1 (.2%) respondent did not know their income; 31 (7.4%) refused to report it.  
²All respondents are employed because all have a worker identity.

Note: Analysis N=304; it excludes 11 respondents in the “other” racial category.
CHAPTER 2

OBLIGATORY AND VOLUNTARY IDENTITY MEANINGS

Chapter 2 Introduction

In this chapter, I discuss and investigate theoretical and empirical distinctions between obligatory and voluntary identities. Specifically, I draw from early role theory and more recent identity theories that specify differences between general categories of identities, and focus most directly on distinctions between two particular role identities: obligatory and voluntary identities. Using new and established identity meaning measures in the U.S. study, I conduct paired sample t-tests to empirically verify the theoretical distinctions between obligatory and voluntary identity meanings. Consistent with my hypotheses, I find that obligatory and voluntary identities are rated by respondents in ways that are consistent with their theoretical meanings.

Role Theory

The theoretical distinction between obligatory and voluntary identities is rooted in classical role theory (Turner 1976, 1978). In particular, this study is informed by three of
Turner’s theoretical contributions: (1) the notion of the real self as having an institutional or impulsive locus (Turner 1976), (2) the concept of a role-person merger and the types of roles in which it is likely to occur (Turner 1978), and (3) the acknowledgement of the place of agency and choice in our role acquisitions and self-presentations, as exemplified by the concept of role-making (Turner 2002). All of these theoretical concepts provide the impetus for sociologists to analyze and attempt to understand the observations of early role and identity theorists that a particular person can and often does act and feel very differently in different situations, positions, or relationships and that different individuals can and often do behave similarly in similar situations, positions, or relationships (Stryker 1980; Turner 2002).

According to Turner (1976), for a person with an institution locus, the real self is revealed by adhering to a high standard, especially when that person is tempted to do otherwise. The goal of a person with an institutional locus of self is to match his/her behavior with role prescriptions. Thus, such a person is likely to work hard to resist pressure to become distracted from his or her goals and principles. For a person with an impulsive locus, the real self is revealed by doing what one wants to do when one wants to do it. The goal of a person with an impulsive locus of self is to match his/her behavior with his/her impulses. Thus, such a person is likely to resist pressure to conform to what they perceive as arbitrary rules and goals of society. This suggests that different behaviors are considered genuine for those with institutional compared to impulsive self-conceptions. Both are concerned with how they appear to others, but for different reasons. In other words, everyone wants to “be themselves,” but for a person with an
institutional self-locus, this means conforming to external standards of role performance and behavior; for a person with an impulsive self-locus, this means conforming to internal standards of role performance and behavior. Given these differences, individuals with institutional self-loci may be more concerned with others’ feedback about and evaluation of their role performances.

There are likely very few people who are either entirely institutional or entirely impulsive, and most people have a sense of self that includes elements of each (Turner 1976). Nonetheless, Turner (1976) suggests that sociological theories too often take for granted that people locate their real selves in institutions, and criticizes researchers’ tendency to make a priori assumptions about which roles are important to individuals because “…the self may be securely lodged somewhere other than where the investigator has looked” (997). Given this, perhaps we should not automatically assume that a person’s sense of self is tied to their work, spouse, or any other roles that we typically believe are universally important. It may also be that others’ evaluations are not equally important to every individual. The conceptualization of role identities as having characteristics that are, to some degree, both obligatory and voluntary does not take for granted that the real self is situated in institutions or that either type of identity is more or less important to individuals’ self-concepts, but rather, allows for identities to be some combination of obligatory (which shares features of institutional locus of self) and voluntary (which share features of impulsive locus of self).

Among the many different types of roles that individuals hold, Turner (1978), makes a key theoretical distinction between roles that “are put on and taken off like
clothing without lasting personal effect” and roles that “are difficult to put aside,” arguing that the latter could lead to a role-person merger in which attitudes and behaviors associated with one role are applied across situations and roles (1). For example, a grade school teacher who develops a strict interaction style with her students in her role as a worker may bring that same style of relating to children home to her interaction with her own children in her role as a mother. This behavior would suggest that she has experienced a role-person merger with her worker role, which leads her to use attitudes and behaviors associated with her worker role in the context of other roles and situations that do not necessarily require those same attitudes and behaviors. According to Turner (1978), a role person merger occurs when three criteria are met: (1) a person enacts a particular role in situations in which it does not apply, (2) a person resists abandoning the role despite attractive alternatives, and (3) a person develops attitudes and beliefs consistent with the role.

One could assume that decisions and actions associated with the criteria for a role-person merger are all determined by an individual role occupant, but according to Turner (1978), role decisions are inherently social. In other words, it is not that the teacher described above necessarily had a strict personality that made her predisposed to behave toward children in a particular way at work and home, but that she learned to be strict through her socialization in her worker role, and the attitudes and behaviors associated with being strict carried over into her mother role. It is also likely that, through her enactment of the strict teacher role, others came to expect her to behave that way in her worker as well as other roles. Turner (1978) invokes the concept of salience
(Stryker 1968, 1980; Stryker and Serpe 1994) when he notes that we can learn a great deal about a person by considering the role(s) they enact across situations and the role(s) that influence the way their other roles are played. Turner (1978) argues that temporary roles and roles that are voluntarily assumed are resistant to merger with the person. This suggests that the voluntary identities in this study may be less likely than the obligatory identities to result in role-person mergers.

Obligatory and voluntary roles may also provide different opportunities for role-making. Turner argues that people role-make by presenting themselves to others in particular ways (Turner 2002). In other words, they choose certain aspects of themselves to display (and to not display) to control the impressions others form of them. Turner (2002) notes that all roles have certain obligatory, optional, and forbidden behaviors associated with them. He also argues that individuals typically do not conceive of themselves in a given role in ways that perfectly match the formal societal expectations associated with that role, and thus, develop an “informal working role” that can be quite different than the formal role (Turner 2002: 243). In other words, norms associated with social roles provide “a set of broad imperatives within which details of roles can be worked out” (Biddle 1986: 71). Even roles that have very strict expectations and obligations (e.g., police or military) have a lot of room for individual creativity and discretion (Turner 2002). By extension, obligatory and voluntary roles, despite their potentially different identity meanings, both afford at least some opportunity for role-making, or the development and expression of unique and creative self-meanings and presentations. However, to the extent that obligatory roles have more rigidly defined
expectations and obligations and are difficult to abandon, they may provide fewer opportunities for role-making than voluntary roles that are more loosely defined and more readily entered and exited.

Turner (1976, 1978, 2002) offers important insights into the ways in which different roles vary in terms of the degree to which they are likely to result in role-person mergers, afford occupants opportunities to role-make, and the ways in which individuals with different self-loci are differentially influenced by others’ feedback and evaluations of their role performances. In addition to potentially different social meanings and expectations, different types of roles are also imputed with identity meanings by the individuals who hold them. These identity meanings also vary by identity type.

**Role Identities**

Identity theorists contend that people attach meanings to themselves in particular roles, groups, and as people more generally (Stryker and Burke 2000), and thus, classify identities as role-based, group-based, and person-based. Similarly, Turner (2011) classifies identities as role group, social, and core. Turner’s (2011) definitions of role and core identities correspond with Stryker and Burke’s (2000) role and person-based identities, but he makes a distinction between group identities that refer to membership in a social category (social identities) and group identities that refer to membership in a corporate unit, organization, or community (group identities). Turner (2011) also notes that there are likely many other types of identities, but that the three types of identities listed above are the most important for understanding interaction processes. Since I only
investigate role identities, and more specifically, distinctions between particular types of role identities (obligatory and voluntary) in this dissertation, I also focus on role identities in the following review.

Role identity meanings are comprised of shared cultural expectations about certain social positions and individuals’ own understandings of what those positions mean. Much of the empirical identity research has focused on role-based identities (Thoits and Virshup 1997; Burke and Stets 2009). Examples of role identities include, spouse, parent, friend, and worker. Role identities are theoretically evaluated in terms of what people do (their behavior in role) versus who they are, and verification of these roles is hypothesized to be more closely related to feelings of self-efficacy (i.e., mastery) more so than to self-worth (i.e., self-esteem) or authenticity. However, this prediction is in need of empirical verification (Burke and Stets 2009).

Obligatory and Voluntary Identities

Within the larger category of role identities, finer distinctions are made between groups of identities that share certain theoretical characteristics, attributes, or meanings. The distinction between obligatory and voluntary identities (Thoits 1992, 2003) is of central importance to this dissertation research. Thoits (2003) describes obligatory identities as “involving long-term ties to others that are affectively intense and have relatively demanding mutual rights and responsibilities attached to them, making those identities more difficult to exit, both emotionally and instrumentally” (184). Further, Thoits (1992, 2003) notes that a failure to carry out responsibilities associated with
obligatory identities will be met with disapproval by role partners. Although some degree of agency is involved in entering and exiting all roles, including those that are obligatory (Thoits 2003), choices regarding the acquisition or abandonment of obligatory roles are likely to be more constrained than choices about limiting or discontinuing involvement in more voluntary roles (Pavalko and Woodbury 2000). In Turner’s (2002) terms, perhaps the opportunity to role-make is relatively limited in the context of obligatory identities. Examples of obligatory identities include spouse/partner, worker, and family member (Thoits 2003).

In contrast to obligatory identities, voluntary identities tend to be “discretionary,” meaning that individuals can more freely move in and out of these identities (Thoits 2003: 184). Compared to obligatory identities, voluntary identities generally involve shorter-term, less affectively intense ties to others, and also involve fewer responsibilities to role partners. “Because voluntary ties tend to be shorter-term (compared to obligatory ties), because their affective intensity is usually lower, and because responsibilities to role partners are less demanding and less likely to be sanctioned when unmet, voluntary identities are easier to exit” (Thoits 2003: 184). In Turner’s (2002) terms, voluntary identities likely offer more opportunities than obligatory identities for role-making. Examples of voluntary identities include religious/spiritual person, friend, or volunteer/social group member (Thoits 2003).

Although these general descriptions of obligatory and voluntary identities make them seem quite different, the obligatory-voluntary distinction is less clear with regard to certain identities compared to others. For instance, Thoits (2003) categorizes the friend...
identity as voluntary, but notes that it may not fit perfectly into that category because friendship ties can have many of the longer-term features of obligatory identities. Since friendships are usually less demanding and easier to exit than jobs or other types of obligatory identities, Thoits (2003) concludes that the friend identity is more voluntary than obligatory. The ambiguity associated with classifying the friend identity illustrates that the voluntary and obligatory categories are not mutually exclusive, and Thoits (2003) notes that they and are not necessarily meant to be. Rather, they are theoretical tools with which to classify and attempt to understand the general nature of certain identities in terms of the meanings that are likely to be associated with them and the contexts in which they are likely to be evoked relative to other types of identities (Thoits 2003). Empirical questions remain with respect to whether obligatory and voluntary identities actually have the theoretical characteristics noted above, and whether they differentially affect self-concept and psychological distress. In this set of analyses, I investigate the extent to which study respondents rate obligatory and voluntary identities in ways that are consistent with their theoretical meanings. I offer specific hypotheses concerning the meanings associated with obligatory and voluntary identities below.

Hypotheses

Overall, I predict that obligatory and voluntary identities will be rated significantly differently on all identity meaning measures. In all hypotheses, obligatory identities refer to the spouse/partner, worker, and family member identities and voluntary identities refer to the friend, volunteer/social group member, and religious/spiritual
identities. In summary, I predict that obligatory identities will be rated as more obligatory and voluntary identities will be rated as more voluntary. The first two hypotheses present my predictions about differences between each category of identity.

\( H_1 \): Obligatory identities will be rated significantly more obligatory than voluntary identities.

\( H_2 \): Voluntary identities will be rated significantly more voluntary than obligatory identities.

The third and fourth hypotheses specify my predictions about differences in the degree to which an identity is more obligatory or voluntary within each identity category.

\( H_3 \): Obligatory identities will be rated significantly more obligatory than voluntary.

\( H_4 \): Voluntary identities will be rated significantly more voluntary than obligatory.

As the hypotheses stated above illustrate, predictions about the degree to which identities have meanings that match the theoretical obligatory-voluntary distinction are relatively straightforward because I test them using measures designed for this exact purpose. However, because the established identity measures I use in this study—centrality, interactional commitment, and affective commitment—are designed to capture the relative placement of a given identity within respondents’ identity hierarchies, they do not apply as directly to the obligatory-voluntary distinction. Specifically, both obligatory and voluntary identities could theoretically be high or low in terms of centrality and commitment, depending on where a person places them relative to the other identities.
they hold. For instance, it is conceivable that certain obligatory identities such as spouse/partner or worker could be more or less important (central to who one is) than certain voluntary identities such as friend or religious/spiritual person for any given individual. I include this measure because it is has been previously tested, and thus, provides an opportunity to test the convergent validity of the new obligatory and voluntary identity meaning measures. However, I make no specific hypotheses about differences between obligatory and voluntary identities in terms of centrality.

With respect to interactional and affective commitment, there are similarities in the meanings of feelings and behavior tied to those concepts and the meanings and behaviors of obligatory and voluntary identities. For instance, obligatory identities such as worker and family member theoretically require a large amount of time-in-role, and thus, may be rated as higher than voluntary identities on interactional commitment. Voluntary identities such as friend or religious/spiritual person are characterized by strong feelings of emotional attachment, and thus, may be rated higher in affective commitment. Again, these established measures provide an opportunity to test the convergent validity of the new obligatory and voluntary identity meaning measures. The following hypotheses are informed by the theoretical similarities between obligatory and voluntary identity meanings and interactional and affective commitment, respectively.

H₅: Obligatory identities will be rated significantly higher than voluntary identities on interactional commitment.

H₆: Voluntary identities will be rated significantly higher than obligatory identities on affective commitment.
Methods

Data and Measures

Data for this portion of the analyses come from the U.S. study (N=376), as the California study does not include any measures of identity meaning. The U.S. study includes six identities: three obligatory and three voluntary. The obligatory identities are spouse/partner, worker, and family member. The voluntary identities are friend, voluntary organization/social group member, and religious/spiritual person.

Given that one of the central goals of this dissertation is to attempt to empirically verify theoretical differences in meanings associated with obligatory and voluntary identities, I designed the U.S. study to include established measures of identity meaning as well as new measures of obligatory and voluntary identity meaning that were developed for the purpose of this dissertation. The three new measures employ different strategies to assess meanings associated with respondents’ identities. For the first two measures, respondents are read the following description prior to answering questions about their identities.

Identities can be described according to how obligatory and voluntary they are. Some may be more obligatory or voluntary, and others may fall somewhere in between. I am going to describe each type of identity to you and ask you to think about how much your [two identities person is being questioned about (e.g., worker and friend identities)] fit into each type. Obligatory identities usually involve ties to others that have many strong obligations and responsibilities. Once a person holds this type of role, it can be very difficult for them to leave it. Voluntary identities usually involve ties to others that have fewer obligations and responsibilities. People can more easily enter and leave these roles if they want to.

The first identity meaning measure developed for this dissertation asks,
First, please think about your [two identities person is being questioned about (e.g., worker and friend identities)] in terms of where they fall on a *continuum between voluntary and obligatory*. On a scale from 0-10 where 0 means completely voluntary and 10 means completely obligatory, where would you place your [spouse/partner, worker, family member, friend, voluntary organization/social group member, religious/spiritual person] identity?

Hereafter, I refer to this item as the *voluntary-obligatory continuum*. The voluntary-obligatory continuum is asked twice; once about the theoretically obligatory identity and once about the theoretically voluntary identity. This measure requires respondents to think about obligatory and voluntary identities as being somewhat opposite types and allows them to place each of their two identities somewhere between those poles. Higher scores (especially those above 5) on this item indicate that the identity is more obligatory, while lower scores (especially those below 5) indicate that the identity is more voluntary.

Before respondents are asked the second set of identity meaning questions developed for this dissertation, they are reminded of the previous descriptions of obligatory and voluntary identities and are then asked to think about each of their identities in terms of the degree to which they are obligatory and/or voluntary. Respondents are then asked, “On a scale from 0-10 where 0 means not at all and 10 means extremely, how obligatory would you say your [spouse/partner, worker, family member, friend, voluntary organization/social group member, religious/spiritual person] identity is?” and “On a scale from 0-10 where 0 means not at all and 10 means extremely, how voluntary would you say your [spouse/partner, worker, family member, friend, voluntary organization/social group member, religious/spiritual person] identity is?” Hereafter, I refer to these items as *obligatory or voluntary ratings*. Respondents are asked each question twice; once about the theoretically obligatory identity and once about
the theoretically voluntary identity. Higher scores indicate that an identity is more obligatory or more voluntary, respectively. This measure requires respondents to think about all identities as possibly being some combination of obligatory and voluntary, and affords them the opportunity to rate each of their identities accordingly.

The third identity meaning measure developed for this dissertation includes eight items that ask respondents to rate the degree to which they agree with a series of statements regarding characteristics that are theoretically more related to either obligatory or voluntary identities. These items were based on the theoretical characteristics on which obligatory and voluntary identities differ (Thoits 2003). They are also consistent with the notion that “the operational referent of commitment is costs – personal and social – of not fulfilling a role based on a given identity, and so foregoing ties to others premised on that role and identity” (Stryker, Serpe, and Hunt 2005:94). Items include, “If I wanted to, it would not be very hard for me to [leave my spouse/partner, quit my job, lose my family, lose my friends, quit my volunteer/social group, quit my religious/spiritual affiliation]”; “I have many responsibilities [as a spouse/partner, at my job, as a family member, as a friend, as a social group member, as a religious/spiritual person]”; and “Most of the people I have met in my role as a [spouse/partner, worker, family member, friend, social group member, religious/spiritual person] have been or will be part of my life for a long time”. Responses range from 1 (strongly disagree) to 4 (strongly agree). Given that these items have not been previously tested, I examine them individually and as a summed scale. Hereafter, I refer to this measure as the *obligatory-voluntary meaning items or scale*. 
The obligatory-voluntary meaning items allow me to assess the extent to which respondents endorse certain meanings or characteristics more for their obligatory compared to voluntary identity and vice versa. Perhaps more importantly, it also allows respondents to attribute any of the characteristics to either their obligatory identity, voluntary identity, or both to similar or different degrees. In replying to these items, respondents are able to consider the specific meanings or characteristics they do or do not associate with each of their identities independent of any researcher-provided definition specifying particular sets of meanings or characteristics thought to be associated with different types of identities.

In addition to the identity meaning measures just described, the U.S. study includes three established measures of identity meaning; centrality (Luthanen and Crocker 1992) and interactional commitment and affective commitment (Stryker et al. 2005). Each concept is measured consistent with previous work, but items are worded so that they apply to the identities in this study. All items are asked twice; once for each identity. **Centrality** is measured using a subset of three items from the original scale. “Being a(n) [name of identity] is an important reflection of who I am”; “When I think of myself, the first thing that comes to mind is myself as a [name of identity]”; and “In order for people to know who I am, it is important that they know I am a [name of identity].” Responses range from 1 (strongly disagree) and 4 (strongly agree). These items are summed, and higher values indicate greater identity centrality or importance.

**Interactional commitment** is measured using the following four items. “How often do you do things with [role complement for identity]?”; In an average week, how many
hours to you spend with [role complement for identity]?”; and “Of the money you do not need for rent, food, clothing and other essentials, how much do you spend on things you do with [role complement for identity]?” Higher values on these items indicate greater interactional commitment. I did not compute a scale for interactional commitment, because each item is asked using non-equivalent response categories. Finally, affective commitment is measured using the following four items. “How much would you miss [role complement for identity] if you were not able to see him/her/them?” “How close (in personal and emotional terms) are you to [role complement]?”; “How important is/are [role complement] to you?”; and “After I do things with [role complement], I often feel unhappy.” Responses for these items range from 1 (not at all, not close at all, not at all important, or strongly disagree) to 4 (a great deal, very close, very important, or strongly agree), respectively. These items are summed, and higher values indicate greater affective commitment.

Analytic Strategy

To investigate the extent to which obligatory and voluntary identities have different meanings and characteristics, I conduct a series of paired-samples t-tests using the established measures of identity meaning as well as those that were developed for this dissertation. Given that the California data does not include measures of identity meanings, these analyses are conducted using only the U.S. data. Because the main goal of this study is to investigate potential differences between the two broader categories of identities and not to identify potential differences between particular identities within the obligatory and
voluntary categories, obligatory and voluntary identities were randomly assigned to respondents from among those for which they screened as eligible. Thus, I consider all three of the obligatory identities as a group and all three of the voluntary identities as a group in the analyses. Specifically, I examine whether there are statistically significant differences between obligatory and voluntary identities on mean levels of the voluntary-obligatory continuum, obligatory and voluntary ratings, obligatory-voluntary meaning items and scales, centrality, interactional commitment, and affective commitment. I also examine correlations between the new obligatory meaning items and established identity meaning items to assess the convergent validity of the new measure.

I investigate potential differences by first comparing ratings *between* the two different types of identities (hypotheses 1 and 2). Finding that obligatory identities are rated as significantly more obligatory than voluntary identities and that voluntary identities were rated as more voluntary than obligatory identities would provide support for the theoretical distinction between them. I further examine potential differences between obligatory and voluntary identities by comparing the ratings *within* each type of identity (hypotheses 3 and 4). If findings show that theoretically obligatory identities are rated as significantly more obligatory than voluntary and that voluntary identities are rated as significantly more voluntary than obligatory on the continuum, rating, and meaning measures, the theoretical distinction between them would be supported. Finally, statistically significant differences between obligatory and voluntary identities with respect to mean levels of centrality (no specific hypothesis), interactional commitment (hypothesis 5), and affective commitment (hypothesis 6) would also support the theoretical assumption
that they are different types of identities with different meanings and characteristics. Taken together, statistically significant differences between obligatory and voluntary identities on all of these measures will support theoretical assumptions and provide justification for treating them separately in subsequent analyses in which I examine the impact of identity discrepancies on psychological distress.

Results

This chapter’s analyses focused on empirically verifying the theoretical differences between obligatory and voluntary identities. Hypotheses one through six specified predictions concerning the way in which respondents would rate their theoretically obligatory and voluntary identities on new and established measures of identity meaning. To evaluate the accuracy of those predictions, I conducted pairwise t-tests that compared the means of obligatory and voluntary identities on each respective measure of identity meaning. Results of these analyses are displayed in tables 2.1 and 2.2.

As illustrated in table 2.1, the mean voluntary-obligatory rating was 5.88 for obligatory identities and 4.58 for voluntary identities. That difference between obligatory and voluntary identities (1.30) was statistically significant, supporting hypotheses 1 and 2, respectively. On the voluntary-obligatory continuum, scores above five indicated that the identity was more obligatory and scores below five indicated that the identity was more voluntary. Although each type of identity was rated, on average, relatively close to
the middle of the scale, obligatory identities fell on the obligatory side and voluntary identities fell on the voluntary side of the continuum as expected.

The average obligatory and voluntary ratings for each type of identity are also displayed in table 2.1. I also used these items to evaluate differences between identities. As illustrated in table 2.1, I found that obligatory identities ($\bar{x} = 6.33$) were rated significantly higher than voluntary identities ($\bar{x} = 4.78$) on the obligatory rating item and that voluntary identities ($\bar{x} = 6.59$) were rated significantly higher than obligatory identities ($\bar{x} = 5.86$) on the voluntary rating item. These results further support hypotheses one and two, respectively.

I also used the obligatory and voluntary rating items to evaluate differences within identities in terms of their obligatory and voluntary ratings. I found that obligatory identities were rated significantly higher on the obligatory item ($\bar{x} = 6.33$) than they were on the voluntary item ($\bar{x} = 5.86$) and that voluntary identities were rated higher on the voluntary item ($\bar{x} = 6.59$) than they were on the obligatory item ($\bar{x} = 4.78$). These findings support hypotheses three and four, respectively.

Table 2.1 also displays means for obligatory and voluntary identities on the obligatory meaning items and scale. These measures were developed for this dissertation, and were intended to capture key theoretical components of obligatory identities. In further support of hypothesis one, I found that obligatory identities were rated significantly higher than voluntary identities on the obligatory meaning scale as well as each item that comprised the scale, with one exception. Obligatory identities were rated slightly higher than voluntary identities on the item that stated, “It would not
Table 2.1. Descriptive Statistics for Obligatory and Voluntary Meaning Items (n=376)

<table>
<thead>
<tr>
<th></th>
<th>Obligatory Identities</th>
<th>Voluntary Identities</th>
<th>Mean Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mean</td>
<td>SD</td>
<td>range</td>
</tr>
<tr>
<td>Voluntary-Obligatory Continuum</td>
<td>5.88</td>
<td>3.05</td>
<td>0-10</td>
</tr>
<tr>
<td><strong>Obligatory &amp; Voluntary Ratings</strong>¹</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Identity is Obligatory</td>
<td>6.33</td>
<td>2.86</td>
<td>0-10</td>
</tr>
<tr>
<td>Identity is Voluntary</td>
<td>5.86</td>
<td>2.89</td>
<td>0-10</td>
</tr>
<tr>
<td><strong>Obligatory Meaning Scale</strong>²³</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Not hard to leave/quit</td>
<td>3.27</td>
<td>.97</td>
<td>1-4</td>
</tr>
<tr>
<td>Upsetting to leave/give up</td>
<td>3.63</td>
<td>.66</td>
<td>1-4</td>
</tr>
<tr>
<td>Not hard to reduce time with people</td>
<td>2.57</td>
<td>.99</td>
<td>1-4</td>
</tr>
<tr>
<td>Upsetting to reduce time with people</td>
<td>3.08</td>
<td>.89</td>
<td>1-4</td>
</tr>
<tr>
<td>Many responsibilities</td>
<td>3.41</td>
<td>.74</td>
<td>1-4</td>
</tr>
<tr>
<td>Many people who count on me</td>
<td>3.32</td>
<td>.79</td>
<td>1-4</td>
</tr>
<tr>
<td>Others disappointed if I were not good</td>
<td>3.40</td>
<td>.69</td>
<td>1-4</td>
</tr>
<tr>
<td>Most people have been or will be part of my life for a long time</td>
<td>3.22</td>
<td>.80</td>
<td>1-4</td>
</tr>
</tbody>
</table>

¹Response categories: 0=not at all; 10=extremely
²Response categories: 1=strongly disagree; 4=strongly agree
³Summed scale of all identity meaning items, coded so that higher scores indicate more obligatory meanings

Obligatory meaning scale alpha=.667 for obligatory identities; obligatory meaning scale alpha=.801 for voluntary identities.

Note: Obligatory identities were rated significantly more obligatory than voluntary (mean difference .47***).
Voluntary identities were rated more voluntary than obligatory (mean difference 1.81***).

* p≤ .05 **p≤ .01 ***p≤ .001
be hard for me to reduce the amount of time I spend with people associated with my identity,” but that difference was not statistically significant.

Additional evidence regarding the empirical differences between obligatory and voluntary identity meanings is displayed in table 2.2. This table contains the results of pairwise t-tests that evaluated the differences between obligatory and voluntary identities on established measures of identity meaning: centrality, interactional commitment, and affective commitment. I did not offer hypotheses concerning centrality, because previous research suggests that most of the identities included in this study tend to be rated by respondents as quite important. However, as illustrated in the top of table 2.2, respondents rated their obligatory identities significantly higher ($\bar{x} = 8.80$) than their voluntary identities ($\bar{x} = 8.16$) on the centrality scale and all of its items. Thus, respondents believed that, on average, their obligatory identities were more important than their voluntary identities in terms of the degree to which they were reflections of who they were, the first thing they thought of when they thought of themselves, and that it was important for others to know that they had those identities in order to know who they were.

The same pattern emerged with respect to interactional commitment, supporting hypothesis five. Specifically, respondents rated their obligatory identities significantly higher than their voluntary identities on each item, which indicated that they spent more time with people associated with their obligatory identities. Given that most individuals spend the majority of their time either at work or with their families, it is not surprising
Table 2.2. Descriptive Statistics for Identity Meaning Items, Identity Ratings, and Discrepancies (N=376)

<table>
<thead>
<tr>
<th></th>
<th>Obligatory Identities</th>
<th>Voluntary Identities</th>
<th>Mean Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>mean</td>
<td>SD</td>
<td>range</td>
</tr>
<tr>
<td><strong>Centrality</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Important reflection of who I am</td>
<td>3.26</td>
<td>.74</td>
<td>1-4</td>
</tr>
<tr>
<td>First thing when think of self</td>
<td>2.67</td>
<td>.92</td>
<td>1-4</td>
</tr>
<tr>
<td>Important to know who I am</td>
<td>2.87</td>
<td>.91</td>
<td>1-4</td>
</tr>
<tr>
<td><strong>Interactive Commitment</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>How often do things with people</td>
<td>5.16</td>
<td>1.98</td>
<td>1-7</td>
</tr>
<tr>
<td>Hours spent with people</td>
<td>48.79</td>
<td>44.89</td>
<td>0-168</td>
</tr>
<tr>
<td>Money spent with people</td>
<td>2.14</td>
<td>1.18</td>
<td>1-5</td>
</tr>
<tr>
<td><strong>Affective Commitment</strong></td>
<td>14.25</td>
<td>2.18</td>
<td>4-16</td>
</tr>
<tr>
<td>How much would miss people</td>
<td>3.55</td>
<td>.75</td>
<td>1-4</td>
</tr>
<tr>
<td>How close to people</td>
<td>3.51</td>
<td>.74</td>
<td>1-4</td>
</tr>
<tr>
<td>How important are people</td>
<td>3.74</td>
<td>.56</td>
<td>1-4</td>
</tr>
<tr>
<td>Unhappy after being with people</td>
<td>3.45</td>
<td>.73</td>
<td>1-6</td>
</tr>
<tr>
<td><strong>Identity Ratings</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self</td>
<td>8.45</td>
<td>1.54</td>
<td>0-10</td>
</tr>
<tr>
<td>Role Complement</td>
<td>8.49</td>
<td>1.69</td>
<td>0-10</td>
</tr>
<tr>
<td><strong>Identity Discrepancies</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Linear</td>
<td>-.03</td>
<td>1.42</td>
<td>-8-10</td>
</tr>
<tr>
<td>Absolute</td>
<td>.70</td>
<td>1.24</td>
<td>0-10</td>
</tr>
<tr>
<td>Squared</td>
<td>2.02</td>
<td>7.93</td>
<td>0-100</td>
</tr>
</tbody>
</table>
that they reportedly spent more time and money with their coworkers, spouses, and other family members.

The affective commitment items were rated significantly higher for obligatory ($\bar{x} = 14.25$) compared to voluntary identities ($\bar{x} = 13.22$), contrary to hypothesis six, which predicted that voluntary identities would be rated as higher than voluntary identities in affective commitment. Each specific item was also rated higher for obligatory compared to voluntary identities, except for the item, “After doing things with [role complement] I often feel unhappy,” which was higher for voluntary identities, but not significantly so. I based that hypothesis on the theoretical description of voluntary identities that suggested that they were characterized by stronger feelings of emotional attachment, compared to obligatory identities. In these data, that was not the case. In other words, obligatory and voluntary identities apparently can be distinguished in terms of their level of affective commitment, but not in the hypothesized way.

Finally, I examined correlations between the new identity meaning scale and measures of centrality, affective commitment, and interactional commitment and found that they were positively correlated. Specifically, the identity meaning scale for obligatory identities was positively correlated with centrality ($r = .434$), affective commitment ($r = .470$) and interactive commitment ($r = .203$) at $p < .000$. The identity meaning scale for voluntary identities was also positively correlated with centrality ($r = .619$), affective commitment ($r = .659$), and interactional commitment ($r = .247$) at $p < .000$. These significant correlations indicate convergent validity between the new and established measures of identity meaning.
Chapter 2 Summary

Overall, I found strong support for obligatory-voluntary distinction based on both new and established measures of identity meaning. Consistent with my hypotheses, the obligatory-voluntary continuum, obligatory and voluntary ratings, and obligatory and voluntary meaning measures (with the exception of one item) were all significantly different for obligatory and voluntary identities, and all in ways that were consistent with their respective theoretical meanings. The established identity measures of centrality, interactional commitment, and affective commitment also distinguished between obligatory and voluntary identities, such that obligatory identities were associated with higher levels of centrality and both types of commitment compared to voluntary identities. With respect to affective commitment only, the relationship was in the direction opposite my hypothesis, which predicted that voluntary identities would be associated with more affective commitment than obligatory identities. It could be that at least some of the voluntary identities (volunteer/social group member in particular) in this study were less well-established or less permanent than the obligatory identities, a point I will return to in the discussion. Given that obligatory and voluntary identities have significantly different meanings for respondents; discrepancies associated with them may differentially affect psychological well-being. Thus, in subsequent analyses, I model obligatory and voluntary identity discrepancies separately and examine potential differences in their relationships with self-concept and psychological distress outcomes.
CHAPTER 3

IDENTITY DISCREPANCY MEASUREMENT AND THE RELATIONSHIP BETWEEN IDENTITY DISCREPANCIES, SELF-CONCEPT, AND PSYCHOLOGICAL DISTRESS

Chapter 3 Introduction

As revealed in the analyses presented in Chapter 2, obligatory and voluntary identities have significantly different meanings. The main theoretical focus of chapter three is to investigate potential differences between obligatory and voluntary identities in terms of the degree to which stressors (identity discrepancies) related to these distinct identities have distinct consequences for self-concept and psychological well-being. To accomplish that task, I also address two important methodological issues: the measurement of identity discrepancies and the examination of multiple identities.

In this chapter, I first discuss the components of the stress process model and the ways in which it has recently been incorporated in identity theories. I further explain identity models in the context of the stress process model, with some attention given the role of significant others as a source feedback to one’s identity. Next, I summarize previous research that has distinguished between different types of identities, and argue that the distinction between obligatory and voluntary identities can further extend the identity discrepancy model and advance our understanding of how different types of identities affect self-concept and distress. I also draw upon previous research to highlight
the importance of situating the identity processes in the context of multiple identities. Then, I conduct and present the results of analyses that investigate the consequences of different identity discrepancy measurement strategies. Finally, I use the results of those analyses to inform the discrepancy measurement strategy I employ in subsequent analyses that investigate the relationships between identity discrepancies, self-concept, and various outcomes of psychological distress using structural equation modeling techniques.

Literature Review

The Stress Process Model

The major components of the stress process model are stressors, mediators, and outcomes (Pearlin et al. 1981). Sociologists working within this perspective are particularly interested in the socially patterned distribution of each component of the stress process. The central question stress process researchers seek to answer is: Why is it that two people who are exposed to seemingly similar conditions experience different outcomes? For stress process researchers, much of the answer to that question lies in the unequal distribution of resources among categories of people within social statuses such as race, class, and gender (Pearlin 1989). Inequalities associated with those statuses are such potent sources of harm that they are considered “fundamental causes” of disease, mental illness included (Link and Phelan 1995).
Stressors. Recognizing that there is no single experience or circumstance that is inherently stressful to all who encounter it, a stressor is best described as a, “condition of threat, demand, or structural constraint that, by its very occurrence or existence, calls into question the operating integrity of the organism” (Wheaton 1999: 281). It is considered a process because stressors and their consequences develop and progress over time (Pearlin 1999).

Stress process researchers examine social structural sources of stress to understand how they operate to impact various outcomes. Race, class, and gender are of particular interest because they are statuses that systematically disadvantage certain social groups by limiting their access to a wide range of valuable material, social, and emotional resources (Pearlin 1989). Social roles and the meanings individuals associate with them are also sources of stress (Thoits 1991, 1995; Burke 1991; Simon 1992, 1995, 1997), and they too are rooted in social structural arrangements (Burke 1991).

Some stressors may directly impact distress. However, given the relatively weak direct associations that are generally observed between stress and psychological distress, researchers seek to identify other, more proximal sources of psychological distress such a lack of personal resources to draw on when confronted with a stressor (Turner and Roszell 1994). Those personal resources (or lack thereof) are potential mediators of the stress process that serve as the mechanisms through which more distal social structural factors impact distress outcomes. They may also serve as moderators that buffer (weaken the effect of) or exacerbate the impact (strengthen the effect of) of stressors on distress outcomes.
Mediators/Moderators. There are several potential mediators of the stress process, including social support, coping, and aspects of the self-concept such as self-esteem and mastery (Pearlin et al. 1981; Seff, Gecas, and Ray 1992; Thoits 1999; Turner and Roszell 1994). Of those, social support and coping have received the most attention in the literature (Pearlin 1989). In this dissertation, I focus on self-esteem and mastery as mediators in the relationship between identity discrepancies and several different outcomes of psychological distress. These two components of self are central to theorizing about self-evaluation (Gecas 1982), and they are related, but distinct, types of self-evaluation (Gecas 1989).

Self-esteem (self-worth) refers to feelings that one is a person of worth and represents a set of affective responses to the self, including one’s own responses and one’s perceptions of the responses of others (Rosenberg 1979; Rosenberg et al. 1995). Mastery (self-efficacy) refers to a sense of control and represents one’s feelings of being able to carry out actions and exercise some degree of control over life events (Gecas 1989). Self-worth and self-efficacy can be conceived of as “outer” and “inner” self-esteem, respectively (Franks and Marolla 1976:325). Self-worth is considered outer because it is greatly influenced by the way in which individuals are evaluated by others, while self-efficacy is considered inner because it is based more on individuals’ own internal sense of being able to exercise mastery and control in their lives. Gecas and Schwalbe (1983) make a similar argument, noting that self-worth is based on others’ evaluations and acceptance while self-efficacy is based on one’s own actions.
Gecas and Schwalbe (1983) criticize the over-emphasis of previous theorizing about the self-concept on the motivation to be seen positively by others and evaluate ourselves based on how we believe others see us at the expense of attention to the equally important motivation to engage in efficacious actions and evaluate ourselves based on our accomplishments and the consequences of our actions. In other words, mastery has been less extensively studied than self-esteem, but it is potentially just as important. For instance, notions of self-efficacy are consistent with the American cultural emphasis on self-reliance, individualism, and achievement, and high self-efficacy is positively associated with both physical and mental health outcomes (Gecas 1989).

Self-efficacy and self-worth are often positively related, but it is also possible for individuals to think of themselves as good, but incompetent or ineffective or as bad but competent and effective (Gecas and Schwalbe 1983). Furthermore, Gecas and Seff (1990) argue that most people consider both esteem and mastery as important to their sense of self, but that one may be more important than the other for any given individual. By extension, then, although self-esteem and mastery are related, it is theoretically plausible that certain stressors could affect them differently or to varying degrees. Furthermore, self-esteem and mastery may be differentially related to psychological distress outcomes.

Outcomes. Sociological stress process researchers are typically concerned with the general outcome of psychological distress, and most commonly conceptualize it as symptoms of global depression, and less frequently, anxiety. There has been much discussion among sociologists who study mental health about expanding outcomes (e.g.,
Horwitz 2002) beyond general distress measures, as it may not always be the most appropriate or relevant outcome with which to detect psychological harm in groups that may manifest the effect of stress in other ways. In this study I use a range of mental health outcomes including depressive, anxiety, social anxiety, and somatic symptoms.

Identities and the Stress Process

Theories linking identity processes and psychological well-being have somewhat recently begun to incorporate elements of the stress process into their models. Stress researchers recognize that social roles and the meanings individuals associate with them (i.e., identities) are potential sources of stress (Thoits 1991,1995; Burke 1991; Simon 1992,1995, 1997). Building on that insight, identity control (Burke 1991,1996) and identity discrepancy (Large and Marcussen 2000; Marcussen and Large 2003; Marcussen 2006) theorists conceive of inconsistencies between the ways in which individuals view and evaluate themselves and the ways in which they perceive others to see them as stressors that, like other types of stressors, can damage self-concept and contribute to psychological distress. In identity research, and in this dissertation, those inconsistencies are referred to as identity discrepancies.

Stressors that are rooted in social structure and role-relationships are likely to be long-term, or chronic. Chronic stressors are “relatively enduring problems, conflicts, and threats” that people experience in their everyday lives (Pearlin 1989:245). Pearlin (1989) notes that a very large and diverse set of experiences comprise this category of stressor, and that those that arise within major social roles are among the most important, and thus,
potentially the most damaging to those who experience them. Given that self-concept and perceptions of feedback from significant others with whom one routinely interacts are relatively stable (Serpe 1987) and enduring (Pearlin 1989), discrepancies are more likely to be closer to chronic strains than short-term life events (though they may be precipitated by life events). Because the self and other evaluations in this dissertation are not tied to any particular situations, they represent how individuals feel about and perceive that others to feel about them in their identities in general. Thus, discrepancies in these identities likely represent persistent rather than short-term lack of identity verification.

Identity Control Theory

Identity control theory (Burke 1991, 1996) provides a model for understanding and predicting how and when identity discrepancies will lead to psychological distress. Burke (1991, 1996) developed a control model to illustrate how identities are managed during interaction. Self-meanings and expectations that individuals associate with their identities comprise the identity standard in this model (Burke 1991, 1996). Those meanings are acquired, in part, through reflected appraisals, or individuals’ perceptions of how others evaluate and behave toward them (Cooley 1902; Mead 1934). Mead (1934) argues that we develop a sense of self through this ability to take the role of specific as well as general others, and consider how we appear from their point of view. The goal of the identity control system is to obtain a match between input from the environment (reflected appraisals) and one’s self-meanings and expectations (identity standard) (Burke
According to Burke (1991, 1996), when there is a mismatch between environmental input and meanings held in the identity standard, people employ various strategies to attempt to alter the input so that they receive feedback that is more in line with their identity standard. In other words, it is the input to the identity control system that is “controlled”. The identity control process is typically quite smooth, with minor adjustments being made without much conscious effort or disruption to normal activities. However, when these adjustments fail to bring reflected appraisals in line with one’s identity standard, distress can result.

There is some evidence that even relatively minor identity-disconfirming life events can impact one’s mood for a day or two (Burke 2004b), and when inconsistent feedback is extreme, long-lasting, refers to a very important identity, or comes from a significant other, it can have a longer-term impact and lead to or exacerbate persistent forms of distress (Burke 1991). Identity control theory predicts that a lack of identity verification (discrepancy) can produce negative emotions (Stets and Burke 1994), damage components of self-concept, and contribute to psychological distress. Identity control theory also predicts that discrepancies in certain types of identities (person, group, and role-based) will be differentially related to self-esteem, self-efficacy, and authenticity (Burke and Stets 2009), but does not make specific predictions regarding their impact on specific distress outcomes. Other theories make more specific predictions about the types of distress expected to be experienced depending on the dimension of the self that is implicated in an identity discrepancy.
Identity Discrepancy Theory

Identity discrepancy theory (Large and Marcussen 2000; Marcussen and Large 2003; Marcussen 2006) is an extension of identity control theory that incorporates aspects of the more psychologically-oriented self discrepancy theory (Higgins, Klein, and Strauman 1985; Higgins 1987,1989). Large and Marcussen (2000) conceive of identity standards as comprised of both aspirations and obligations. Aspirations are what people want or aspire to be, and obligations are what people feel they should or are obligated to be. According to identity discrepancy theory, individuals have an identity for each role they occupy, and each of those role-identities is comprised of meanings that indicate the type of person they want to be and feel they should be as an occupant of that role.

Discrepancies between reflected appraisals of how others see one in an identity and one’s own aspirations related to that identity are hypothesized to predict depressive more than anxiety symptoms. Discrepancies between reflected appraisals and one’s obligations related to an identity are hypothesized to predict anxiety more than depressive symptoms. Examining these different components (aspirations and obligations) of single identities allows researchers to specify the ways in which those components differentially impact depressive and anxiety symptoms. I suggest that examining specific types of identities (i.e., voluntary and obligatory) may further elucidate the relationship between identity discrepancy and the other key components of the stress process, mediators and outcomes, in the context of the identity discrepancy process.
Identity in the Context of the Stress Process

Stressors: Identity Discrepancies. According to Thoits (1995), incorporating ideas from self and identity, such as self-verification, will help stress researchers predict distress outcomes more precisely. Research suggests that the impact of role occupancy on psychological distress depends on which roles are considered. Wheaton (1990) argues that role losses may not be universally distressing, but rather, whether one experiences distress with the loss of a role depends on the amount of stress associated with that role. Due to the generally greater demands and responsibilities associated with obligatory roles, they may produce more stressors, including identity discrepancies. With respect to the worker role (an obligatory role), Thoits (1992) finds that those with low stress in the worker role experience even less distress than those who do not hold that role. Conversely, married men who hold the worker role and experience high stress in that role report the same level of distress as those who are unemployed. Reitzes and Mutran (2002) note that the worker role is likely to be stressful for many adults due to its “instrumental character, potentially demanding performance standards, job pressures, and more or less adequate financial rewards” (651). Thus, identity discrepancies may be more common, and potentially larger, in the worker role or other obligatory roles, perhaps more than in roles that are more voluntary. The higher prevalence of identity discrepancy in obligatory roles may then contribute to psychological distress. Thus, I hypothesize that all identity discrepancies will be related to psychological distress, but further hypothesize that obligatory identity discrepancies will have a greater impact on each respective outcome in this study.
H₇: Obligatory (a) and voluntary identity discrepancies (b) will be positively related to depressive symptoms.

H₈: Obligatory identity discrepancies will have a larger effect than voluntary identity discrepancies on depressive symptoms.

H₉: Obligatory (a) and voluntary identity discrepancy (b) will be positively related to anxiety symptoms.

H₁₀: Obligatory identity discrepancies will have a larger effect than voluntary identity discrepancies on anxiety symptoms.

H₁¹: Obligatory (a) and voluntary identity discrepancy (b) will be positively related to somatic symptoms.

H₁²: Obligatory identity discrepancies will have a larger effect than voluntary identity discrepancies on somatic symptoms.

Due to the generally fewer demands and responsibilities associated with voluntary roles, they may be less likely to produce identity discrepancies and other stressors. Thoits (1992) finds that possessing a friend role (a voluntary role) significantly decreases distress for most of the individuals in her sample (except for divorced men and marginally so for divorced women), but the worker role only significantly decreases distress (and marginally so) for married men. Thoits (1992) also examines the effect of holding certain roles on distress controlling for overall stress level and finds that voluntary identities reduces distress and substance use more than obligatory identities. The benefits of voluntary identities may be due, in part, to fewer or smaller identity discrepancies in this type of role.
Mediators: Self-Esteem and Mastery. Self-esteem and mastery are two key components of the self-concept that have received much empirical attention from identity and mental health scholars (Cast and Burke 2002; Marcussen 2006; Stets and Harrod 2004). Identity researchers argue that it is important to consider the role of affective identity meanings such as self-esteem in identity processes (Ervin and Stryker 2001; Cast and Burke 2002, Burke 2004a; Marcussen 2006). In fact, Cast and Burke (2002) suggest that self-esteem has several potential roles in identity theory – as an outcome, resource, and motive. As an outcome of identity processes, self-esteem decreases as a result of identity discrepancies, or lack of identity verification. As a resource, self-esteem buffers or helps individuals guard against the otherwise negative psychological impact of identity discrepancies. Finally, self-esteem can be conceived of as a motive such that individuals seek situations and relationships that allow them to satisfy the goals of maintaining or increasing their positive self-feelings.

Seff et al. (1992) examine the role of self-concept as a mediator between work-related stressors (in particular, limitations caused by injuries sustained at work) and distress, and find that work-related stressors had indirect effects on depression that operated through self-esteem and self-efficacy. The same pattern may also be found with respect to the impact of other types of identity disruptions, such as identity discrepancies between the way in which individuals see themselves and the way they believe others see them. This type of identity disruption or stressor should also lead to depression and other types of psychological distress through self-esteem and mastery. In this study, I focus on self-esteem and mastery as mediators of identity processes, such that they are expected to
decrease as a result of identity discrepancies, and in turn, decrease well-being. Thus, I hypothesize the following relationships between identity discrepancies and self-concept.

\( H_{13} \): *Obligatory* (a) and *voluntary* identity discrepancies (b) will be negatively related to self-esteem.

\( H_{14} \): *Obligatory* (a) and *voluntary* identity discrepancies (b) will be negatively related to mastery.

\( H_{15} \): The effect of *obligatory* (a) and *voluntary* (b) identity discrepancies on the distress outcomes will be mediated, in part, through their negative impact on self-esteem.

\( H_{16} \): The effect of *obligatory* (a) and *voluntary* (b) identity discrepancies on the distress outcomes will be mediated, in part, through their negative impact on mastery.

Given that most common social roles, including those that are obligatory and voluntary, are generally ranked by survey respondents as highly important (e.g., Thoits 1991, 1992; Reitzes and Mutran 2002), along with research that finds that verification of various role-identities is positively related with self-esteem and mastery (Stets and Harrod 2004), discrepancies related to the obligatory and voluntary role-identities should also affect both self-esteem and mastery. However, because the obligatory and voluntary role-identities are distinct (Thoits 2003), they may affect self-esteem and mastery to different degrees (Stets and Harrod 2004). Just as differences between obligatory and voluntary roles may translate into more or larger discrepancies in obligatory versus voluntary roles,
theory and research also suggest that obligatory and voluntary identity discrepancies may differentially impact self-esteem and mastery.

Theoretically, the worker role-identity is considered to be obligatory (Thoits 2003). Stets and Harrod (2004) note several other general features of the worker role-identity that indicate its potential to predict different outcomes than the friend role-identity (which is considered voluntary): (1) it is instrumentally, task, and achievement oriented, (2) it is associated with meanings such as competence, power, and agency, (3) interaction tends to be competitive and occur among individuals of unequal status (e.g., a manager and his/her employee), and (4) successful performance indicates that one has the skills and knowledge needed to accomplish goals. All of these features of the worker role-identity suggest that one will be evaluated in this role with respect to what they do, and by extension, those evaluations will have implications for one’s sense of self as being able to act efficaciously or exercise mastery. This is consistent with Burke and Reitzes’ (1981) assertion that identities are related to role performances and other outcomes through shared meanings.

In contrast to the worker role-identity, the friend role-identity is considered to be more voluntary (Thoits 2003). As with the worker role-identity, Stets and Harrod (2004) describe additional features of the friend role-identity that suggests it may be related to different outcomes than the worker role-identity: (1) it is expressively and socioemotionally oriented, (2) it is associated with meanings such as goodness, acceptance, care, and concern, (3) interaction tends to involve integration and interdependence among status equals, and (4) successful performance indicates that one
possesses moral worth. All of these features of the friend role-identity suggest that one will be evaluated in this role with respect to *who they are*, and by extension, those evaluations will have implications for one’s sense of self-esteem. Again, this is consistent with the notion that identities are connected to outcomes through shared meanings (Burke and Reitzes 1981),

Stets and Harrod (2004) find that verification of the worker, friend, and academic identities is positively related to self-esteem and mastery. Marcussen (2006) finds that aspiration discrepancies, but not obligation discrepancies associated with the student, child, and friend identities are negatively related to self-esteem. Marcussen (2006) also finds that self-esteem mediates the relationship between aspiration discrepancies and both depression and anxiety for the student identity, as well as the relationship between aspiration discrepancies and depression for the child identity. Although Marcussen (2006) does not make specific predictions about the nature of the relationships between identity discrepancies and self-esteem, the findings summarized above suggest that discrepancies associated with different identities and identity dimensions may be related to self-esteem (and potentially other aspects of self-concept) in different ways.

Furthermore, because obligatory identities and voluntary identities have different performance meanings, and contexts of action, they may affect self-esteem and mastery to different degrees (Thoits 2003; Stets and Harrod 2004).

Gecas and Schwalbe (1983) note that certain contexts of action are differentially valued such that efficacious actions in contexts that are highly valued can be expected to contribute more to self-esteem than those that occur in lesser-valued contexts. Given that
our culture emphasizes hard work and individual achievement over (and sometimes even at the expense of) socioemotional relationships, it may be that identity processes that occur within certain identity contexts will also be differentially valued. If this is the case, one might expect discrepancies that occur within obligatory roles such as worker and spouse to be more consequential for self-concept and psychological well-being outcomes than discrepancies that occur within voluntary roles such as friend or voluntary group member. For instance, Burke and Stets (2009) emphasize the societal importance of obligatory identities and suggest that identity processes associated with these identities have more potent consequences for self-concept and distress than identity processes associated with more voluntary identities.

I expect that the meanings that are common to voluntary identities and self-esteem will connect them such that discrepancies associated with voluntary identities will affect self-esteem more than mastery. Similarly, I expect that the meanings that are common to obligatory identities and mastery will connect them such that discrepancies associated with obligatory identities will affect mastery more than self-esteem. Thus, I offer the following two hypotheses regarding the differential effects of obligatory and voluntary identity discrepancies on self-esteem and mastery.

$H_{17}$: Obligatory identity discrepancies will be more strongly related to mastery than self-esteem.

$H_{18}$: Voluntary identity discrepancies will be more strongly related to self-esteem than mastery.
Outcomes: Psychological Distress. Identity and stress researchers alike have largely focused on depressive symptoms or general distress as outcomes of social psychological processes. As a way to move beyond general distress measures and the tendency to focus almost exclusively on depression, researchers suggest that social anxiety and other types of psychological distress, such as somatic symptoms, should also be considered as outcomes of stress research in general, and identity discrepancy research in particular (Marcussen and Large 2003; Marcussen 2006). Although recent empirical attempts to include a wider variety of physical and mental health outcomes and to differentially predict different types of distress are relatively novel in the context of identity theory, efforts to make theoretical and empirical distinctions between depression and anxiety are not new.

Researchers have long recognized depression and anxiety (and their associated symptoms) as distinct phenomena. For instance, Oatley and Bolton (1985) note that depression refers to feelings associated with losses that threaten self-worth, whereas anxiety refers to feelings associated with an anticipated loss at some future point in time. Identity threats (such as discrepancies between the way individuals evaluate themselves in a role and the way in which they perceive significant others to evaluate them) may damage their self-concept, the relationship with the significant other who is perceived as the source of the disconfirming feedback that causing negative feelings, and their psychological well-being. As seen in hypotheses seven through 12, I investigate depressive, anxiety, social anxiety, and somatic symptoms as outcomes of identity discrepancies in this study.
The Role of Significant Others. For identity theorists and other structural symbolic interactionists, proximate structures such as patterns of relationships among members of interpersonal networks directly shape our self-concepts and behaviors. Furthermore, those patterns of relationships are themselves shaped and influenced by the more distal aspects of social structure (Stryker 2008). In other words, our opportunities to develop interpersonal relationships with different types of people are, in part, determined by social arrangements such as those associated with gender, ethnicity, and the neighborhoods in which we live. Once we develop relationships with particular people (based on those who are available to us through our positions in social structure), each of our relationships with different significant others contributes, in potentially different ways, to the ways in which we define and think about ourselves. Thus, while we are influenced to some degree by every person with whom we form a relationship, that influence will be stronger or impact different aspects of ourselves for some of our relationships compared to others.

Identity control theorists address these potential differences in predicting that inconsistent feedback about one’s self that comes from (or is perceived to come from) significant others will be more distressing than feedback that comes from acquaintances (Burke 1991, 1996). Identity discrepancy theorists also suggest that including reflected appraisals from specific others is an important next step in testing the theory (Marcussen and Large 2003; Marcussen 2006). Furthermore, in a recent review that emphasized the continued relevance of Mead’s work in sociology, Stryker (2008) suggests that Mead’s concept of the generalized other does not adequately capture the complexities of
contemporary society, mainly because it treats all collectivities as equal representatives of society, thus overlooking important distinctions between different social structures and groups. It could similarly be criticized for its inability to capture the potentially different influence of certain relationship partners versus others, given that we do not really know who respondents are thinking about when we ask them how “others” view them in their roles.

It may be that individuals consider the most important person associated with each role such that a person thinks about his/her partner when asked how others see him/her as a partner or his/her closest friend when asked to think about how others see him/her as a friend. However, researchers cannot discern whether this is true when they only ask respondents about others in general. It is possible, for instance, that every role has a set of particular significant others whose opinions matter most for that role, or that individuals have a set of significant others whose opinions of them matter across all of their roles. Given that personal relationships vary on a number of dimensions such as length of acquaintance, depth of relationship, type of relationship (e.g., partner versus friend), any or all of those factors might make certain types of discrepancies with particular significant others more or less distressing than others. Thus, an important contribution of this research is to examine the ways in which discrepancies associated with particular others (role complements), instead of others in general, contribute to distress outcomes.
Identity Discrepancies across Multiple Identities

Early research on multiple identities was driven by assumptions about the benefits of occupying multiple identities (e.g., Thoits 1983, 1986). Specifically, the identity accumulation hypothesis (Thoits 1983, 1986) which states that there is a direct relationship between the number of roles one occupies and psychological well-being, such that the more roles one holds, the more one experiences a sense of meaning and purpose in life and is psychologically healthy. This is consistent with the notion that those with more complex cognitive self-structures, or those who think about themselves in ways that allow them to distinguish between and compartmentalize different aspects of themselves enjoy greater psychological well-being than those with less complex self-structures (Linville 1987).

Although multiple role occupancy can foster desirable outcomes such as psychological well-being, self-esteem, mastery, and positive affect (Ervin and Stryker 2001; Ahrens and Ryff 2006), it can also cause stress and distress to the extent that individuals experience role strains (Goode 1960), or problems meeting role obligations. Individuals may also occupy two or more roles that conflict (Gross et al. 1958), or contain incompatible meanings. Roles that are conflicting or are comprised of incompatible meanings and behavioral expectations are sources of competing demands on individuals’ time and energy. Thus, the more roles one occupies, the more potential there is that two or more of them will conflict in some way. By extension, the more roles one occupies, the more identity standards one has to manage and attempt to confirm. As a result, one of the potential drawbacks of multiple role involvements is that identity
discrepancies may be more common for those who are attempting to manage and combine several different roles. To the extent that identity meanings are shared across different roles, there will be fewer different meanings to control, which will facilitate verification (Burke and Stets 2009). Given that obligatory and voluntary roles have different meanings; their combinations may be particularly likely to result in discrepancies.

Research suggests that, to more fully understand the consequences of certain role combinations, one must also consider the types of roles involved. For example, the benefits of role quantity occur most consistently when voluntary roles are considered as a subset, in contrast to obligatory roles (Pavalko & Woodbury 2000; Thoits 1992, 2003). Specifically, Thoits (2003) finds that the number of voluntary identities is related to greater self-esteem, mastery, and psychological well-being, but the number of obligatory identities is unrelated to those outcomes. One explanation for why researchers tend not to find an effect of obligatory role accumulation on psychological outcomes is because their positive and negative aspects probably counterbalance one another to produce no net effect (Thoits 2003). In other words, difficult or costly and pleasant or rewarding experiences in a single role may balance out. Similarly, there may be situations in which rewards in one role counteract or make up for stressors in another (Stephens, Franks, and Townsend 1994).

Burke and Stets (2009) offer a slightly different interpretation of findings with regard to the benefits of voluntary relative to obligatory identities. They argue that it is not simply holding and acquiring more voluntary identities or holding more voluntary
than obligatory identities that leads to psychological well-being, but that verification of all types of identities is important. They also suggest that voluntary identities are more likely to be verified, but not necessarily because of any intrinsic qualities they possess. Rather, the positive effects of holding multiple voluntary identities is a result of the tendency for people to keep identities that are verified, and to the extent possible, drop those that are not verified. According to Burke and Stets (2009), since obligatory identities are more difficult to abandon, people are likely to remain in them whether they are verified or not. Thus, obligatory identity discrepancies may be more common than voluntary identity discrepancies. This study examines obligatory and voluntary identity discrepancies to determine whether discrepancies are more common in one type of identity versus the other and also investigates the impact of discrepancies in each type of identity on self-concept and distress across multiple identities. By focusing on a specific stressor related to obligatory and voluntary identities (discrepancies between self-evaluations and reflected appraisals of others’ evaluations of self), I more directly examine what it is about obligatory and voluntary roles that is (or is not) related to distress.

In addition to understanding how identity processes operate across different types of identities, it is also important to understand how different types of identities coalesce to impact self-concept and psychological well-being. The relationships between multiple identities is a central concern for identity theorists who seek to answer the theory’s key question, “Given situations in which there exist behavioral options aligned with two (or more) sets of role expectations attached to two (or more) positions in networks of social
relationships, why do persons choose one particular course of action?” (Stryker and Burke 2000:286). While identity researchers typically answer this question by examining the arrangement of identities in salience hierarchies (e.g., Serpe 1987; Stryker and Serpe 1982), or rankings that indicate the likelihood of an identity being invoked across situations, there is still much to be learned about the relationships between identities in the context of identity theory (Stryker and Burke 2000; Cast and Burke 2007).

Identity control researchers have recently begun to theoretically and empirically examine multiple identities in the context of the identity verification process (e.g., Burke 2003; Stets 1995), but they typically consider each role-identity in isolation. For example, Stets and Harrod (2004) investigate multiple identities (worker, friend, and academic), but they model each identity individually. That analytic strategy provides information about processes within a given identity, but does not tell us anything about the relationship between two or more identities or their concurrent effects on any given outcome. Thus, while Stets and Harrod (2004) are able to test the impact of certain status characteristics (e.g., sex, race, age) on identity-verification and the effect of self-verification on self-esteem and mastery in the context of three identities, they are not able to answer questions about the relative impact of identity-verification (or lack of) in different identities on outcomes such as self-esteem, mastery, or psychological distress.

Other studies employ similar strategies. Stets and Tsushima (2001) consider how discrepancies in family (group-based) and worker (role-based) identities are related to different dimensions of emotion, but they conduct analyses using only one of those identities for each individual respondent. Stets and Cast (2007) investigate the reciprocal
relationship between the spouse (role-based) and sociable person (person-based) identities and various types of resources. But again, they estimate statistical models associated with each identity in isolation from the other.

An exception to the tendency of identity researchers (exemplified by the studies briefly summarized above) to consider multiple identities in isolation from other identities is Stets’ (1995) study that examines the relative impact of mastery (person-based) and gender (role-based) identities on each other and on control over one’s partner during interaction. Utilizing a simultaneous equation modeling strategy similar to that which Stets’ (1995) employs, I consider the mutual influence of discrepancies associated with two role-identities (one obligatory and one voluntary) on self-concept and psychological distress.

Methods

Data and Measures

Data for this chapter’s analyses are from the U.S. and California studies. The independent and mediating variables are measured consistently across both studies, but the dependent measures are different. Below I describe all measures and note the key differences and similarities between the measures from each respective data source.

Dependent Measures: U.S. Study. To be consistent with previous research (e.g., Thoits 2003), I use the standard version of the Brief Symptom Inventory (BSI: Derogatis and Melisaratos 1983) as the distress outcome in the U.S. study. The BSI contains 20
items from the longer Symptom Checklist-90-revised (SCL-90-R; Derogatis 1977),
which is a self-report inventory designed to assess symptoms among psychiatric patients
as well as non-patients. I use the subscales as stand-alone outcomes to explore the
potentially different effects of identity discrepancies on each respective form of
psychological distress. For all items, respondents are asked, “In the past month, how
distressed were you by each of the following?”

The **depression** subscale includes the following seven symptoms. “Thoughts of
ending your life”, “Feeling lonely”, “Feeling blue”, “Feeling no interest in things”,
“Feeling hopeless about the future”, “Feelings of worthlessness”, and “Your feelings
being easily hurt”. The **anxiety** subscale includes the following six symptoms.
“Nervousness or shakiness inside”, “Suddenly scared for no reason”, “Feeling fearful”,
“Feeling tense or keyed up”, “Spells of terror or panic”, “Feeling so restless you could
not sit still”. Finally, the **somatization** subscale includes the following seven symptoms.
“Faintness or dizziness”, “Pains in heart or chest”, “Nausea or upset stomach”, “Trouble
getting your breath”, “Hot or cold spells”, “Numbness or tingling in parts of your body”,
“Feeling weak in parts of your body”. Responses for each item range from 0 (not at all)
to 4 (extremely). Items in each respective subscale are summed, and higher scores
indicate higher levels of depressive, anxiety, and somatic symptoms, respectively.

Descriptive statistics for depressive, anxiety, and somatic symptom items and their
summed scales are displayed in table 3.1. As shown in table 3.1, the mean distress levels
in the U.S. sample are relatively low; 10.55 for depressive symptoms, 8.91 for anxiety
symptoms, and 10.11 for somatic symptoms.
Table 3.1. Descriptive Statistics for U.S. Study Dependent and Mediating Measures (N=376)

<table>
<thead>
<tr>
<th>Scale</th>
<th>mean</th>
<th>SD</th>
<th>range</th>
<th>alpha</th>
</tr>
</thead>
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<td><strong>Depressive Symptoms Scale</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thoughts of ending life</td>
<td>1.56</td>
<td>.95</td>
<td>1-5</td>
<td></td>
</tr>
<tr>
<td>Feeling lonely</td>
<td>1.40</td>
<td>.84</td>
<td>1-5</td>
<td></td>
</tr>
<tr>
<td>Feeling blue</td>
<td>1.57</td>
<td>.96</td>
<td>1-5</td>
<td></td>
</tr>
<tr>
<td>Feeling no interest in things</td>
<td>1.50</td>
<td>.90</td>
<td>1-5</td>
<td></td>
</tr>
<tr>
<td>Feeling hopeless about future</td>
<td>1.50</td>
<td>.89</td>
<td>1-5</td>
<td></td>
</tr>
<tr>
<td>Feelings of worthlessness</td>
<td>1.58</td>
<td>1.00</td>
<td>1-5</td>
<td></td>
</tr>
<tr>
<td>Feelings being easily hurt</td>
<td>1.43</td>
<td>.84</td>
<td>1-5</td>
<td></td>
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<tr>
<td><strong>Anxiety Symptoms Scale</strong></td>
<td>8.91</td>
<td>3.29</td>
<td>6-24</td>
<td>.678</td>
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<tr>
<td>Nervousness or shakiness inside</td>
<td>1.44</td>
<td>.84</td>
<td>1-5</td>
<td></td>
</tr>
<tr>
<td>Suddenly scared for no reason</td>
<td>1.45</td>
<td>.86</td>
<td>1-5</td>
<td></td>
</tr>
<tr>
<td>Feeling fearful</td>
<td>1.46</td>
<td>.87</td>
<td>1-5</td>
<td></td>
</tr>
<tr>
<td>Feeling tense or keyed up</td>
<td>1.55</td>
<td>.92</td>
<td>1-5</td>
<td></td>
</tr>
<tr>
<td>Spells of terror or panic</td>
<td>1.51</td>
<td>.92</td>
<td>1-5</td>
<td></td>
</tr>
<tr>
<td>Feeling restless/could not sit still</td>
<td>1.50</td>
<td>.89</td>
<td>1-5</td>
<td></td>
</tr>
<tr>
<td><strong>Somatic Symptoms Scale</strong></td>
<td>10.11</td>
<td>3.53</td>
<td>7-33</td>
<td>.713</td>
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<tr>
<td>Faintness or dizziness</td>
<td>1.39</td>
<td>.76</td>
<td>1-5</td>
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</tr>
<tr>
<td>Pains in heart or chest</td>
<td>1.34</td>
<td>.72</td>
<td>1-5</td>
<td></td>
</tr>
<tr>
<td>Nausea or upset stomach</td>
<td>1.37</td>
<td>.76</td>
<td>1-5</td>
<td></td>
</tr>
<tr>
<td>Trouble getting breath</td>
<td>1.52</td>
<td>.88</td>
<td>1-5</td>
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</tr>
<tr>
<td>Hot or cold spells</td>
<td>1.49</td>
<td>.89</td>
<td>1-5</td>
<td></td>
</tr>
<tr>
<td>Numbness or tingling</td>
<td>1.49</td>
<td>.90</td>
<td>1-5</td>
<td></td>
</tr>
<tr>
<td>Feeling weak</td>
<td>1.50</td>
<td>.90</td>
<td>1-5</td>
<td></td>
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<tr>
<td><strong>Rosenberg Self-esteem scale</strong></td>
<td>32.91</td>
<td>4.81</td>
<td>10-40</td>
<td>.892</td>
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<tr>
<td><strong>Pearlin Mastery scale</strong></td>
<td>21.43</td>
<td>3.35</td>
<td>10-28</td>
<td>.751</td>
</tr>
<tr>
<td>Measure</td>
<td>Mean</td>
<td>SD</td>
<td>Range</td>
<td>Alpha</td>
</tr>
<tr>
<td>----------------------------------------------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
<td>-------</td>
</tr>
<tr>
<td><strong>Depressive Symptoms Scale</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Could not shake blues</td>
<td>17.90</td>
<td>14.84</td>
<td>0-70</td>
<td>.849</td>
</tr>
<tr>
<td>Trouble keeping mind on things</td>
<td>3.72</td>
<td>3.36</td>
<td>0-10</td>
<td></td>
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<tr>
<td>Felt depressed</td>
<td>2.34</td>
<td>2.93</td>
<td>0-10</td>
<td></td>
</tr>
<tr>
<td>Felt lonely</td>
<td>1.96</td>
<td>2.29</td>
<td>0-10</td>
<td></td>
</tr>
<tr>
<td>Enjoyed life (reverse-coded)</td>
<td>2.72</td>
<td>3.19</td>
<td>0-10</td>
<td></td>
</tr>
<tr>
<td>Felt sad</td>
<td>1.72</td>
<td>2.25</td>
<td>0-10</td>
<td></td>
</tr>
<tr>
<td><strong>Social Anxiety Symptoms Scale</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nervous at casual gatherings</td>
<td>20.84</td>
<td>12.37</td>
<td>0-60</td>
<td>.711</td>
</tr>
<tr>
<td>Uncomfortable in group</td>
<td>2.81</td>
<td>3.01</td>
<td>0-10</td>
<td></td>
</tr>
<tr>
<td>At ease speaking with opposite sex (reverse-coded)</td>
<td>4.00</td>
<td>3.41</td>
<td>0-10</td>
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<tr>
<td>Anxious and uncomfortable at parties</td>
<td>2.54</td>
<td>2.99</td>
<td>0-10</td>
<td></td>
</tr>
<tr>
<td>Seldom anxious in social situations (reverse-coded)</td>
<td>3.00</td>
<td>3.10</td>
<td>0-10</td>
<td></td>
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<tr>
<td>Shy person</td>
<td>4.74</td>
<td>3.44</td>
<td>0-10</td>
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<tr>
<td><strong>Rosenberg Self-esteem</strong></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>32.79</td>
<td>4.28</td>
<td>22-40</td>
<td>.820</td>
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<tr>
<td><strong>Pearlin Mastery</strong></td>
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<td></td>
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<tr>
<td></td>
<td>22.06</td>
<td>3.19</td>
<td>14-28</td>
<td>.786</td>
</tr>
</tbody>
</table>

**Dependent Measures: California Study.** The California study includes measures of two forms of psychological distress: depressive symptoms and social anxiety symptoms. **Depressive symptoms** are measured using seven items adapted from the Center for Epidemiological Studies-Depression (CES-D) scale (Radloff 1977). Respondents indicate on a scale of 0 (none of the time) to 10, (all of the time) how often during the past week they experienced certain symptoms (e.g., “I felt that I could not shake off the blues even with help from my family or friends”; “I felt depressed”). **Social anxiety symptoms** are measured using six items adapted from the social distress subscale.
of the Social Avoidance and Distress scale (SADS; Watson and Friend 1969). Respondents rate themselves on a scale of 0 (not at all characteristic) to 10 (extremely characteristic), indicating the degree to which each statement is characteristic of the way they tend to feel (e.g., “I often feel nervous even in casual get-togethers”; “In general, I am a shy person”). Descriptive statistics for depressive and social anxiety symptom items and their summed scales are displayed in table 3.2. As shown in table 3.2, mean distress levels are also relatively low in the California sample; 17.90 for depressive symptoms and 20.84 for social anxiety symptoms.

**Independent Measures: Calculating Identity Discrepancies.** Identity discrepancies are the focal independent variables in this dissertation. In general terms, an identity discrepancy refers to an inconsistency or difference between respondents’ self-evaluations and their perceptions of how select significant others, or others in general, would evaluate them in their roles. Various strategies have been used to calculate identity discrepancies, and they include using the linear (raw) difference between ratings, the absolute value of the difference between ratings, and the squared difference between ratings. Conducting extensive analyses using each different type of calculation is beyond the scope of this dissertation. However, I conduct analyses of the bivariate relationships between discrepancies calculated using each respective strategy and combine that information with theory to inform and justify the method I use to calculate that identity discrepancies that I use in the subsequent structural equation modeling analyses.

**Linear discrepancies** are difference scores that are calculated by simply subtracting respondents’ perceptions of how others would evaluate or rate them from their
own self-evaluations or ratings. For instance, a respondent rates him/herself on a scale from zero to 10 and rates him/herself on the same scale based on how he/she thinks a significant other would rate him/her. This results in discrepancies with a theoretical range of -10 to +10.

Linear discrepancies have not been used alone in identity research, and that is not surprising when one considers that most discrepancy theories in both psychology (e.g., self-verification theory, self-discrepancy theory) and sociology (e.g., identity control theory, identity discrepancy theory) assume that individuals’ behavior is shaped by a self-verification motive. A person operating in accordance with the self-verification motive will strive to behave in ways that lead them to receive feedback from others that matches the way in which they feel about themselves, whether positive or negative (e.g., Higgins 1987; Swann, Griffin, Predmore, and Gaines 1987; Swann, Pelham, and Krull 1989; Swann and Read 1981a, 1981b). If we assume a self-verification motive, then a person who experiences a discrepancy in any direction is expected to experience negative emotions or psychological distress because the goal of receiving confirmatory feedback about one’s self is not met. In other words, individuals will experience distress if they perceive that others view or evaluate them more negatively or worse than they view or evaluate themselves and if they perceive that others view them more positively or better than they view or evaluate themselves. The former prediction is shared by self-enhancement theories (e.g., Jones 1973; Kaplan 1975); the latter is not.

A person operating in accordance with the self-enhancement motive will strive to behave in ways that lead them to receive feedback from others that is positive or makes
them feel good about themselves (Jones 1973; Kaplan 1975). If we assume a self-enhancement motive, then a person who experiences a discrepancy that indicates that others see them more negatively than they see themselves is expected to experience negative, unpleasant emotions or psychological distress (this is consistent with the self-verification prediction), but a person who experiences a discrepancy that indicates that others see them more positively than they see themselves is expected to experience positive, pleasant emotions. In other words, individuals will experience distress if they perceive that others view or evaluate them more negatively or worse than they view or evaluate themselves, but will experience positive feelings such as self-esteem if they perceive that others view or evaluate them more positively or better than they view or evaluate themselves.

**Absolute value discrepancies** are also difference scores that are calculated by subtracting respondents’ perceptions of how others would evaluate or rate them from their own self-evaluations or ratings. As the name suggests, the absolute value of that difference is then used in statistical models. Compared to linear discrepancies, the theoretical range of absolute value discrepancies are far more restricted. If one uses the same 10-point scale as mentioned above, the possible range of absolute value discrepancies is 0-10 (as opposed to -10 to +10 for linear discrepancies). Additionally, absolute values make no distinction between situations in which the discrepancy indicates that the respondent’s self-rating is higher than the perceived rating of others and those in which the perceived other rating is higher than the respondent’s self-rating; both receive the same value if the difference is of the same magnitude. For example, if the self-rating is six and the perceived other rating is
four, then 6-4=2, [2]=2. If the self-rating is four and perceived other rating is six, then 4-6=-2, [-2]=2. In the first case, the self-rating is two points higher than the perceived other rating, and in the second case, the self-rating is two points lower than the perceived other rating, but both result in a discrepancy score of two.

This type of discrepancy has been used relatively frequently in previous research that examined the impact of identity discrepancies on psychological distress (e.g., Marcussen and Large 2003; Marcussen 2006; Stets and Harrod 2004). This measurement strategy is informed by the theoretical assumption that any discrepancy, regardless of direction, will lead to psychological distress. Comparing results using this type of discrepancy and linear discrepancies provides a “check” on the underlying theoretical assumptions.

Like linear and absolute value discrepancies, squared discrepancies are also difference scores that are calculated by subtracting respondents’ perceptions of how others would evaluate or rate them from their own self-evaluations or ratings, and as the name suggests, that difference is squared for use in statistical models. Squared discrepancies have been used in previous identity research (Burke and Harrod 2005; Burke, Stets, and Cerven 2007). By squaring the raw difference score, all values are made positive. Thus, using the same 10-point scale as discussed above, the range of possible values for discrepancies is zero to 100, which is far less compressed than that of absolute value discrepancies. However, like absolute value discrepancies, squared discrepancies make no distinction between situations in which the discrepancy indicates that the respondent self-rating is higher than the perceived rating of the other and those in which the perceived other
rating is higher than the respondent self-rating; both receive the same value if the difference is of the same magnitude (e.g., 6-4=2, 2^2=4; 4-6=-2, -2^2=4).

Burke and Harrod (2005) examine the impact of squared discrepancies in models that control for linear discrepancies to test competing hypotheses associated with self-verification and self-enhancement theories. Squared discrepancies are most appropriate for testing identity control and identity discrepancy theories, because both theorize that distress increases at an increasing rate as discrepancies grow larger (Burke 2003; Burke and Stets 1999). In other words, the amount of discomfort is a function of the magnitude of the discrepancy (Burke 1996; Stets 2001). According to Burke and Harrod (2005), the relationship between identity discrepancies and distress is curvilinear, where zero discrepancy corresponds to zero distress, and increasing discrepancy in either a positive or negative direction increases distress.

As Burke and Harrod (2005) note, if squared discrepancies significantly predict distress in models that control for linear discrepancies, then the self-verification assumption that discrepancies in any direction are distressing is supported. Conversely, if the linear discrepancy significantly predicts distress in those models, the self-enhancement assumption that only discrepancies that indicate that others see one more negatively than one sees one’s self are distressing is supported (Burke and Harrod 2005).

Independent Measures: Two Alternative Operationalizations of Identity Discrepancies. In addition to different strategies of calculating discrepancies, there are also different operationalizations of identity discrepancies that can be examined in the context of regression analyses. First, one could use the self and perceived other ratings to
compute an interaction term to be included in statistical models. Second, in regression models that examine the impact of identity discrepancies, one could include the self and perceived other ratings as controls to assess the extent to which it is the discrepancies, and not the ratings themselves, that contribute to distress. The goal of the analyses in which I explore different ways to calculate discrepancies and different ways to include them in regression models is to more comprehensively consider their implications and to inform the selection of the most appropriate measurement technique for use in the structural equation modeling analyses.

**Independent Measures: U.S. Study.** The U.S. study includes six identities: three obligatory and three voluntary. The three obligatory identities are spouse/partner, worker, and family member. The three voluntary identities are friend, voluntary organization/social group member, and religious/spiritual person. For each of the six identities, respondents are asked, “On a scale of 0-10, where 0 is not at all good, and 10 is very good, how would you rate yourself as a [spouse/partner, worker, family member, friend, voluntary organization/social group member, religious/spiritual person]?” Respondents are also asked how “others” and the most relevant role complement would rate them in each of their identities. Hereafter, I refer to these items as *identity ratings*.

In the analyses presented below, I use only the rating for the most relevant role complement to calculate discrepancies for each identity. The role complements are the following: Spouse/partner for the spouse/partner identity; coworkers for worker identity; family members for the family member identity; closest friend for the friend identity; members of your voluntary organization/social group for the voluntary
Table 3.3. Descriptive Statistics for U.S. Study Identity Ratings

<table>
<thead>
<tr>
<th>Identity Type</th>
<th>n</th>
<th>Self appraisal</th>
<th>SD</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Obligatory Identities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Spouse/Partner Identity (n=142)</strong></td>
<td></td>
<td>Self appraisal</td>
<td>7.98</td>
<td>1.67</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Spouse/Partner reflected appraisal</td>
<td>8.22</td>
<td>1.90</td>
</tr>
<tr>
<td><strong>Worker Identity (n=98)</strong></td>
<td></td>
<td>Self appraisal</td>
<td>9.10</td>
<td>.91</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Coworkers reflected appraisal</td>
<td>8.94</td>
<td>.96</td>
</tr>
<tr>
<td><strong>Family Member Identity (n=136)</strong></td>
<td></td>
<td>Self appraisal</td>
<td>8.49</td>
<td>1.59</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Family Members reflected appraisal</td>
<td>8.44</td>
<td>1.82</td>
</tr>
<tr>
<td><strong>All Obligatory Identities (n=376)</strong></td>
<td></td>
<td>Self appraisal</td>
<td>8.45</td>
<td>1.54</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Role complement reflected appraisal</td>
<td>8.49</td>
<td>1.69</td>
</tr>
<tr>
<td><strong>Voluntary Identities</strong></td>
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<td><strong>Friend Identity (n=140)</strong></td>
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<td>Self appraisal</td>
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<td></td>
<td></td>
<td>Close Friend reflected appraisal</td>
<td>8.79</td>
<td>1.55</td>
</tr>
<tr>
<td><strong>Religious/Spiritual Identity (n=128)</strong></td>
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<td>Self appraisal</td>
<td>8.24</td>
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<td></td>
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<td>Other Members reflected appraisal</td>
<td>7.58</td>
<td>1.95</td>
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<tr>
<td><strong>Volunteer/Social Identity (n=108)</strong></td>
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<td>Self appraisal</td>
<td>7.63</td>
<td>1.96</td>
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<td>Other Members reflected appraisal</td>
<td>7.55</td>
<td>1.82</td>
</tr>
<tr>
<td><strong>All Voluntary Identities (n=376)</strong></td>
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<td>Self appraisal</td>
<td>7.94</td>
<td>1.82</td>
</tr>
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<td></td>
<td></td>
<td>Role complement reflected appraisal</td>
<td>8.02</td>
<td>1.87</td>
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Table 3.4. Descriptive Statistics for U.S. Study Identity Discrepancies

<table>
<thead>
<tr>
<th>Obligatory Identities</th>
<th>mean</th>
<th>SD</th>
<th>range</th>
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<tr>
<td><strong>Spouse/Partner Identity (n=142)</strong></td>
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<tr>
<td>Self-Spouse/Partner linear</td>
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<td>1.63</td>
<td>-8-10</td>
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<tr>
<td>Self-Spouse/Partner absolute</td>
<td>.88</td>
<td>1.40</td>
<td>0-10</td>
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<tr>
<td>Self-Spouse/Partner squared</td>
<td>2.71</td>
<td>10.34</td>
<td>0-100</td>
</tr>
<tr>
<td><strong>Worker Identity (n=98)</strong></td>
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<td></td>
</tr>
<tr>
<td>Self-Coworkers linear</td>
<td>.16</td>
<td>.81</td>
<td>-2-4</td>
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<tr>
<td>Self-Coworkers absolute</td>
<td>.43</td>
<td>.70</td>
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</tr>
<tr>
<td>Self-Coworkers squared</td>
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<td>0-16</td>
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<td><strong>Family Member Identity (n=136)</strong></td>
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<td>Self-Family Members linear</td>
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<td>-4-8</td>
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<tr>
<td>Self-Family Members absolute</td>
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<tr>
<td>Self-Family Members squared</td>
<td>2.28</td>
<td>7.66</td>
<td>0-64</td>
</tr>
<tr>
<td><strong>All Obligatory Identities (n=376)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Role Complement reflected appraisal linear</td>
<td>-.03</td>
<td>1.42</td>
<td>-8-10</td>
</tr>
<tr>
<td>Self-Role Complement reflected appraisal absolute</td>
<td>.70</td>
<td>1.24</td>
<td>0-10</td>
</tr>
<tr>
<td>Self-Role Complement reflected appraisal squared</td>
<td>2.02</td>
<td>7.93</td>
<td>0-100</td>
</tr>
<tr>
<td><strong>Voluntary Identities</strong></td>
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<td></td>
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</tr>
<tr>
<td><strong>Friend Identity (n=140)</strong></td>
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</tr>
<tr>
<td>Self-Close Friend linear</td>
<td>-.87</td>
<td>1.37</td>
<td>-7-2</td>
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<td>Self-Close Friend absolute</td>
<td>1.03</td>
<td>1.25</td>
<td>0-7</td>
</tr>
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<td>Self-Close Friend squared</td>
<td>2.61</td>
<td>5.73</td>
<td>0-49</td>
</tr>
<tr>
<td><strong>Religious/Spiritual Identity (n=128)</strong></td>
<td></td>
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<tr>
<td>Self-Other Members linear</td>
<td>.66</td>
<td>1.33</td>
<td>-2-5</td>
</tr>
<tr>
<td>Self-Other Members absolute</td>
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<td>1.18</td>
<td>0-5</td>
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<td><strong>All Voluntary Identities (n=376)</strong></td>
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<td></td>
</tr>
<tr>
<td>Self-Role Complement reflected appraisal linear</td>
<td>-.07</td>
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<td>-7-5</td>
</tr>
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<td>Self-Role Complement reflected appraisal absolute</td>
<td>.85</td>
<td>1.14</td>
<td>0-7</td>
</tr>
<tr>
<td>Self-Role Complement reflected appraisal squared</td>
<td>2.01</td>
<td>4.77</td>
<td>0-49</td>
</tr>
</tbody>
</table>
organization/social group member identity; others who share your religious/spiritual affiliation for the religious/spiritual person identity. For all of the identity rating items, higher scores indicate more positive views or evaluations of the respondent in that identity. Thus, for all discrepancies calculated using these items, higher values indicate larger discrepancies between self and perceived other rating. Descriptive statistics for the U.S. study self and role complement identity ratings and linear, absolute, and squared identity discrepancies are displayed in tables 3.3 and 3.4. As shown in table 3.4, the mean identity discrepancy is relatively low for obligatory (linear=-.03; absolute value=.70; squared=2.02) and voluntary (linear=-.07; absolute value=.85; squared=2.01).

Independent Measures: California Study. The California data also includes identity ratings, but only for one voluntary (friend) and one obligatory (worker) identity. Discrepancies related to those identities are calculated using responses from the following items. For the worker identity, respondents are asked, “On a scale of 0 to 10, where 0 is not at all good, and 10 is very good, how would you rate yourself at your job?” They also report how their family members, co-workers, friends and partners would rate them at their job. For the friend identity, respondents are asked “On a scale of 0 to 10, where 0 is not at all good, and 10 is very good, how would you rate yourself as a friend?” They also report how their friends and close friends would rate them as a friend.¹ In the analyses presented here, I use only the rating for the most relevant role complement to calculate discrepancies for each identity; coworkers for worker identity and close friend for friend the friend identity. For all of the identity rating items, higher scores indicate more positive views or

¹ The significant others for each role-identity were chosen prior to data collection, based on their appropriateness as referents for each respective role (Stets and Harrod 2004).
Table 3.5. Descriptive Statistics for California Study Obligatory and Voluntary Identities (N=335)

<table>
<thead>
<tr>
<th></th>
<th>mean</th>
<th>SD</th>
<th>range</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Obligatory (Worker) Identity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Identity Ratings</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self appraisal</td>
<td>8.87</td>
<td>1.26</td>
<td>0-10</td>
</tr>
<tr>
<td>Coworker reflected appraisal</td>
<td>8.58</td>
<td>1.52</td>
<td>0-10</td>
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<tr>
<td><strong>Identity Discrepancies</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Self-Coworker linear</td>
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<td>1.60</td>
<td>-10-10</td>
</tr>
<tr>
<td>Self-Coworker absolute</td>
<td>.85</td>
<td>1.39</td>
<td>0-10</td>
</tr>
<tr>
<td>Self-Coworker squared</td>
<td>2.65</td>
<td>10.55</td>
<td>0-100</td>
</tr>
<tr>
<td><strong>Voluntary (Friend) Identity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Identity Ratings</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self appraisal</td>
<td>9.01</td>
<td>1.45</td>
<td>0-10</td>
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<tr>
<td>Close friend reflected appraisal</td>
<td>9.21</td>
<td>1.15</td>
<td>2-10</td>
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<td><strong>Identity Discrepancies</strong></td>
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<td></td>
</tr>
<tr>
<td>Self-Close Friend linear</td>
<td>-.21</td>
<td>1.36</td>
<td>-10-8</td>
</tr>
<tr>
<td>Self-Close Friend absolute</td>
<td>.64</td>
<td>1.22</td>
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<tr>
<td>Self-Close Friend squared</td>
<td>1.89</td>
<td>8.33</td>
<td>0-100</td>
</tr>
</tbody>
</table>

evaluations of the respondent in that identity. Thus, for all discrepancies calculated using these items, higher values indicate larger discrepancies between self and perceived other rating. Descriptive statistics for the California study self and role complement identity ratings and linear, absolute, and squared identity discrepancies are displayed in table 3.5. As shown in table 3.5, the mean level of identity discrepancy was relatively low for obligatory (linear=.30; absolute value=.85; squared=2.65) and voluntary (linear=-.21; absolute value=.64; squared=1.89) identities.

*Self-Concept Mediators: California and U.S. Studies.* Both studies use the same self-esteem and mastery measures. *Self-esteem* is measured using the 10-item Rosenberg
Self-Esteem scale (Rosenberg 1965). Items include, “I feel that I am a person of worth, at least on an equal basis with others”; “I feel that I have a number of good qualities”.

Mastery is measured using the seven-item Pearlin Mastery scale (Pearlin and Schooler 1978). Items include, “I have little control over things that happen to me”; “Sometimes I feel like I am being pushed around in life”. Responses for all self-esteem and mastery items range from 1 (strongly agree) to 4 (strongly disagree), and are coded and summed so that higher scores indicate more self-esteem or mastery, respectively. Descriptive statistics for the self-esteem and mastery summed scales appear at the bottom of table 3.1 for the U.S. study and the bottom of table 3.2 for the California study. In both samples, self-esteem and mastery are relatively high. In the U.S. sample, the mean level of self-esteem is 32.91 and the mean level of mastery is 21.43. In the California sample, the mean level of self-esteem is 32.79 and the mean level of mastery is 22.06.

Control Variables: U.S. Study. All analyses using the U.S. data include controls for race, gender, age, education, income, marital status, and employment status. Employment status is coded so that 1=employed full or part time. Race is coded into binary variables for black=1 and Latino=1, with white as the comparison group. Gender is coded as a binary variable so that 1=female. Age is measured in years. Education is measured in years of schooling completed. Income is measured in eight categories, where 1 represents the lowest and 8 represents the highest income. Marital status is coded into binary variables for single=1 and cohabiting=1, with married as the comparison group.
Control Variables: California Study. All analyses using the California data include controls for race (white, black, Latino), gender, age, education, and marital status. All of those variables are coded in the same way described above, except that income is measured using 12 categories where 1 represents the lowest and 12 represents the highest income. I could not control for employment status in the California models, because all respondents hold the worker identity, and thus, are employed at least part-time.

Analytic Strategy

Identity Discrepancy Measurement Strategies. To explore the consequences of using different strategies to calculate identity discrepancies, I examine correlations between discrepancies calculated using different methods and the mediators and outcomes of interest. Specifically, these analyses focus on identifying whether absolute value discrepancies, squared discrepancies, and linear discrepancies produce substantively different results in terms of their bivariate relationships with the mediators and outcomes of interest. I use this empirical information to verify theoretical arguments about the types of identity discrepancies that are most appropriate for research testing identity control theory.

I also explore the implications of using different analytic strategies to examine the impact of identity discrepancies on distress. Specifically, I conduct two sets of ordinary least squares (OLS) regression analyses. First, I estimate models that include controls for the self and perceived other ratings to examine whether identity discrepancies are significant predictors of distress, net of the variables that comprise them. Second, I estimate models in which identity discrepancies are represented as interaction terms
between the self and perceived other ratings. These models also control for the self and other ratings. In this analysis, I investigate the extent to which identity discrepancies can be represented as multiplicative effects of the identity ratings that comprise them.

To investigate the measurement issues just described, I use both the California and U.S. data. I use the U.S. data to explore relationships between obligatory and voluntary identities, self-esteem and mastery, and depressive, anxiety, and somatic symptoms. I use the California data to replicate findings in an independent sample. To simplify the presentation and interpretation of the structural equation modeling results, I use the results of these analyses in conjunction with theoretical and statistical considerations to choose a single identity discrepancy measurement strategy to use in calculating discrepancies for all remaining analyses in this dissertation.

**Relationship between Identity Discrepancies, Self-Concept, and Distress.** I investigate the relationship between obligatory and voluntary identity discrepancies, self-concept, and distress using two stages of structural equation modeling. I use structural equation modeling for two reasons. First, it is ideal for simultaneously estimating relationships between multiple independent, mediating, and outcome variables. Second, it provides the information necessary to test whether a given theoretical (structural) model fits the pattern of relationships found in the data, and this information can then be used to determine whether differences in model fit are statistically significant.

In the first stage of structural equation modeling, I estimate separate models that examine the direct and indirect effects (through self-esteem and mastery) of obligatory and voluntary identity discrepancies on distress using the U.S. data. The first model
includes only obligatory (spouse/partner, worker, and family member) discrepancies. The second model includes only voluntary (friend, religious/spiritual, and volunteer/social group member) identity discrepancies. The third model includes both obligatory and voluntary discrepancies to examine their simultaneous impact on distress.

Figure 3.1 displays the theoretical combined model. However, the actual third model that I estimate is based on the empirical results of the separate obligatory and voluntary identity analyses. These three models provide preliminary information about the extent to which identity discrepancies operate similarly for obligatory and voluntary identities as well as their relative influence on self-concept and distress when they are included together in a single model.

The outcomes for all models using the U.S. data are depressive, anxiety, and somatic symptoms, and self-esteem and mastery are included as mediators. Because the distress scales are highly reliable, I scale them and enter them in all analyses as observed variables to preserve degrees of freedom in this relatively small sample. Given that the
distress outcomes are endogenous variables in the structural model, measurement error associated with them is modeled. Because the mastery and self-esteem measures in these data are well-established and have consistently been found to be highly valid and reliable, they are also scaled and entered into models as observed variables. As mediators in the proposed theoretical model, they are also endogenous variables, so measurement error associated with them is also modeled.

In the second stage, I estimate (as closely as possible) the final combined obligatory and voluntary structural equation model produced in the U.S. analyses in the California sample. The outcomes for all models using the California data are depressive and social anxiety symptoms, and self-esteem and mastery were included as mediators, but given the lack of exactly equivalent measures in the U.S. and California data, I could only replicate the general pattern of relationships in the final U.S. model. Ideally, I would have been able to precisely reproduce the final U.S. model and test it in the California data. Even with the non-equivalent outcomes, these analyses provide an opportunity to attempt to verify, in an independent sample, the general pattern of relationships between discrepancies, self-concept, and distress found the U.S. data.

With these cross-sectional data, I cannot rule out the possibility that respondents’ current level of distress affects the severity of their identity discrepancies. However, respondents report self-ratings and perceived others’ ratings of themselves in each role separately and are not directly asked to think about or report stressors or problems in their roles (discrepancies). If current distress influences identity ratings, it likely leads individuals to report lower self and other ratings, resulting in zero or low discrepancy
scores rather than larger discrepancies (as might occur if distressed respondents are asked to directly assess inconsistencies related to their social roles). Thus, although reverse causation is possible, its operation is more likely to lead to underestimates (or a more conservative test) of the relationship between discrepancies and distress rather than the reverse.

**Evaluating Structural Equation Model Fit.** Before I present the results of the analyses, I first discuss the measures of fit that I use to evaluate each of the structural equation models that I estimate. The *chi-square statistic* tests the null hypothesis that the data perfectly fit the model being estimated, and it is based on the minimum value of the discrepancy. If the chi-square statistic is significant, it indicates that the pattern of relationships found in the data is significantly different from the pattern of relationships specified in the model, and thus, the model should be rejected (or altered). However, this statistic is affected by sample size, such that the larger the sample, the more difficult it is to find support for the null hypothesis (and obtain a non-significant chi-square statistic). In large samples, researchers have suggested computing the relative chi-square ($X^2/df$), and if it is approximately five or less, the model can be accepted as a reasonable fit to the data.

The *root mean square error of approximation (RMSEA)* does not incorporate a penalty for model complexity, and thus, tends to favor models with many parameters. It is a population discrepancy function that represents the discrepancy obtained by fitting the model to the population moments instead of the sample moments. A model that
produces an RMSEA around .05 can be considered a good fit to the data, but models with an RMSEA of .08 or below are considered adequate (Browne and Cudeck 1993).

The Akaike information criterion (AIC) (Akaike 1973,1987) is a measure of relative goodness-of-fit, and it is used to compare the fit of two models such that the model with a lower AIC is the more desirable of the two.

Several measures of fit compare the fit of the model being estimated to the independence model, and the normed fit index (NFI, Bentler and Bonett 1980) and comparative fit index (CFI, Bentler 1990) are two such measures of fit. Both range from zero to one, with values around .900 and above indicating a good fit. The goodness-of-fit index (GFI, Joreskog and Sorbom 1984) also ranges from 0-1. Like the NFI and CFI, values at or above .900 on the GFI are considered good. I report and interpret all of these measures of fit to evaluate each of the models in this dissertation.

Results

Implications of Identity Discrepancy Measurement Strategies

Given the range of different ways in which identity discrepancies have been discussed and calculated in the previous research, the first aim of the analyses in this chapter was to theoretically and empirically determine which was the most appropriate to use in subsequent studies in this dissertation. Based on the theoretical considerations I discussed above, squared (quadratic) difference scores were the best measurement strategy to empirically capture the nature of the relationship between identity
discrepancies and distress. Furthermore, controlling for linear discrepancies in analyses of squared discrepancies provided the opportunity to evaluate whether the observed relationships lend more support self-verification theories, such as identity control and identity discrepancy theories or self-enhancement theories.

I examined bivariate correlations to determine whether linear, absolute value, and squared discrepancies were related to the self-concept mediators and distress outcomes in similar ways. Based on findings from previous research (e.g., Burke and Harrod 2005), I expected that linear discrepancies would not be significantly associated with self-concept or distress, but that absolute value and squared discrepancies would. Tables 3.6 and 3.7 display the results of these analyses in the U.S. and California data. In both tables, O represents obligatory identities and V represents voluntary identities. Recall that the obligatory identities were spouse/partner, worker, and family member in the U.S. study and worker in the California study; and the voluntary identities were friend, religious/spiritual, volunteer/social group member in the U.S. study and friend in the California study.

As illustrated in table 3.6 in the columns labeled 1 and 4, none of the linear discrepancies were associated with mastery, self-esteem, depressive, anxiety, or somatic symptoms. With respect to the absolute value (columns labeled 2 and 5) and squared (columns labeled 3 and 6) discrepancies, I found that they were associated with self-concept and distress in similar ways. Specifically, obligatory absolute value (column 2) and squared (column 3) discrepancies were both significantly and positively associated with depressive and somatic symptoms. The only difference was that obligatory absolute
### Table 3.6. Correlations between U.S. Study Obligatory and Voluntary Discrepancies, Dependent, and Mediating Variables (N=376)

<table>
<thead>
<tr>
<th></th>
<th>(1) O linear</th>
<th>(2) O absolute</th>
<th>(3) O squared</th>
<th>(4) V linear</th>
<th>(5) V absolute</th>
<th>(6) V squared</th>
<th>(7) Mastery</th>
<th>(8) Self-esteem</th>
<th>(9) Depressive</th>
<th>(10) Social anxiety</th>
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<td><strong>.092</strong></td>
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<td>-.420***</td>
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<td>.698***</td>
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</table>

* p≤ .05 **p≤ .01 ***p≤ .001  
Note: Columns depicting correlations for absolute value and squared discrepancies are **bolded**.

### Table 3.7. Correlations between California Study Obligatory and Voluntary Discrepancies, Mediating, and Dependent Variables (N=335)

<table>
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<tr>
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<th>(1) O linear</th>
<th>(2) O absolute</th>
<th>(3) O squared</th>
<th>(4) V linear</th>
<th>(5) V absolute</th>
<th>(6) V squared</th>
<th>(7) Mastery</th>
<th>(8) Self-esteem</th>
<th>(9) Depressive</th>
<th>(10) Social anxiety</th>
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<tbody>
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<td>(1)</td>
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<td>-.392***</td>
<td>-.400***</td>
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</table>

* p≤ .05 **p≤ .01 ***p≤ .001  
Note: Columns depicting correlations for absolute value and squared discrepancies are **bolded**.
value discrepancies, but not obligatory squared discrepancies, were significantly and positively associated with anxiety symptoms. I also found that voluntary absolute value (column 5) and squared (column 6) were both significantly and negatively associated with self-esteem and mastery and significantly and positively associated with anxiety and somatic symptoms.

As illustrated in table 3.7, the pattern of relationships between discrepancies, self-concept, and distress in the California data differed from that which I found in the U.S. data. Specifically, none of the voluntary identity discrepancies (linear, absolute, or squared) were significantly related to any of the self-concept mediators or distress outcomes. Furthermore, linear obligatory identity discrepancies were significantly and negatively related to both self-esteem and mastery. However, similar to what I found in the U.S. data, absolute value and squared obligatory identity discrepancies showed the same pattern of relationships with the mediators and outcomes. Both were significantly and negatively associated with mastery and self-esteem and significantly and positively associated with social anxiety symptoms. Neither was significantly associated with depressive symptoms.

Given that I found no consistent empirical difference between absolute value and squared discrepancies in terms of their associations with the key mediators and outcomes in either the U.S. or California studies, and that Burke and Harrod (2005) provided a strong theoretical argument for using squared discrepancies in identity discrepancy research, I used the squared discrepancies in all subsequent analyses. Hereafter, “discrepancies” will refer to these squared (quadratic) discrepancies.
I also explored two alternative operationalizations of identity discrepancies in the context of OLS regression models. The first alternative operationalization involved controlling for self and role complement ratings in examining the impact of identity discrepancies on distress. The second alternative operationalization involved computing interaction (multiplicative) terms comprised of self and role-complement evaluations and examining their impact on distress in models that controlled for the self and role-complement evaluations. I estimated these models using both the U.S. and California data.

In the U.S. and California data OLS regression models, I failed to find empirical support for including identity discrepancies and controls for self and role complement ratings in regression models. Specifically, I found that the obligatory identity discrepancy remained a significant predictor of all three outcomes when the self and perceived other ratings were included in the model. The perceived other rating of the obligatory identity was significantly and negatively associated with the distress outcomes, but it did not eliminate the effect of discrepancy. Neither voluntary identity discrepancies nor the self and perceived other ratings were significantly associated with any of the outcomes.

In the U.S. and California data OLS regression models that included self and role complement identity ratings and interaction terms between the two, I found that the interaction terms were not significantly associated with depressive, anxiety, or somatic symptoms. Because identity theories predict that it is both the presence and magnitude of an identity discrepancy that contributes to distress, it is not surprising that interaction
terms fail to capture the theoretical relationship between identity discrepancies and distress. Theoretically, interaction terms assume that a particular level of self-evaluation will be related more strongly to distress in the presence of a particular level of role-complement evaluation, compared to other levels of role-complement evaluations. Underlying this assumption is an additional assumption that self-evaluations and role-complement evaluations are themselves related to distress, and that when combined in certain ways, will be more strongly related to distress. Taken together, these empirical models do not support operationalizing identity discrepancies as multiplicative relationships between self and role complement evaluations of respondents’ identities.

Correlations between the key study variables were useful for determining similarities in bivariate associations involving identity discrepancies that were measured in different ways, but they only provided preliminary evidence as to what the pattern of relationships between identity discrepancies, self-concept, and distress would look like in a multivariate environment. OLS regression analyses were useful for investigating the relationships between two alternative operationalizations of identity discrepancies and their relationship with distress – interaction terms and models that included discrepancies while controlling for the identity ratings that comprised them – but neither the bivariate correlations nor the multivariate regressions were sufficient for examining, simultaneously, the relationships between obligatory and voluntary identity discrepancies, multiple mediators, and multiple outcomes. Therefore, to adequately address my research question concerning the potential differences between obligatory and
voluntary identity discrepancies in terms of their direct or mediated relationships with psychological distress, I conducted a series of structural equation models.

*Relationship between Identity Discrepancies, Self-Concept, and Distress*

I initially expected identity discrepancies to be significantly associated with all self-concept and distress measures, but the patterns of correlations displayed in tables 3.6 and 3.7 suggest otherwise. Specifically, obligatory identity discrepancies were only significantly related to depressive and somatic, but not anxiety symptoms in the U.S. data. Voluntary identity discrepancies, however, were significantly related to mastery, self-esteem, anxiety, and somatic symptoms. This suggests that obligatory identity discrepancies would be directly related to depressive and somatic symptoms and that voluntary identity discrepancies would be related to anxiety and somatic symptoms, either directly or indirectly through self-esteem and mastery.

In the California data, voluntary identity discrepancies were not significantly related to any of the self-concept or distress measures, while obligatory identity discrepancies were significantly associated with mastery, self-esteem, and social anxiety. Because of these inconsistent findings and lack of equivalence between the U.S. and California studies in terms of the particular identities and outcomes included, I estimated structural equation models in the U.S. data, and then attempted to approximate the final model in the California data. To inform the construction of the model that combined obligatory and voluntary identity discrepancies, I began by estimating separate obligatory and voluntary models within the U.S. data.
To investigate the relationships between obligatory identity discrepancies, self-concept, and distress, I first estimated a version of the model depicted in figure 3.1 that only included obligatory identity discrepancies. This model also included error terms for the endogenous variables mastery, self-esteem, depressive, anxiety, and somatic symptoms, and the errors of self-esteem and mastery as well as the errors of depressive, anxiety, and somatic symptoms were allowed to correlate. As a preliminary step in testing the structural model, I estimated a “free to float” version in which all of the control variables (age, income, education, gender, race/ethnicity, employment status, and marital status) were entered, but not connected to any other variables by structural arrows (i.e., they were modeled as being unrelated to each other and the key study variables). I then examined the modification indices to determine which paths should be added from the control variables to the key study variables. I found that income, education, employment status, and age were associated with self-esteem; employment status, income, and age were associated with mastery; education and gender were associated with somatic symptoms; and income was associated with depressive symptoms. Also, age, education, and income were correlated with employment status and income and education were correlated with one another. I added the above structural paths and correlations to the model and deleted control variables that were not found to be associated with other variables in the model (marital status and race/ethnicity).

With the appropriate controls included, I estimated the first model. It fit the data relatively well ($X^2=61.476$, 33df, $p=.002$; GFI=.974; NFI=.951; CFI=.976;
Although most of the measures of fit were within the range of values that can be considered “good”, the $X^2$ statistic was significant, which indicated a less than ideal fit to the data. Inspection of the model coefficients revealed that the paths from obligatory identity discrepancies to mastery, self-esteem, and anxiety symptoms were nonsignificant. Therefore, I estimated a second model in which those paths were removed (i.e., set to zero). With those modifications, mastery, self-esteem, and anxiety symptoms no longer had any paths leading to them from the key study variables, so I also eliminated them from the model. With those variables removed, age and employment status were no longer associated with anything in the model, so I removed them as well. With those modifications, the model fit improved ($X^2=20.914, 11 \text{df}, p=.034; \text{GFI}=.984; \text{NFI}=.954; \text{CFI}=.977; \text{RMSEA}=.049; \text{AIC}=54.914$). Modification indices for the second model suggested that model fit would improve if a path was added from income to somatic symptoms.

In the third model, I added that path and found that it further improved the fit of the model ($X^2=7.848, 10 \text{df}, p=.644; \text{GFI}=.994; \text{NFI}=.983; \text{CFI}=1.000; \text{RMSEA}=.000; \text{AIC}=43.848$), and the $X^2$ statistic became nonsignificant, suggesting that the model did not statistically differ from the pattern of relationships observed in the data. As a final step, I examined the coefficients and found the paths from gender and education to the outcomes were nonsignificant. I deleted the nonsignificant control variables and found that it did not alter the substantive relationships between the variables remaining in the model. Standardized estimates for the final, trimmed, structural equation model for obligatory identities in the U.S. data are displayed in figure 3.2 ($X^2=2.258, 2 \text{df}, p=.323$;
GFI=.998; NFI=.994; CFI=.999; RMSEA=.019; AIC=28.258. Unstandardized estimates and standard errors for all paths included in the model depicted in figure 3.2 appear in the second column of table 3.8.

As shown in figure 3.2, obligatory identity discrepancies were significantly and positively related to somatic (B=.140) and depressive (B=.127) symptoms, supporting hypotheses seven(a) and 11(a). Mastery and self-esteem do not appear in this final model because, in earlier models, I found that neither was significantly associated with obligatory identity discrepancies. Specifically, self-esteem and mastery were significantly and negatively associated with depressive, somatic, and symptoms, but obligatory identity discrepancies were not related to either component of self-concept. This finding is contrary to hypotheses 13(a) and 14(a), which predicted that obligatory identity discrepancies would be negatively related to self-esteem and mastery, and it also fails to support hypotheses 15 and 16 which predicted that self-esteem and mastery would mediate the relationship between obligatory identity discrepancies and distress. Given the obligatory identity discrepancies were not significantly related to self-esteem or
Table 3.8. Unstandardized Estimates and Standard Errors for Final Obligatory, Voluntary, and Combined Models in U.S. Data (N=376)

<table>
<thead>
<tr>
<th>Path</th>
<th>Obligatory (^1)</th>
<th>Voluntary (^2)</th>
<th>Combined (^3)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(b) (SE)</td>
<td>(b) (SE)</td>
<td>(b) (SE)</td>
</tr>
<tr>
<td><strong>Key Theoretical Coefficients</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>O Discrepancies (\rightarrow) Depress</td>
<td>(0.062) (.026)</td>
<td>(0.037) (.018)</td>
<td></td>
</tr>
<tr>
<td>O Discrepancies (\rightarrow) Somatic</td>
<td>(0.062) (.024)</td>
<td>(0.039) (.017)</td>
<td>(-.058) (.025)</td>
</tr>
<tr>
<td>V Discrepancies (\rightarrow) Mastery</td>
<td>(-.075) (.035)</td>
<td>(-.075) (.035)</td>
<td>(-.118) (.050)</td>
</tr>
<tr>
<td>V Discrepancies (\rightarrow) Self-Esteem</td>
<td>(-.217) (.050)</td>
<td>(-.207) (.050)</td>
<td>(-.244) (.045)</td>
</tr>
<tr>
<td>Self-Esteem (\rightarrow) Depress</td>
<td>(-.174) (.042)</td>
<td>(-.174) (.042)</td>
<td>(-.244) (.045)</td>
</tr>
<tr>
<td>Self-Esteem (\rightarrow) Somatic</td>
<td>(-.167) (.071)</td>
<td>(-.177) (.071)</td>
<td>(-.156) (.064)</td>
</tr>
<tr>
<td>Mastery (\rightarrow) Depress</td>
<td>(-.167) (.071)</td>
<td>(-.177) (.071)</td>
<td>(-.205) (.060)</td>
</tr>
<tr>
<td>Mastery (\rightarrow) Somatic</td>
<td>(-.167) (.071)</td>
<td>(-.177) (.071)</td>
<td>(-.205) (.060)</td>
</tr>
<tr>
<td>Mastery (\rightarrow) Anxiety</td>
<td>(-.205) (.060)</td>
<td>(-.205) (.060)</td>
<td></td>
</tr>
<tr>
<td><strong>Control Variable Coefficients</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Income (\rightarrow) Self-Esteem</td>
<td>(0.456) (.113)</td>
<td>(0.447) (.113)</td>
<td></td>
</tr>
<tr>
<td>Income (\rightarrow) Mastery</td>
<td>(0.196) (.080)</td>
<td>(0.196) (.080)</td>
<td></td>
</tr>
<tr>
<td>Employed (\rightarrow) Self-Esteem</td>
<td>(1.606) (.523)</td>
<td>(1.506) (.523)</td>
<td></td>
</tr>
<tr>
<td>Employed (\rightarrow) Mastery</td>
<td>(1.171) (.351)</td>
<td>(1.171) (.351)</td>
<td></td>
</tr>
<tr>
<td>Age (\rightarrow) Self-Esteem</td>
<td>(0.040) (.014)</td>
<td>(0.039) (.014)</td>
<td></td>
</tr>
<tr>
<td>Female (\rightarrow) Somatic</td>
<td>(-.580) (.249)</td>
<td>(-.585) (.248)</td>
<td></td>
</tr>
<tr>
<td>Income (\rightarrow) Depress</td>
<td>(-.415) (.088)</td>
<td>(-.158) (.058)</td>
<td>(-.155) (.058)</td>
</tr>
<tr>
<td>Income (\rightarrow) Somatic</td>
<td>(-.268) (.081)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Covariances</strong></td>
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<td></td>
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<tr>
<td>Employed (\leftrightarrow) Age</td>
<td>(-2.617) (.379)</td>
<td>(-2.617) (.279)</td>
<td></td>
</tr>
<tr>
<td>Employed (\leftrightarrow) Income</td>
<td>(0.300) (.054)</td>
<td>(0.300) (.054)</td>
<td></td>
</tr>
<tr>
<td>Self-Esteem (\leftrightarrow) Mastery</td>
<td>(9.064) (.888)</td>
<td>(9.112) (.888)</td>
<td></td>
</tr>
<tr>
<td>Depress (\leftrightarrow) Anxiety</td>
<td>(7.039) (.655)</td>
<td>(6.973) (.650)</td>
<td></td>
</tr>
<tr>
<td>Anxiety (\leftrightarrow) Somatic</td>
<td>(6.006) (.578)</td>
<td>(5.927) (.572)</td>
<td></td>
</tr>
<tr>
<td>Depress (\leftrightarrow) Somatic</td>
<td>(9.153) (.813)</td>
<td>(7.588) (.699)</td>
<td>(7.286) (.685)</td>
</tr>
</tbody>
</table>

\(^1\)Standardized coefficients for this model are displayed in figure 3.2.
\(^2\)Standardized coefficients for this model are displayed in figure 3.3.
\(^3\)Standardized coefficients for this model are displayed in figure 3.4.

Notes: Structural paths for obligatory and voluntary linear discrepancies mimicked those of the squared discrepancies. Only squared discrepancy coefficients are reported here; all linear discrepancies were NS. **Bolded** coefficients are statistically significant at \(p \geq .05\) or better. Blank cells represent parameters that were not estimated in the model reported in that column.
mastery, hypothesis 17, which predicted that obligatory identity discrepancies would have a greater impact on mastery than self-esteem was also not supported. Contrary to hypothesis nine(a), obligatory identity discrepancies were not significantly related to anxiety symptoms, so that outcome was excluded from the final model. Finally, the model depicted in figure 3.2 controls for income, which was significantly and negatively related to somatic and depressive symptoms.

_U.S. Study Structural Equation Models: Voluntary Identity Model._ To investigate the relationships between voluntary identity discrepancies, self-concept, and distress, I estimated a version of the model depicted in figure 3.1 that only included voluntary identity discrepancies. Like the obligatory identity model, this model also included error terms for the endogenous variables mastery, self-esteem, depressive, anxiety, and somatic symptoms, and the errors of self-esteem and mastery as well as the errors of depressive, anxiety, and somatic symptoms were allowed to correlate. As a preliminary step in testing the structural model, I estimated a “free to float” version in which all of the control variables (age, income, education, gender, race/ethnicity, employment status, and marital status) were entered, but not connected to any other variables by structural arrows (i.e., they were modeled as being unrelated to each other and the key study variables). I then examined the modification indices to determine which paths should be added from the control variables to the key study variables.

I found the same pattern of relationships between the control variables and outcomes as I did in the obligatory identity model: income, education, employment status, and age were associated with self-esteem; employment status, income, and age
were associated with mastery; education and gender were associated with somatic symptoms; and income was associated with depressive symptoms. Also, age, education, and income were correlated with employment status and income and education were correlated with one another. I added the above structural paths and correlations to the model and deleted control variables that were not found to be associated with other variables in the model (marital status and race/ethnicity).

With the appropriate controls included, I estimated the first model. Like the first obligatory identity model, I found that the first voluntary identity model fit the data relatively well ($X^2=65.022$, 33df, $p=.001$; GFI=.973; NFI=.947; CFI=.972; RMSEA=.051; AIC=155.022). Although most of the measures of fit were within the range of values that can be considered “good”, the $X^2$ statistic was significant, which indicated a less than ideal fit to the data. Inspection of the model coefficients revealed that the direct paths from voluntary identity discrepancies to the depressive, anxiety, and somatic symptoms outcomes were nonsignificant. Therefore, I estimated a second model in which those paths were removed (i.e., set to zero), leaving only the indirect paths through mastery and self-esteem. With those modifications, model fit improved ($X^2=57.307$, 37df, $p=.018$; GFI=.976; NFI=.953; CFI=.982; RMSEA=.038; AIC=139.307). As a final step, I deleted the nonsignificant control variables and found that it did not alter the substantive relationships between the variables remaining in the model. Standardized estimates for the final, trimmed, structural equation model for voluntary identities in the U.S. data are displayed in figure 3.3 ($X^2=51.2279$, 31df, $p=.012$, GFI=.977; NFI=.955; CFI=.981; RMSEA=.042; AIC=121.279). Unstandardized
estimates and standard errors for all paths included in the model depicted in figure 3.3 appear in the third column of table 3.8.

As shown in figure 3.3, the pattern of relationships between voluntary identity discrepancies, self-concept, and distress was quite different than the pattern I found for obligatory identity discrepancies. Voluntary identity discrepancies were not directly related to any of the distress outcomes, failing to support hypotheses seven(b), nine(b), and ll(b). They were indirectly related, through both self-esteem and mastery, to depressive, anxiety, and somatic symptoms, supporting hypotheses13(b) through 16(b). Specifically, voluntary identity discrepancies were significantly and negatively related to self-esteem (B=-.117) and mastery (B=-.108), and mastery and self-esteem were both significantly and negatively related to all three distress outcomes. Because the standardized coefficient for the effect of voluntary identity discrepancies on self-esteem was larger than the standardized coefficient for the effect of voluntary identity discrepancies on mastery, hypothesis 18 was also supported.
U.S. Study Structural Equation Models: Combined Obligatory and Voluntary Identity Model. To simultaneously investigate the relationships between obligatory and voluntary identity discrepancies, self-concept, and distress, I first estimated the complete model depicted in figure 3.1. Like the models that included obligatory and voluntary identities alone, this model also included error terms for the endogenous variables mastery, self-esteem, depressive, anxiety, and somatic symptoms, and the errors of self-esteem and mastery as well as the errors of depressive, anxiety, and somatic symptoms were allowed to correlate. As a preliminary step in testing the structural model, I estimated a “free to float” version in which all of the control variables (age, income, education, gender, race/ethnicity, employment status, and marital status) were entered, but not connected to any other variables by structural arrows (i.e., they were modeled as being unrelated to each other and the key study variables). I then examined the modification indices to determine which paths should be added from the control variables to the key study variables.

I found the similar pattern of relationships between the control variables and outcomes as I did in the separate obligatory and voluntary models: income, education, employment status, and age were associated with self-esteem; employment status and age were associated with mastery; education and gender were associated with somatic symptoms; and income was associated with depressive symptoms. Also, age, education, and income were correlated with employment status and income and education were correlated with one another. I added the above structural paths and correlations to the
model and deleted control variables that were not found to be associated with other
variables in the model (marital status and race/ethnicity).

With the appropriate controls included, I estimated the first model. Like the first
models of the obligatory and voluntary identities separately, I found that the first
combined obligatory and voluntary identity model fit the data relatively well ($X^2=96.988$,
59 df, $p=.001$; GFI=.965; NFI=.925; CFI=.969; RMSEA=.041; AIC=188.988). Because
the $X^2$ statistic was significant, I examined the modification indices to determine whether
additional paths would improve the model fit. They suggested adding paths from
employment status to self-esteem, from income to mastery, and from the squared
obligatory identity discrepancy to self-esteem. Although the path from obligatory
identity discrepancy from self-esteem was removed in the analyses of obligatory
identities alone, I made the suggested modifications in the second model and found that
the model fit improved ($X^2=74.238$, 55 df, $p=.043$, GFI=.973; NFI=.943; CFI=.984;
RMSEA=.031; AIC=174.238).

As a final step, I deleted the nonsignificant control variables and found that it did
not alter the substantive relationships between the variables remaining in the model.
Standardized estimates for the final, trimmed, combined obligatory and voluntary identity
structural equation model in the U.S. data are displayed in figure 3.4($X^2=66.833$, 47 df,
$p=.030$; GFI=.974; NFI=.945; CFI=.982; RMSEA=.034; AIC=154.833). Unstandardized
estimates and standard errors for all paths included in the model depicted in figure 3.4
appear in the fourth and final column of table 3.8.
As shown in figure 3.4, obligatory identity discrepancies were significantly and directly related to depressive symptoms (B=.075) and somatic symptoms (B=.089), supporting hypotheses seven and 11. Obligatory identity discrepancies also had an indirect relationship with all three outcomes, through its effect on self-esteem (B=-.095), supporting hypotheses 13(a) and 15(a). However, hypothesis 17, which predicted that obligatory identity discrepancies would have a larger effect on mastery compared to esteem was not supported. Voluntary identity discrepancies had no direct relationships with the distress outcomes, failing to support hypotheses seven(b), nine(b), and 11(b). Furthermore, hypotheses eight and 12, which predicted that the direct effect of obligatory identity discrepancies on depressive and somatic symptoms would be larger than the direct effect of voluntary identity discrepancies (which in these data, is zero) on the same outcomes was not supported. However, voluntary identity discrepancies were indirectly related to all three through its relationships with mastery (B=-.108) and self-esteem (B=-
.115), supporting hypotheses 13(b) through 16(b). Also, the standardized effect of voluntary identity discrepancies on self-esteem was larger than their effect on mastery, supporting hypothesis 18.

_California Study Structural Equation Models._ Ideally, I would have been able to test the exact models that I developed in the U.S. data in an independent data set. Because the identities and psychological distress outcomes in the California study were not equivalent to those in the U.S. study, I could not use the California data to precisely replicate the final models produced in the U.S. study analyses. The California data did include two of the same identities as the U.S. data – worker (an obligatory identity) and friend (a voluntary identity) – and the same measures of self-esteem and mastery. Like the U.S. data, the California data also included depressive symptoms, but they were measured on a different scale using a different instrument. The only other potential outcome included in the California data was social anxiety symptoms, but an equivalent measure was not present in the U.S. data (i.e., anxiety and somatic symptoms are conceptually quite different from symptoms of social anxiety). Therefore, the closest I could come to replicating the final combined model from the U.S. analyses was to mimic them as much as possible using the available identity discrepancies and outcomes. Since the basic pattern of relationships in the U.S. data revealed that obligatory identity discrepancies were directly related to the distress outcomes and voluntary identity discrepancies were indirectly related to the distress outcomes through self-esteem and mastery, I began the analyses of the California data by estimating a similar combined model using the available measures.
California Study Structural Equation Models: Replicating Final Combined U.S. Model. I estimated the model depicted in figure 3.4, but removed variables that were not present in or did not apply to the California data and replaced them, where applicable, with similar measures. Figure 3.5 depicts the California data version of the combined obligatory and voluntary identity model. Specifically, I removed the control for employment status since everyone in the California study was employed. I also included worker and friend identity discrepancies as independent variables and depressive and anxiety symptom as outcomes since no other identities or outcomes were present in the California data.

I estimated a preliminary “free to float” model to determine which control variables, if any, were associated with the outcomes in the California data, since a different measure of depressive symptoms and no measure of social anxiety symptoms were used in the U.S. data. Based on modification indices, I added paths from education to mastery, from income to social anxiety symptoms, from age to depressive symptoms,
and correlations between age and education and between income and education and age. The modification indices suggested that I add correlations between friend linear discrepancies and age, between friend squared discrepancies and income, and between work linear discrepancies and friend linear discrepancies. Amos suggested correlations between these variables because it does not suggest paths that would turn exogenous variables into endogenous variables. However, I added structural arrows from age and income to the friend discrepancies.

With the appropriate controls and the modifications listed above, I estimated the first model. The model fit the data well ($X^2=25.118$, 21df, $p=.242$; GFI=.987; NFI=.968; CFI=.994; RMSEA=.024; AIC=115.118), but although self-esteem was significantly associated with depressive and social anxiety symptoms and mastery was significantly associated with social anxiety symptoms, none of the other key theoretical (structural) paths involving identity discrepancies, were significant. Given that the same model fit well in the U.S. data and that both obligatory and voluntary identity discrepancies were related directly and/or indirectly to all three of the distress outcomes, it is surprising that the same relationships failed to reach statistical significance when I attempted to replicate the model in the independent California sample. Figure 3.6 shows standardized estimates for the final combined obligatory and voluntary identity model in the California data. Unstandardized estimates and standard errors for all paths included in the model depicted in figure 3.6 appear in the fourth and final column of table 3.9.

As shown in figure 3.6, neither the obligatory nor voluntary discrepancies were significantly related, directly or indirectly to depressive or social anxiety symptoms.
Thus, I was unable to replicate the basic pattern of relationships in the U.S. data in the California data. The lack of equivalence in outcome measures between the U.S. and California data could have contributed to my failure to replicate the model, but differences between the U.S. and California samples in racial/ethnic and gender composition could also provide clues as to why I had trouble fitting the model to the California data. In this dissertation, I cannot empirically address the lack of equivalent measures, but I can further explore the implications for model fit of the racial/ethnic and gender makeup of each sample.
Table 3.9. Unstandardized Estimates and Standard Errors for Final Combined Model in California Data (N=355)

<table>
<thead>
<tr>
<th>Path</th>
<th>b</th>
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</thead>
<tbody>
<tr>
<td><strong>Key Theoretical Coefficients</strong></td>
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<tr>
<td>O Discrepancies $\rightarrow$ Depress</td>
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<tr>
<td>O Discrepancies $\rightarrow$ Soc Anx</td>
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<td>(.062)</td>
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<tr>
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<td>0.014</td>
<td>(.016)</td>
</tr>
<tr>
<td>V Discrepancies $\rightarrow$ Mastery</td>
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<td>(.021)</td>
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<td>(.028)</td>
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<td><strong>Control Variable Coefficients</strong></td>
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<td>(.058)</td>
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<td>(.075)</td>
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<tr>
<td>Income $\rightarrow$ Soc Anx</td>
<td><strong>-0.537</strong></td>
<td>(.181)</td>
</tr>
<tr>
<td>Income $\rightarrow$ Mastery</td>
<td><strong>0.239</strong></td>
<td>(.057)</td>
</tr>
<tr>
<td>Education $\rightarrow$ Self-Esteem</td>
<td><strong>0.374</strong></td>
<td>(.069)</td>
</tr>
<tr>
<td>Education $\rightarrow$ Mastery</td>
<td><strong>0.173</strong></td>
<td>(.053)</td>
</tr>
<tr>
<td><strong>Covariances</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education $\leftrightarrow$ Age</td>
<td>8.573</td>
<td>(2.329)</td>
</tr>
<tr>
<td>Education $\leftrightarrow$ Income</td>
<td>5.257</td>
<td>(.695)</td>
</tr>
<tr>
<td>Age $\leftrightarrow$ Income</td>
<td><strong>12.876</strong></td>
<td>(2.300)</td>
</tr>
<tr>
<td>Self-Esteem $\leftrightarrow$ Mastery</td>
<td><strong>8.244</strong></td>
<td>(.782)</td>
</tr>
<tr>
<td>Depress $\leftrightarrow$ Soc Anx</td>
<td><strong>47.907</strong></td>
<td>(8.340)</td>
</tr>
</tbody>
</table>

*Bolded* coefficients are statistically significant at $p \geq .05$ or better

$X^2=25.118$, 21df, $p=.242$; GFI=.987; NFI=.968; CFI=.994; RMSEA=.024; AIC=115.118
Chapter 3 Summary

In this chapter, I examined the relationships between obligatory and voluntary identity discrepancies, self-concept, and psychological distress. I also examined two methodological issues to guide the analyses. First, I explored several strategies for calculating identity discrepancies. I found that squared identity discrepancies had similar patterns of relationships to self-concept and distress and that linear discrepancies were largely unrelated both. I also found little support for the alternative operationalizations of identity discrepancies that involved estimating OLS regression models in which discrepancies were entered as interaction terms between self and perceived significant other identity ratings or analyses in which discrepancies were entered as predictors in models that controlled for self and perceived significant other identity ratings. Given that squared identity discrepancies, more than linear discrepancies, accurately represent the theoretical relationship between identity discrepancies and distress, and had the same pattern of relationships as absolute value discrepancies with the mediators and outcomes, I used them in the subsequent analyses.

With regard to the key theoretical relationships I tested in this chapter, I found that obligatory and voluntary identity discrepancies were indeed related to distress through different pathways. Obligatory discrepancies were directly related to depressive and somatic symptoms and indirectly related to depressive, somatic, and anxiety symptoms through self-esteem. Voluntary identity discrepancies were not directly related to any of the distress outcomes, but were indirectly related to all of them through both self-esteem and mastery.
In analyses in which I estimated the model for obligatory and voluntary identities separately, I found that obligatory identity discrepancies were only directly associated with depressive and somatic symptoms, and that they were not indirectly related to any of the three distress outcomes through self-esteem or mastery. The indirect relationships between the voluntary identity discrepancies and distress through both self-esteem and mastery were present in the model with only voluntary identities and the combined model with obligatory identity discrepancies. These findings support the notion that considering different types of identities as groups or in separate analyses may be misleading. When I combined the obligatory and voluntary identity models, I found that the pattern of relationships between voluntary identity discrepancies and distress remained the same as it was in the separate model, but the relationships concerning obligatory identity discrepancies slightly changed, in that they were no longer just related to depressive and somatic symptoms directly, but were also related to depressive, somatic, and anxiety symptoms through self-esteem. I return to the implications of these findings for identity theory and research in the discussion.

As a final step in the analyses for this chapter, I attempted to replicate findings from U.S. data in California data and found that, although the model fit the California data relatively well, many of the relationships that were statistically significant in the U.S. data were nonsignificant in the California data. One explanation for the non-equivalence between the U.S. and California analyses of very similar models is the non-equivalence of the U.S. and California study samples. There are two key demographic characteristics that are quite different across the samples: gender and racial/ethnic
composition. Specifically, the U.S. sample is comprised of 85 percent white respondents and 70 percent female respondents while the California sample is comprised of 27 percent white, 33 percent black, 31 percent Latino, and 52 percent female respondents. To investigate the extent to which a lack of structural invariance between different racial/ethnic and gender groups may have contributed to the non-equivalence of relationships between identity discrepancies, self-concept and distress in analyses using the U.S. and California data, I estimate two multi-group structural equation models in chapter 4.
CHAPTER 4

POTENTIAL RACIAL/ETHNIC AND GENDER VARIATION

Chapter 4 Introduction

In chapter three, I attempted to replicate the final U.S. obligatory and voluntary identity model in the California data, but found that many of the relationships that were statistically significant in the U.S. data were nonsignificant in the California data. One reason for the lack of equivalence of the model in the two sources of data may be the lack of the equivalence of racial/ethnic and gender distributions of each sample. Researchers typically assume that identity processes operate similarly for individuals of different racial/ethnic and gender groups. However, in the context of the identity discrepancy process, these assumptions have not been empirically examined. To begin to fill this important gap in identity research and to investigate the extent to which a lack of structural invariance between different racial/ethnic and gender groups may have contributed to the non-equivalence of relationships between identity discrepancies, self-concept and distress in analyses using the U.S. and California data in the previous set of analyses (chapter 3), I estimate two multi-group structural equation models, one for race/ethnicity and one for gender. I find the model is equivalent for men and women, but not for white, black, and Latino respondents.
Literature Review

Structural Variation in Role-Related Stressors

Stress process researchers look to the unequal distribution of resources based on characteristics such as race/ethnicity, class, and gender to explain why two individuals who are exposed to seemingly similar life circumstances and stressors can be differentially affected by them (Pearlin 1989). In a recent review of the last forty years of sociological stress research, Thoits (2010) notes that recognizing that certain social groups are disproportionately exposed to particular types of stressors and linking those inequalities in stress exposure to inequalities in physical and mental health is “sociology’s unique contribution” to the study of stress (43).

In addition to experiencing different stressors, certain social groups are systematically disadvantaged in terms of their lack of access to a wide range of valuable material, social, and emotional resources that facilitate coping and potentially protect them from the harmful effects of the stressors they experience (Pearlin 1989). Given that individuals of different social statuses are differentially exposed to stressors and are also differentially vulnerable (i.e., responsive) to them, mental health scholars are interested in comparing rates of psychological distress between and within social categories, including those representing different racial/ethnic groups (e.g., Brown, Sellers, Brown, and Jackson 1999; Jackson et al. 2010). As such, in my final set of analyses, I examine the extent to which the identity discrepancy process operates similarly for white, black, and Latino respondents.
Although one might expect racial/ethnic minorities to experience more distress than their white counterparts given other disadvantaged statuses they are disproportionately likely to hold (e.g., low socioeconomic status), many studies report no racial/ethnic differences in psychological distress (Evans-Campbell, Lincoln, and Takeuchi 2006; Brown et al. 1999; Kessler, Mickelson, and Williams 1999; Marcussen and Piatt 2005). Research has established that race/ethnicity affects exposure to health risks and access to health-related resources, but the particular ways in which differential risk, exposure, and access to care translates into particular health-related outcomes are less clear (Evans-Campbell et al. 2006). Thus, even if levels of certain forms of psychological distress are similar across racial/ethnic groups, the causal linkages between stressors, self-concept, and distress outcomes may be different in kind or in magnitude for different racial/ethnic groups.

*Potential Racial/Ethnic Differences in the Identity Discrepancy Process*

One way in which race/ethnicity may impact health and mental health is through social psychological processes, such as identity discrepancy, that potentially operate differently for different racial/ethnic groups. Self and identity research has been criticized for not adequately addressing the ways in which inequality and stratification along social status lines, such as those associated with race/ethnicity, might produce variation in identity and self-concept processes (Hunt 2003; Owens and Serpe 2003). Similarly, mental health research has been criticized for assuming that social psychological processes operate similarly across different racial/ethnic groups (1997;
Evans-Campbell et al. 2006), and for neglecting to study certain racial/ethnic groups such as Native Americans, Asian Americans, and Latinos (Takeuchi and Williams 2003; Wu et al. 2003). Overall, then, empirical evidence demonstrating racial/ethnic similarity in identity processes is lacking, because it is more often assumed than directly tested. However, there are at least three theoretical reasons to believe that differences exist.

First, certain social roles may have different meanings for different racial/ethnic groups (e.g., Jackson 1997; Brown et al. 1999). For instance, it may be that obligatory and voluntary roles carry different expectations and identity meanings for particular racial/ethnic groups. If this is the case, then discrepancies associated with obligatory and voluntary identities may impact self-concept and distress through different pathways or to different degrees. The importance of particular social roles may also be different for different racial/ethnic groups. Scholars suggest that the historical and current life experiences of certain racial/ethnic groups may be distinct enough to cause them to vary (compared to whites and other racial/ethnic groups) in terms of the degree to which they attach importance to particular roles (Jackson 1997). For example, racial/ethnic minority groups in America often experience barriers to gainful employment, so they may attach less importance to that identity than their white counterparts, and instead, place greater importance on family roles such as spouse/partner and parenting roles (Jackson 1997). Differences in the importance of certain roles could also translate into differences in identity meanings, such as centrality and commitment, which are related to those roles. To the extent that particular racial/ethnic groups are less committed to certain identities
or see them as less central to who they are, discrepancies associated with them may be less important for self-concept and psychological well-being for those groups.

Second, different racial/ethnic groups may have different experiences (rewards and costs) in particular social roles. Research suggests that experiences in social roles are not equally rewarding to different groups due to unequal opportunity structures that operate in ways that systematically make certain role experiences more or less likely for particular groups (Jackson 1997), including those that are stressful (Brown et al. 1999). In other words, the opportunity to enjoy the benefits of occupying a given role is not equally available to members of all social groups. Perhaps self-verification is one benefit that certain racial/ethnic group members are less likely to experience, compared to others. In other words, identity discrepancies may be more common in the context of particular roles for certain racial/ethnic groups.

Third, in addition to different role experiences, certain racial/ethnic groups may be affected in different ways or to different degrees by similar role experiences. Put another way, particular racial/ethnic groups may be more vulnerable than others to certain stressors such that they may have similar role experiences, but are more negatively affected by or reactive to them. For instance, Marcussen and Piatt (2005) find that black and white individuals have similar role experiences and perceptions of role conflict, balance, and success, but that those experiences are differentially related to well-being for members of different racial/ethnic and gender groups. By extension, I argue psychological distress and self-concept may be differentially affected by obligatory and voluntary identity discrepancies for different racial/ethnic groups in this study.
To answer questions related to the potential race differences summarized above, Evans-Campbell et al. (2006) suggest that researchers need to conduct race-specific analyses. In particular, these efforts should focus on identifying processes and mechanisms as opposed to “explaining away” or “controlling for” factors that may contribute to racial/ethnic differences in mental health (Evans-Campbell et al. 2006). One such factor is that predictors of mental health may operate differently for different racial/ethnic groups (Brown et al. 1999). Identity discrepancies are one type of predictor that may be differentially related to psychological well-being for individuals from different racial/ethnic backgrounds. This study explores the extent to which a particular social psychological process (identity discrepancy) operates in equivalent (or nonequivalent) ways for whites, blacks, and Latinos. Given the exploratory nature of the race/ethnicity multi-group analyses, I do not make hypotheses about the specific nature of differences between particular racial/ethnic groups. Rather, I test the null hypothesis of no differences between groups.

Potential Gender Differences in the Identity Discrepancy Process

Cumulative research suggests that men and women experience similar levels of psychological distress, but do not experience it in the same ways. Specifically, women tend to experience distress in the form of internalizing problems such as depression and anxiety while men tend to experience distress in the form of externalizing problems such as substance abuse (Simon 2002) or violent behavior (Umberson, Williams, and Anderson 2002). Unfortunately, the outcome measures necessary to fully assess whether
identity discrepancies affect distress outcomes that are thought to be more likely manifestations of distress for men (e.g., substance abuse) are not present in the data available for this study. However, given that there is reason to believe that men and women may be differentially affected by certain stressors, I explore potential gender differences in the relationships between identity discrepancies and more general measures of psychological distress as well as components of self-concept. The theoretical reasons to expect that social psychological processes, such as identity discrepancy, might operate differently for men and women parallel those related to race/ethnicity.

First, certain social roles may have different meanings for men and women. Just as potential differences in identity meanings are likely important for understanding racial/ethnic variation in the causes and consequences of stress, the different tasks and meanings associated with social roles (Lennon 1995; Simon 1995) and role relationships (Umberson and Terling 1997) are important for understanding gender differences in the stress process. Researchers need to consider not only role occupancy, but the content (tasks and meanings) of those roles (Lennon 1995; Simon 1995), and the associated relationships (Umberson and Terling 1997).

Simon (1995) finds that work and family roles are interdependent for men (i.e., they can perform the same tasks to fulfill most of the obligations in both roles), and that work and family roles are more independent for women (i.e., there are different, and often conflicting, expectations associated with each respective role, such that it is virtually impossible to fulfill the demands of both roles by performing the same tasks). Simon (1997) also finds that the relationship between gender and distress is not
significant when identity meanings associated with the worker, spouse, and parent
identities are controlled.

The meanings and behavioral expectations associated with other common social
roles may also vary by gender. Specifically, meanings attached to obligatory and
voluntary roles may be different for men and women, and thus, discrepancies that occur
in obligatory and voluntary roles may impact self-concept and distress in different ways
or to different degrees for men and women.

Second, men and women may have different role experiences (rewards and costs)
in particular roles. For example, Mirowsky (1996) finds that men and women differ in
their marital status, employment status, and experience of childcare and economic strains.
Women and men are concentrated in different types of occupations, and these different
occupations offer different types of work environments (Lennon 1987). For instance,
women are more likely than men to report that they receive inadequate rewards, such as
lower income, at their work (Pearlin and Lieberman 1979), and they also report feeling
less control over their work (Pugliesi 1995). These differences suggest that women
experience different stressors than men in their work roles, and similar gender differences
may exist in the context of other roles. These differences may be related to whether a
role is obligatory or voluntary.

Third, in addition to different role experiences, certain gender groups may be
affected in different ways or to different degrees by similar role experiences. Put another
way, particular men or women may be more vulnerable to certain stressors such that they
may have similar role experiences, but are more negatively affected by or reactive to
them. For example, even when men and women have similar occupational experiences, women tend to be more vulnerable to high demands and routinization on the job (Roxburgh 1996). In the context of marital roles, Simon (2002) finds that men and women are affected similarly by marital loss and gain, but that these marital transitions were related to depression for women and alcohol abuse for men. The roles involved in these studies are all obligatory. Perhaps these differences also apply to other obligatory roles or to voluntary roles. Similar to the racial/ethnic multi-group analyses, the gender multi-group analyses are exploratory. Thus, I test the null hypothesis of no differences between men and women rather than make specific hypotheses about differences between them.

Methods

Data and Measures

Data for these analyses come from the California study. Because of the relatively unique sampling strategy, the California data afforded the opportunity to examine the equivalence of identity discrepancy models across different racial/ethnic and gender groups. I estimate the multi-group models using only the California data for two reasons. First, the final combined model in study two (chapter 3) fit the full U.S. sample well, and many of the key theoretical relationships were statistically significant. By contrast, although the model also fit the California data well, many of the key theoretical relationships that were present in the U.S. data failed to reach statistical significance.
Second, the groups in a multi-group model should ideally be as similar in size as possible. In the U.S. data, the majority of the respondents are white women, while the California data have an even mix of three different racial/ethnic groups and of men and women. Dependent, independent, and mediating variables in this set of analyses were described in detail in chapter 3.

Analytic Strategy

The first multi-group structural equation model examines the extent to which the combined obligatory and voluntary identity model fits the data equally for white, black, and Latino respondents. The second multi-group structural equation model tests the equivalence of the model for women and men. There are two key advantages to estimating multi-group models instead of testing the same model separately in each respective group. First, it provides a basis upon which to determine whether differences are statistically significant. Second, in models where there are no differences between groups, or differences concerning few parameters, multi-group models provide more accurate parameter estimates (Arbuckle 2010).

I conduct each multi-group analysis in three stages. First, I estimate the model with no cross-group constraints. I examine coefficients produced for each group in this model to identify any potential differences. Second, I constrain the key theoretical paths to be equal across groups and re-estimate the model. I conduct a chi-square difference test to determine whether the constrained model fits the data significantly worse than the unconstrained model. If it does, then I examine modification indices to determine
whether the model for a particular group or groups could be improved by releasing certain constraints. Finally, I make the suggested modifications and re-estimate the model a final time. If a chi-square difference test reveals that this last model produces a significantly improved fit to the data, then the null hypotheses of no differences between groups can be rejected. I conduct analyses in these three stages by race/ethnicity, then gender.

Results

Racial/Ethnic Differences

The unconstrained model fit the data relatively well ($X^2=72.592$, 63df, $p=.191$; GFI=.960; NFI=.922; CFI=.987; RMSEA=.022; AIC=342.592). In the white sample (N=91), I found that the work (obligatory) squared discrepancies were significantly and positively associated with social anxiety, the friend (voluntary) linear discrepancies were significantly and positively associated with self-esteem, mastery was significantly and negatively related to social anxiety symptoms, and self-esteem was significantly and negatively related to depressive symptoms. In the Latino sample (N=109), I found that neither the work or friend identity discrepancies were significantly related to any of the self-concept or distress measures. In fact, the path from self-esteem to social anxiety symptoms was the only one of the main theoretical relationships that reached statistical significance in the Latino sample. Finally, in the black sample (N=104), I found that the work squared discrepancy was significantly and positively associated with depressive
symptoms, and self-esteem was significantly and negatively related to depressive symptoms.

Although the unconstrained model fit the data rather well, the differences between racial/ethnic groups in terms of which structural paths were statistically significant suggested that the model was not invariant across the three different racial/ethnic groups. To further test and examine that invariance, I conducted a second multi-group structural equation model in which I constrained the key theoretical paths to be equal across groups. Specifically, I constrained all paths from discrepancies to the mediators and outcomes and all paths from the mediators to the outcomes to be equal across the three racial/ethnic groups.

The constrained multi-group model did not fit the data as well as the unconstrained model ($X^2=102.736$, 91df, $p=.188$; GFI=.945; NFI=.889; CFI=.985; RMSEA=.021; AIC=316.736). However, I conducted a chi-square difference test and found that, although the constrained model provided a poorer fit to the data, it did not fit significantly worse than the unconstrained model ($X^2=30.144$, 28df; critical $X^2$ value for $p<.05$ is 41.337). Even though the constrained model fit the data relatively well, I examined modification indices to determine whether any paths, if released, would improve the model fit.

Modification indices suggested that the model fit would improve if I released the equality constraint on the path from obligatory identity discrepancies to social anxiety symptoms for the white sample, the path from obligatory identity discrepancies to depressive symptoms for the black sample, and the path from friend discrepancies to
depressive symptoms for the Latino sample. I then estimated a third model in which I released those respective equality constrains for the suggested groups, and found that it fit better ($X^2=82.749$, 83df, $p=.487$; GFI=.955; NFI=.911; CFI=1.000; RMSEA=.000; AIC=312.749) than the previous model. The chi-square difference test revealed that this partially constrained model fit the data significantly better than the previous, fully constrained, model ($X^2=19.987$, 8df ;critical $X^2$ value for $p<.05$ is 15.510). The results of this final race/ethnicity multi-group model appear in table 4.1.

As shown in table 4.1, for all three groups, self-esteem and mastery were significantly associated with depressive and social anxiety symptoms, such that higher self-esteem and mastery were each associated with less depressive and social anxiety symptoms. As for the identity discrepancies, voluntary identity discrepancies were not significantly related to self-concept or distress. In the Latino sample only, the obligatory identity discrepancies were also unrelated to self-concept and distress.

In both the white and black samples, only one relationship between identity discrepancies and distress was significant; obligatory identity discrepancies were associated with social anxiety symptoms in the white sample ($B=.249$) and obligatory identity discrepancies were associated with depressive symptoms in the black sample ($B=.246$).
Table 4.1. Unstandardized Estimates and Standard Errors for Race/Ethnicity Multi-Group Model (N=304)

<table>
<thead>
<tr>
<th>Path</th>
<th>white (n=91)</th>
<th>black (n=104)</th>
<th>Latino (n=109)</th>
</tr>
</thead>
<tbody>
<tr>
<td>O Discrepancies → Depress</td>
<td>-0.48 (0.085)E</td>
<td>0.509 (0.235)</td>
<td>-0.048 (0.085)E</td>
</tr>
<tr>
<td>O Discrepancies → Soc Anx</td>
<td>1.297 (0.516)</td>
<td>0.571 (0.068)E</td>
<td>0.071 (0.068)E</td>
</tr>
<tr>
<td>O Discrepancies → Self-Esteem</td>
<td>0.014 (0.015)E</td>
<td>0.014 (0.015)E</td>
<td>0.014 (0.015)E</td>
</tr>
<tr>
<td>V Discrepancies → Depress</td>
<td>0.124 (0.109)E</td>
<td>0.124 (0.109)E</td>
<td>0.120 (0.184)</td>
</tr>
<tr>
<td>V Discrepancies → Mastery</td>
<td>0.019 (0.022)E</td>
<td>0.019 (0.022)E</td>
<td>0.019 (0.022)E</td>
</tr>
<tr>
<td>V Discrepancies → Self-Esteem</td>
<td>0.009 (0.029)E</td>
<td>0.009 (0.029)E</td>
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</tr>
<tr>
<td>Self-Esteem → Depress</td>
<td>-1.043 (0.258)E</td>
<td>-1.043 (0.258)E</td>
<td>-1.043 (0.258)E</td>
</tr>
<tr>
<td>Self-Esteem → Soc Anx</td>
<td>-0.633 (0.226)E</td>
<td>-0.633 (0.226)E</td>
<td>-0.633 (0.226)E</td>
</tr>
<tr>
<td>Mastery → Depress</td>
<td>-0.745 (0.335)E</td>
<td>-0.745 (0.335)E</td>
<td>-0.745 (0.335)E</td>
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<tr>
<td>Mastery → Soc Anx</td>
<td>-0.777 (0.289)E</td>
<td>-0.777 (0.289)E</td>
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Control Variable Coefficients

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<th>Latino (n=109)</th>
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<tr>
<td>Age → V Discrepancies</td>
<td>-0.002 (0.013)</td>
<td>-0.032 (0.092)</td>
<td>-0.151 (0.094)</td>
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<tr>
<td>Age → Self-Esteem</td>
<td>-0.038 (0.030)</td>
<td>-0.028 (0.035)</td>
<td>-0.027 (0.037)</td>
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<tr>
<td>Age → Mastery</td>
<td>-0.042 (0.025)</td>
<td>-0.028 (0.027)</td>
<td>-0.009 (0.028)</td>
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<tr>
<td>Age → Depress</td>
<td>-0.212 (0.092)</td>
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<td>-0.235 (0.132)</td>
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<tr>
<td>Income → V Discrepancies</td>
<td>-0.027 (0.054)</td>
<td>-0.483 (0.319)</td>
<td>0.952 (0.328)</td>
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<td>Income → Self-Esteem</td>
<td>0.274 (0.128)</td>
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<td>Income → Soc Anx</td>
<td>-0.232 (0.297)</td>
<td>-0.476 (0.345)</td>
<td>-0.807 (0.374)</td>
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<td>Income → Mastery</td>
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<td>Education → Self-Esteem</td>
<td>0.285 (0.148)</td>
<td>0.005 (0.171)</td>
<td>0.491 (0.094)</td>
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<td>Education → Mastery</td>
<td>0.126 (0.121)</td>
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<td>0.299 (0.071)</td>
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Covariances

<table>
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<td>Education ↔ Age</td>
<td>0.337 (3.837)</td>
<td>9.272 (3.209)</td>
<td>-0.836 (3.597)</td>
</tr>
<tr>
<td>Education ↔ Income</td>
<td>2.945 (1.002)</td>
<td>4.412 (0.986)</td>
<td>3.496 (1.089)</td>
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<tr>
<td>Age ↔ Income</td>
<td>9.654 (4.633)</td>
<td>11.491 (4.055)</td>
<td>4.252 (2.580)</td>
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<td>Self-Esteem ↔ Mastery</td>
<td>7.139 (1.369)</td>
<td>8.760 (1.460)</td>
<td>6.456 (1.130)</td>
</tr>
<tr>
<td>Depress ↔ Soc Anx</td>
<td>24.211 (11.691)</td>
<td>35.683 (14.698)</td>
<td>76.319 (18.028)</td>
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</table>

Bolded coefficients are statistically significant at p < .05 or better; E denotes equality constraints.

X²=82.749, 83df, p=.487; GFI=.955; NFI=.911; CFI=1.000; RMSEA=.000; AIC=312.749
Gender Differences

The unconstrained model fit the data well ($X^2=39.427$, 42df, $p=.585$; GFI=.980; NFI=.957; CFI=1.000; RMSEA=.000; AIC=219.427). In the female model ($N=\ldots$, friend discrepancies were significantly related to mastery, and both mastery and self-esteem were significantly related to depressive symptoms. In the male model, friend discrepancies were significantly related to self-esteem, mastery was significantly related to anxiety, and self-esteem was significantly related to depressive symptoms.

The constrained model did not fit the data quite as well as the unconstrained model ($X^2=57.547$, 56df $p=.414$; GFI=.970; NFI=.937; CFI=.998; RMSEA=.009; AIC=209.647), but the chi-square difference test revealed that it did not fit significantly worse ($X^2=22.220$, 24df; critical $X^2$ value for $p=.05$ is 36.415). Modification indices suggested that the model could not be improved by releasing any of the equality constraints. The results of this final gender multi-group model appear in table 4.2.
Table 4.2. Unstandardized Estimates and Standard Errors for Gender Multi-Group Model (N=335)\(^1\)

<table>
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<th>Path</th>
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<td><strong>Key Theoretical Coefficients</strong></td>
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<td>O Discrepancies → Depress</td>
<td>-.011</td>
<td>(.076)E</td>
<td>-.011</td>
<td>(.076)E</td>
</tr>
<tr>
<td>O Discrepancies → Soc Anx</td>
<td>.086</td>
<td>(.063)E</td>
<td>.086</td>
<td>(.063)E</td>
</tr>
<tr>
<td>O Discrepancies → Self-Esteem</td>
<td>.014</td>
<td>(.016)E</td>
<td>.014</td>
<td>(.016)E</td>
</tr>
<tr>
<td>V Discrepancies → Mastery</td>
<td>.013</td>
<td>(.021)E</td>
<td>.013</td>
<td>(.021)E</td>
</tr>
<tr>
<td>V Discrepancies → Self-Esteem</td>
<td>-.015</td>
<td>(.027)E</td>
<td>-.015</td>
<td>(.027)E</td>
</tr>
<tr>
<td>Self-Esteem → Depress</td>
<td>-1.143</td>
<td>(.257)E</td>
<td>-1.143</td>
<td>(.257)E</td>
</tr>
<tr>
<td>Self-Esteem → Soc Anx</td>
<td>-.673</td>
<td>(.217)E</td>
<td>-.673</td>
<td>(.217)E</td>
</tr>
<tr>
<td>Mastery → Depress</td>
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<td>(.343)E</td>
<td>-.620</td>
<td>(.343)E</td>
</tr>
<tr>
<td>Mastery → Soc Anx</td>
<td>-.704</td>
<td>(.287)E</td>
<td>-.704</td>
<td>(.287)E</td>
</tr>
<tr>
<td><strong>Control Variable Coefficients</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Age → V Discrepancies</td>
<td>-.007</td>
<td>(.023)</td>
<td>-.124</td>
<td>(.069)</td>
</tr>
<tr>
<td>Age → Self-Esteem</td>
<td>-.020</td>
<td>(.034)</td>
<td>-.041</td>
<td>(.023)</td>
</tr>
<tr>
<td>Age → Mastery</td>
<td>-.027</td>
<td>(.025)</td>
<td>-.040</td>
<td>(.018)</td>
</tr>
<tr>
<td>Age → Depress</td>
<td>-.215</td>
<td>(.090)</td>
<td>-.127</td>
<td>(.076)</td>
</tr>
<tr>
<td>Income → V Discrepancies</td>
<td>.013</td>
<td>(.021)</td>
<td>.167</td>
<td>(.260)</td>
</tr>
<tr>
<td>Income → Self-Esteem</td>
<td>.185</td>
<td>(.123)</td>
<td>.321</td>
<td>(.099)</td>
</tr>
<tr>
<td>Income → Soc Anx</td>
<td>-.536</td>
<td>(.263)</td>
<td>-.626</td>
<td>(.241)</td>
</tr>
<tr>
<td>Income → Mastery</td>
<td>.163</td>
<td>(.092)</td>
<td>.312</td>
<td>(.077)</td>
</tr>
<tr>
<td>Education → Self-Esteem</td>
<td>.490</td>
<td>(.096)</td>
<td>.215</td>
<td>(.103)</td>
</tr>
<tr>
<td>Education → Mastery</td>
<td>.279</td>
<td>(.072)</td>
<td>.027</td>
<td>(.079)</td>
</tr>
<tr>
<td><strong>Covariances</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education ↔ Age</td>
<td>16.030</td>
<td>(3.707)</td>
<td>1.322</td>
<td>(2.917)</td>
</tr>
<tr>
<td>Education ↔ Income</td>
<td>5.821</td>
<td>(1.105)</td>
<td>4.851</td>
<td>(1.860)</td>
</tr>
<tr>
<td>Age ↔ Income</td>
<td>21.459</td>
<td>(3.495)</td>
<td>5.907</td>
<td>(3.091)</td>
</tr>
<tr>
<td>Self-Esteem ↔ Mastery</td>
<td>8.970</td>
<td>(1.207)</td>
<td>7.225</td>
<td>(1.979)</td>
</tr>
<tr>
<td>Depress ↔ Soc Anx</td>
<td>50.901</td>
<td>(12.918)</td>
<td>45.167</td>
<td>(11.027)</td>
</tr>
</tbody>
</table>

\(^1\)Bolded coefficients are statistically significant at p \(>\) .05 or better; E denotes equality constraints.

\(X^2=57.547, \, 56\text{df} \, p=.414; \, \text{GFI}=.970; \, \text{NFI}=.937; \, \text{CFI}=.998; \, \text{RMSEA}=.009; \, \text{AIC}=209.647\)
Chapter 4 Summary

In this chapter, I used the California data to investigate whether structural relationships that were significant in the U.S. data, but not in the California data, could be attributed to differences between different racial/ethnic and gender groups in terms of fit and significant (or non-significant) structural paths between key theoretical variables. I found that the model was equivalent for women and men, but not for whites, blacks, and Latinos. I discuss the implications of these findings for future theory and research in the discussion.
CHAPTER 5

DISCUSSION AND CONCLUSIONS

Summary of Dissertation Findings

In this dissertation, I investigated identity discrepancies in the context of obligatory and voluntary identities. In chapter two, I examined the extent to which identities that are theoretically obligatory or voluntary could be empirically distinguished in terms of the meanings respondents attribute to them. I found that they indeed were distinct. Respondents rated their obligatory and voluntary identities in ways that were consistent with their theoretical differences using both new (voluntary-obligatory continuum, obligatory and voluntary ratings, obligatory meanings) and established (centrality, interactive commitment, affective commitment) identity meaning measures.

In chapter three, I focused on the relationships between discrepancies related to obligatory (worker, family member, and spouse/partner) and voluntary (friend, religious/spiritual, and volunteer) identities, self-concept, and psychological distress. I found differences in the patterns of relationships between obligatory and voluntary identity discrepancies, self-concept, and distress. Specifically, I found that obligatory identities affected psychological distress in mostly direct ways, while voluntary identity discrepancies were related to psychological distress indirectly, through self-esteem and mastery.
A secondary aim of chapter three was to address two key methodological issues by investigating different identity discrepancy measurement strategies and examining multiple identities. Regarding the measurement of identity discrepancies, I found theoretical and empirical support for using squared discrepancy terms. With respect to multiple identities, I found a key difference between the models in which I examined obligatory identities alone and the model in which I combined them with voluntary identities. Specifically, obligatory identity discrepancies were indirectly related to all three outcomes (depressive, anxiety, and somatic) through self-esteem when I included them in the combined model with voluntary identity discrepancies, but they were not related to self-esteem when I modeled them alone. In the model with only obligatory identity discrepancies, they were directly associated with depressive and somatic, but not anxiety, symptoms.

Finally, in chapter three, I attempted to replicate (by approximating the general pattern of relationships between discrepancies, self-concept, and distress) the final model developed in one sample (the U.S. sample) in a second, independent sample (the California sample), but found that many of the relationships that were statistically significant in the U.S. data were nonsignificant when I modeled them in the California data. I speculated that differences in terms of their racial/ethnic and gender distributions of each sample might explain the inconsistent findings across samples.

In chapter four, I conducted two multi-group analyses to determine whether racial/ethnic or gender variation in the identity discrepancy process helped explain the inconsistency between the results in the U.S. and California samples. I found that the model was equivalent for women and men, but not for whites, blacks, and Latinos. The
three racial/ethnic groups were similar in that self-esteem and mastery were significantly and negatively associated with depressive and social anxiety symptoms and voluntary identity discrepancies were not significantly related to self-concept or distress. However, I found differences between groups in terms of the impact of obligatory identity discrepancies. In the Latino sample only, the obligatory identity discrepancies were unrelated to self-concept and distress. In the white sample, obligatory identity discrepancies were associated only with social anxiety symptoms. In the black sample, obligatory identity discrepancies were associated only with depressive symptoms.

In the final chapter, *chapter five*, I discuss theoretical, methodological, and empirical contributions of my dissertation as well as limitations and directions for future research.

*Chapter 5 Summary*

In this chapter, I highlight the key theoretical and empirical contributions of this dissertation, discuss its limitations, and offer directions for future research that could potentially expand on this study and address its limitations. In this dissertation research, I made two main *theoretical contributions*. First, I extended theorizing about the impact of identity discrepancies related to different types of roles in the context of obligatory and voluntary identities. In doing so, I drew links to classic role theory as well as contemporary identity theories. Second, I evaluated the theoretical assumption that social psychological processes operate similarly for different racial/ethnic and gender groups. Table 5.1 displays a summary of all study hypotheses and whether they were supported in this study.
Table 5.1. Summary of Hypotheses  

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Obligatory identities will be rated significantly more obligatory than voluntary identities.</td>
<td>Supported</td>
</tr>
<tr>
<td>2. Voluntary identities will be rated significantly more voluntary than obligatory identities.</td>
<td>Supported</td>
</tr>
<tr>
<td>3. Obligatory identities will be rated significantly more obligatory than voluntary.</td>
<td>Supported</td>
</tr>
<tr>
<td>4. Voluntary identities will be rated significantly more voluntary than obligatory.</td>
<td>Supported</td>
</tr>
<tr>
<td>Obligatory identities will be rated significantly higher than voluntary identities on interactional commitment.</td>
<td>Supported</td>
</tr>
<tr>
<td>Voluntary identities will be rated significantly higher than obligatory identities on affective commitment.</td>
<td>Not Supported</td>
</tr>
<tr>
<td>Obligatory (a) and voluntary identity discrepancies (b) will be positively related to depressive symptoms.</td>
<td>(a)Supported (b)Not supported</td>
</tr>
<tr>
<td>Obligatory identity discrepancies will have a larger effect than voluntary identity discrepancies on depressive symptoms.</td>
<td>Supported</td>
</tr>
<tr>
<td>Obligatory (a) and voluntary identity discrepancy (b) will be positively related to anxiety symptoms.</td>
<td>(a)Supported (b)Not supported</td>
</tr>
<tr>
<td>Obligatory identity discrepancies will have a larger effect than voluntary identity discrepancies on anxiety symptoms.</td>
<td>Not supported</td>
</tr>
<tr>
<td>Obligatory (a) and voluntary identity discrepancy (b) will be positively related to somatic symptoms.</td>
<td>(a)Supported (b)Not supported</td>
</tr>
<tr>
<td>Obligatory identity discrepancies will have a larger effect than voluntary identity discrepancies on somatic symptoms.</td>
<td>Supported</td>
</tr>
<tr>
<td>Obligatory (a) and voluntary identity discrepancies (b) will be negatively related to self-esteem.</td>
<td>(a)Partially supported (b)Supported</td>
</tr>
<tr>
<td>Obligatory (a) and voluntary identity discrepancies (b) will be negatively related to mastery.</td>
<td>(a)Partially supported (b)Supported</td>
</tr>
<tr>
<td>The effect of obligatory (a) and voluntary (b) identity discrepancies on the distress outcomes will be mediated, in part, through their negative impact on self-esteem.</td>
<td>(a)Supported (b)Supported</td>
</tr>
<tr>
<td>The effect of obligatory (a) and voluntary (b) identity discrepancies on the distress outcomes will be mediated, in part, through their negative impact on mastery.</td>
<td>(a)Not supported (b)Supported</td>
</tr>
<tr>
<td>Obligatory identity discrepancies will be more strongly related to mastery than self-esteem.</td>
<td>Not supported</td>
</tr>
<tr>
<td>Voluntary identity discrepancies will be more strongly related to self-esteem than mastery.</td>
<td>Supported</td>
</tr>
</tbody>
</table>
In addition to the theoretical contributions, there are several *methodological contributions* of this dissertation that I believe help to advance work in this area. First, I developed and tested new measures of obligatory and voluntary identity meaning. Second, investigated the implications of identity discrepancy measurement strategies and drew from previous theory to determine which strategy was most appropriate for this research. Third, I developed a structural equation model in one sample and re-estimated it in an independent sample. Finally, I examined the identity discrepancy process simultaneously in the context of multiple identities.

*Theoretical Contributions and Implications*

*Consequences of Identity Discrepancies in Obligatory and Voluntary Roles*

Identity theorists have recently begun to refine their theories and empirical research concerning the ways in which differences in meanings between and within identities can have implications for their impact on particular outcomes. Some of this work has focused on differences between identities in terms of the aspect of self on which they focus. For example, Burke and Stets (2009) have distinguished between identities that are person, group, or role-based and specified the ways in which discrepancies associated with each type of identity will differentially impact self-worth, self-efficacy, and authenticity. Other strands of this work have focused on differences in meanings between components of identity standards within a given identity and the ways in which those differences are expected to affect particular distress outcomes more than others. For instance, Large and
Marcussen (2000) have specified the ways in which discrepancies associated with different components (aspirations and obligations) of given identities will differentially affect depression and anxiety.

In general, the goal of this theoretical and empirical work examining the relationship between identity discrepancies, self-concept, and mental health has been to refine predictions about which particular types of identity discrepancies are expected to impact which particular outcomes related to self-concept and psychological well-being. Following most closely those studies that have distinguished between meanings within role identities, I attempt to refine these theoretical ideas by examining the impact of discrepancies associated with different types of role identities, those that obligatory or voluntary (Thoits 1992, 2003).

Distinctions between obligatory and voluntary identities complement earlier theorizing about differences between individuals with institutional and impulsive self-loci (Turner 1976). According to Turner (1976), for a person with an institution locus, the real self is revealed by adhering to a high standard, especially when that person is tempted to do otherwise. The goal of a person with an institutional locus of self is to match his/her behavior with role prescriptions. Thus, such a person is likely to work hard to resist pressure to become distracted from his or her goals and principles. For a person with an impulsive locus, the real self is revealed by doing what one wants to do when one wants to do it. The goal of a person with an impulsive locus of self is to match his/her behavior with his/her impulses. Thus, such a person is likely to resist pressure to conform to what they perceive as arbitrary rules and goals of society.
In the context of obligatory and voluntary identities, it may be that individuals with an institutional self-locus are more concerned with meeting their obligations and the expectations of others in their obligatory roles such as work and spouse. Thus, these roles, and verification of their associated identity meanings, may be more consequential for their sense of self-concept and psychological well-being. It may also be that individuals with an impulsive self-locus are more concerned with expressing their inner selves in the form of involvement in voluntary associations such as friendships or social groups. Thus, these roles, and verification of their associated identity meanings, may be more consequential for their sense of self-concept and psychological well-being. While I could not directly test these theoretical ideas, they are consistent with the obligatory-voluntary identity distinction that I tested, and for which I found support.

Discrepancies in the context of obligatory identities were directly related to depressive and somatic symptoms, but not anxiety symptoms. Obligatory identity discrepancies were also indirectly related to depressive, somatic, and anxiety symptoms through self-esteem, but not mastery. Voluntary identities were not directly related to any of the outcomes in this study, but were indirectly related to depressive, anxiety, and somatic symptoms through both self-esteem and mastery. The differences in findings related to obligatory and voluntary identities supports the theoretical idea that discrepancies associated with different types of identities are differentially associated with self-concept and distress.

I made predictions about the exact nature of the differences between the impact of obligatory and voluntary identity discrepancies on self-concept based on the notion that
identities are connected to outcomes through shared meanings (Burke and Reitzes 1981). Specifically, according to Burke and Stets (2009), obligatory identities share meanings with mastery and voluntary identities share meanings with self-esteem. As such, I expected that identity discrepancies associated with obligatory identity discrepancies would have a larger effect on mastery than self-esteem and that voluntary identity discrepancies would have a larger effect on self-esteem than mastery. While I did find that voluntary identity discrepancies had a slightly larger effect on self-esteem compared to mastery, I found that obligatory identity discrepancies were unrelated to mastery.

There is a possible explanation for the larger direct effect of obligatory identity discrepancies on distress outcomes and the entirely indirect effects of voluntary identity discrepancies. It could be that because many obligatory identities have strong institutional ties and are difficult to exit, discrepancies that occur within them have more potent and direct consequences for distress. Even though obligatory identity discrepancies operate through self-esteem, that link is not required for them to affect distress. This seems inconsistent with Stets and Harrod’s (2004) argument that obligatory identities are more about what one does rather than who one is. However, if an identity discrepancy in an obligatory role indicates that one is not living up to performance expectations, perhaps a person does not always blame his or her self (i.e, suffer damage to his/her self-concept) to experience distress. Gecas and Schwalbe (1983) argued that one’s self-worth (self-esteem) is based on others’ evaluations while self-efficacy is based on one’s own actions. Given that the obligatory identity discrepancies in these data were based on respondents’ perceptions of others evaluations of them and their own self-evaluations (and not
specifically on their actions) this could explain why they were unrelated to mastery. If, as Gecas and Schwalbe suggested (1983), mastery is based more on one’s own actions, it may be that discrepancies between individuals’ assessments of whether they and others believe they are meeting particular performance expectations as an employee, spouse, or family member would have been more closely related to mastery than the more general discrepancies in this dissertation.

The finding the voluntary identity discrepancies are only related to distress through self-concept seems more consistent with Stets and Harrod’s (2004) argument that voluntary identities are more about who one is rather than what one does. It makes sense, then, that one’s self-concept would be affected by this type of identity discrepancy. Although I did find support for their claim that voluntary identity discrepancies would affect self-esteem more than mastery, the difference was very small in magnitude. The fact that voluntary identity discrepancies, which theoretically have implications for one’s sense of who one is, affected both mastery and self-esteem to similar degrees makes sense in the context of theory in which self-esteem (self-worth) and mastery (self-efficacy) are conceived of as inner and outer self-esteem (Franks and Marolla 1976), respectively. The measures of global self-esteem and mastery that I used in this dissertation are perhaps more appropriate for capturing the general effects of identity discrepancies on self-concept. The differential effects on self-concept of voluntary identity discrepancies may be better assessed using role-specific measure of self-esteem and mastery.
Racial/Ethnic Non-Equivalence and Gender Equivalence of Identity Discrepancy Models

Another contribution of this research was that it directly tested the general theoretical assumption that social psychological processes operate similarly for different racial/ethnic groups (Hunt 2003; Owens and Serpe 2003). I also included a broader range of racial/ethnic groups, which was an improvement upon previous research that typically does not include certain groups such as Latinos (Takeuchi and Williams 2003; Wu et al. 2003). Evans-Campbell argued that researchers need to conduct race-specific analyses to identify similarities and differences in social psychological processes and mechanisms in different racial/ethnic groups. Research that has examined racial/ethnic differences in social psychological process suggests differences. For instance, Marcussen and Piatt (2005) found that black and white respondents experienced and perceived their role conflict, balance, and success similarly, but those experiences were differentially related to well-being for white and black respondents.

From a statistical standpoint, estimates produced by models that combine all respondents from different racial/ethnic groups together could be misleading (unless the sample is relatively homogenous), because a model could fit a full sample poorly because of the poor fit to one or more groups, even it is a good representation of the pattern of relationships in other groups. I found evidence of this in the race/ethnicity multi-group model. Specifically, I found that neither obligatory nor voluntary identity discrepancies were associated with distress in the Latino sample. Obligatory identity discrepancies were significantly related to depressive symptoms in the black sample and social anxiety symptoms in the white sample.
The California data in which I estimated the multi-group model included one obligatory identity (worker) and one voluntary identity (friend). Perhaps these particular identities are not as important as other obligatory (e.g., spouse/partner or family member) and voluntary (e.g., religious/spiritual or social group member) for Latino respondents. This could explain why neither type of identity discrepancy was related to distress for the Latinos in this study. Given that there was evidence in these data that the identity discrepancy process varied for different racial/ethnic groups, it would be interesting to explore the potential variation across other types of groups or variation in other social psychological processes across race/ethnicity and other social statuses.

**Empirical Contributions and Implications**

*Distinctions between Obligatory and Voluntary Identity Meanings*  

Theoretical distinctions between obligatory and voluntary identities have been specified in the literature, but to date, have not been empirically verified. Obligatory and voluntary identities are not assumed to represent mutually exclusive theoretical categories, but rather, theoretical tools with which to classify and attempt to understand the general nature of certain identities in terms of the meanings that are likely to be associated with them and the contexts in which they are likely to be evoked *relative* to other types of identities (Thoits 2003). Theoretically, obligatory identities are characterized by long-term, affectively intense ties to others that include strong mutual rights and responsibilities among role partners, and voluntary identities are characterized by
relatively shorter-term, less affectively intense ties to others that include fewer responsibilities to role partners (Thoits 2003).

A key contribution of this dissertation was to test new measures that assessed whether obligatory and voluntary identities could be empirically distinguished in terms of whether respondents rated them as obligatory or voluntary, where they placed them on a continuum between obligatory and voluntary, and whether they associated obligatory meanings with theoretically obligatory identities and voluntary meanings with theoretically voluntary identities. All three of these new measures distinguished between obligatory and voluntary identities and showed statistically significant differences between them. Furthermore, correlations between the new and established identity meaning measures showed convergent validity, which indicated that the new obligatory and voluntary identity meaning measure was associated with measures of theoretically similar concepts.

Turner (1976) criticized researchers’ tendency to assume that institutional roles such as those tied to work and family, are highly important to most people and that most people wish to conform to their relatively strict role prescriptions (Turner 2002). By measuring the meanings of obligatory and voluntary identities and more directly determining whether, and the extent to which, they differed on various dimensions of identity meaning, I addressed a key gap in research on these types of identities. Consistent with the idea that people develop informal working roles (Turner 2002) within the context of socially determined role prescriptions and expectations, I measured meanings associated with obligatory and voluntary identities rather than assuming that obligatory identities are more important or that all individuals who hold these identities see them in particular ways.
This measurement strategy allowed me to collect information necessary to confirm (or refute) the standard set of meanings that we assume are associated with obligatory compared to voluntary identities.

Implications of Identity Discrepancy Measurement Strategies

Another goal of this dissertation was to investigate the implications of different identity discrepancy measurement strategies and draw upon theoretical and empirical evidence to choose the most appropriate strategy for this research. Burke and Harrod (2005) argued that the identity control model (and other self-verification models) could best be tested by calculating squared difference scores and including them in statistical models that control for linear (raw) difference scores. This measurement strategy most accurately represents the theoretical relationship between identity discrepancies and psychological distress by accounting for its curvilinear nature (Burke and Harrod 2005). The analyses I conducted here support that theoretical claim. Specifically, I found that squared identity discrepancies showed a pattern of relationships with self-concept and distress that was similar to absolute value discrepancies, which have been used rather extensively in identity discrepancy research (e.g., Marcussen and Large 2003; Marcussen 2006), and that linear discrepancies were unrelated to those outcomes. Furthermore, squared discrepancies were related to outcomes in models that controlled for the linear term, which lent further support to the assumption of identity theories in particular, and self-verification theories more generally, that identity discrepancies contribute to distress regardless of whether they indicate that others evaluate one better or worse than one sees one’s self.
Independent Samples and Multiple Identities

Another empirical strength of this dissertation was that it utilized two independent samples, one of which was randomly drawn from the U.S. population, to develop and verify the structural equation models. This increases the generalizability of my findings. Furthermore, all studies that use structural equation modeling should ideally attempt to replicate their models in independent samples, especially when empirically-informed modifications are made in the course of model testing, to avoid capitalizing on idiosyncratic features of their data (Kline 2005). Although I did not have identical outcome measures in the U.S. and California data, I was able to approximate in the California data the model developed in the U.S. data.

A final empirical contribution of this dissertation was that it considered the identity discrepancy process in the context of multiple identities. Although most identity research considers identities in isolation (Cast and Burke 2007), the relationship between multiple identities is key to answering questions about role involvement and behavior choices (Stryker and Burke 2000). Thus, in addition to understanding how identity processes operate across different types of identities, it is also important to understand how different types of identities coalesce to impact self-concept and psychological well-being.

Identity control researchers have recently begun to theoretically and empirically examine multiple identities in the context of the identity verification process (e.g., Burke 2003; Stets 1995), but they typically consider each role-identity in isolation. That analytic strategy provides information about processes within a given identity, but does not tell us anything about the relationship between two or more identities or their
concurrent effects on any given outcome. Since most people occupy multiple roles (every respondent in this study held at least two roles, one obligatory and one voluntary), models that only consider single identities in isolation from other identities could obscure important differences between the effects of discrepancies associated with different types of roles, such as those that are obligatory and voluntary.

Limitations and Directions for Future Research

Sample Differences

Although a strength of this dissertation lies in its use of multiple, independent data sets, there were some limitations that came from using these two particular samples. I was able to examine the equivalence of the final combined model for different racial/ethnic and gender groups, but there were other differences between the samples that I did not examine. First, I could not examine whether obligatory and voluntary identity meanings were equivalent for different racial/ethnic groups, because the identity meaning measures were only present in the U.S. sample, which was very racially homogenous. Previous research suggests that roles may have different meanings for different racial/ethnic groups (Jackson 1997; Brown et al. 1999). Second, everyone in the California sample was employed while only 56 percent of those in the U.S. sample were employed. It could be that the combination of obligatory and voluntary identities in the context of the identity discrepancy model could vary for those who are employed versus those who are not. Second, the average age in the U.S. data was 55 years, while the average age in the
California data was 39 years. Because the entire California sample was employed, it is not surprising that their average age was lower. Specifically, it may be that older individuals tend to hold more voluntary roles while younger individuals hold more voluntary roles. If this is the case, the identity discrepancy process could operate differently for younger versus older respondents in the context of obligatory and voluntary identities.

Additional Outcomes

I attempted to improve upon previous research that tends to focus on depressive symptoms or general distress (Horwitz 2002; Marcussen and Large 2003; Marcussen 2006) by examining depressive, somatic, anxiety, and social anxiety symptoms. Nonetheless, there are certainly additional mental health outcomes that could be included, such as substance use or abuse or personality disorder. There is some evidence that certain individuals, especially men, cope with distress by engaging in substance use or abuse and other types of destructive behavior as a means with which to cope with stress (Aneshensel 1999). Additionally, somatic symptoms represent a small set of bodily symptoms that could be affected by the identity discrepancy process, but there are other physical health outcomes that could also be affected by identity discrepancies. For instance, it could be that obesity and coronary heart disease, which have been liked to stress (House 1974) are also affected by identity discrepancies. To the extent that it is important to understand the full range of outcomes with which identity discrepancies are associated, research that explores these additional types of outcomes would be beneficial.
Thoits (1991) noted that stress theory can be criticized for its lack of specificity in predicting outcomes, and argued that it is important to identify the conditions under which stress exposure is more likely to result in physical illness, psychological problems, or both. Applied to obligatory and voluntary identity discrepancies, future research might consider the conditions under which discrepancies in these different types of roles have consequences for physical or mental health, or both. Such research would further advance the goal of refining predictions about the impact of identity discrepancies on particular outcomes.

**Consequences of Identity Discrepancies for Identity Change**

Another direction for future research is to examine the implications of these findings and identity change. Burke (1991, 1996) predicted that failed attempts to alter feedback that does not confirm the meanings in one’s identity standard would result in identity change. Burke and Stets (2009) argued that one of the reasons that the accumulation of voluntary identities is not associated with greater psychological well-being is because, since these roles include fewer obligations and are easier to enter and exit (Thoits 2003), individuals will drop them if they are not verified. Given that obligatory roles include more obligations and expectations that make them more difficult to exit (Thoits 2003), individuals cannot just drop them when they are not verified. In Turner’s (1978) terms, certain roles, such as those that are voluntary, “are put on and taken off like clothing without lasting personal effect” and other roles, such as those that are obligatory, “are difficult to put aside” (1).
Differences in role occupants’ ability to abandon a role in which they are experiencing identity discrepancies may translate into different strategies of dealing with discrepancies, particularly in the context of obligatory roles. Since individuals cannot abandon their jobs or spouses without making major life changes, they will have to develop other strategies with which to cope with discrepancies if they are to avoid long-term damage to self-concept and the experience of psychological distress.

Obligatory roles likely offer fewer opportunities than voluntary roles for a person to role-make and use their creativity and discretion to decide exactly how they would like to behave and present themselves to others (Turner 2002) because of their greater obligations and responsibilities to role partners. However, individuals typically do not conceive of themselves in a given role in ways that perfectly match the formal societal expectations associated with that role, and thus, develop an “informal working role” that can be quite different than the formal role (Turner 2002: 243). It would be interesting to investigate the behavioral and cognitive adjustments that individuals engage in when they experience identity discrepancies in obligatory roles in which they have more limited opportunities for role-making and are less able to simply abandon the role. Such a study would require longitudinal data that examines the ways in which individuals develop and adjust their informal working roles over time.

The Role of Significant Others

A final direction for future research is to further examine the role of significant others in the identity discrepancy process. In this dissertation, I used reflected appraisals
of one role complement associated with each identity. Burke (1991,1996) argued that discrepancies involving significant others are more distressing than those that involve acquaintances. Researchers could conduct studies similar to this one in which they consider reflected appraisals from a broader range of individuals who have varying degrees of association with particular identities. In those studies, it would also be informative to consider the length of acquaintance, type of relationship, and depth of relationship with the significant others that are included.

Conclusion

This dissertation contributes to and expands upon identity models of distress by examining meanings associated with obligatory and voluntary roles and investigating whether identity discrepancies that occur within the context of these distinct roles are differentially related to self-concept and psychological distress. I find that respondents distinguish between their obligatory and voluntary identities in terms of the meanings they attribute to them, and that those differences translate into different patterns of relationships between identity discrepancies, self-concept, and distress. Obligatory identity discrepancies are indirectly related to depressive, anxiety, and somatic symptoms through self-esteem, and directly related to depressive and somatic symptoms. Voluntary identity discrepancies are not directly related to any of the distress outcomes, but are indirectly related to depressive, anxiety, and somatic symptoms through both self-esteem and mastery. Differences in the identity discrepancy model were evident for different racial/ethnic, but not gender, groups. Despite the noted limitations, these findings
advance our understanding of the impact of identity discrepancies in different types of roles on self-concept and psychological distress and point to directions for future research that could build upon the theoretical, methodological, and empirical contributions outlined above.
REFERENCES


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APPENDIX A

UNITED STATES STUDY QUESTIONNAIRE

Screening and Demographic Questions

For random assignment of one obligatory and one voluntary identity, based on eligibility
(note: possible obligatory identities – spouse/partner, worker, family member
possible voluntary identities – friend, religious/spiritual group member, volunteer
organization/social group member)

1. What is your age? _____

2. What is your current relationship status?
   - Single, not dating
   - Single, dating casually
   - Single, dating one person seriously (note: eligible for spouse/partner identity)
   - Single, living with a partner (note: eligible for spouse/partner identity)
   - Married (note: eligible for spouse/partner identity)

3. Which of the following best represents your marital history?
   - Never married
   - Married once
   - Married two or more times
   - Widowed

4. Are you currently employed?  
   (note: yes = eligible for worker identity)
   - Yes
   - No

5. If you are employed, how many hours do you work outside of the home in a typical week?
6. How many times in the past 30 days would you say you have had contact (for example by phone, email, or some other form of written contact) with one or more of your family members?  
*(note: any response greater than zero = eligible for family member identity)*

7. How many times in the past 30 days would you say you have had contact (for example by phone, email, or some other form of written contact) with one or more of your friends?  
*(note: any response greater than zero = eligible for friend identity)*

8. Do you participate in religious/spiritual services or events?  
*(note: yes = eligible for religious/spiritual person identity)*

   Yes       No

9. Do you belong to any voluntary organizations or social groups, excluding those associated with religion/spirituality? This includes organizations formed for civic, political, recreational, business related, and educational goals. Things like PTA, clubs, sport leagues for you or your children, such as little league or a bowling team, etc....  
*(note: yes = eligible for voluntary organization/social group member identity)*

   Yes       No

10. If you do belong to voluntary organizations or social groups, which is the most important to you?  
*(note: yes = for those who will be questioned about this identity, the name of the voluntary organization/social group should be inserted into subsequent questions.)*

11. What race do you consider yourself to be?  

   White  
   Black/African American  
   Hispanic/Latino  
   Asian  
   Other

12. How many years of schooling have you completed?  

   ________ Years of Schooling
13. Now I am going to read some income categories. Please stop me when I reach the category that best describes the total annual income of your household. Please include your personal income, as well as the income of others living in the household.

- Less than $14,999
- Between $15,000 and $24,999
- Between $25,000 and $34,999
- Between $35,000 and $44,999
- Between $45,000 and $59,999
- Between $60,000 and $74,999
- Between $75,000 and $99,999
- Above $100,000

14. Gender (interviewer coded by voice)

Identity Questions

(note: all identity questions will be asked twice – once for the obligatory identity and once for the voluntary identity)

Self and Other Appraisals

1. On a scale of 0-10, where 0 is not at all good, and 10 is very good, how would you rate yourself as a [spouse/partner, worker, family member, friend, voluntary organization/social group member, religious/spiritual person]?

2. On a scale of 0-10, where 0 is not at all good, and 10 is very good, how do you think others would rate you as a [spouse/partner, worker, family member, friend, voluntary organization/social group member, religious/spiritual person]?

3. On a scale of 0-10, where 0 is not at all good, and 10 is very good, how do you think [your spouse/partner, coworkers, family members, closest friend, members of your voluntary organization/social group, others who share your religious/spiritual affiliation] would rate you as a [spouse/partner, worker, family member, friend, voluntary organization/social group member, religious/spiritual person]?
Obligatory and Voluntary Ratings

“Identities can be described according to how obligatory and voluntary they are. Some may be more obligatory or voluntary, and others may fall somewhere in between. I am going to describe each type of identity to you and ask you to think about how much your [two identities person is being questioned about (e.g., worker and friend identities)] fit into each type.”

“Obligatory identities usually involve ties to others that have many strong obligations and responsibilities. Once a person holds this type of role, it can be very difficult for them to leave it. Voluntary identities usually involve ties to others that have fewer obligations and responsibilities. People can more easily enter and leave these roles if they want to.”

“First, please think about your [two identities person is being questioned about (e.g., worker and friend identities)] in terms of where they fall on a continuum between voluntary and obligatory.”

1. On a scale from 0-10 where 0 means completely voluntary and 10 means completely obligatory, where would you place your [spouse/partner, worker, family member, friend, voluntary organization/social group member, religious/spiritual person] identity?

“No, please think about your [two identities person is being questioned about (e.g., worker and friend identities)] in terms of the degree to which they are obligatory and/or voluntary.”

“Just to remind you, obligatory identities usually involve ties to others that have many strong obligations and responsibilities. Once a person holds this type of role, it can be very difficult for them to leave it.”

2. On a scale from 0-10 where 0 means not at all and 10 means extremely, how obligatory would you say your [spouse/partner, worker, family member, friend, voluntary organization/social group member, religious/spiritual person] identity is?

“No, please think about your [two identities person is being questioned about (e.g., worker and friend identities)] in terms of the degree to which they are obligatory and/or voluntary.”

“Just to remind you, voluntary identities usually involve ties to others that have fewer obligations and responsibilities. People can more easily enter and leave these roles if they want to.”

3. On a scale from 0-10 where 0 means not at all and 10 means extremely, how voluntary would you say your [spouse/partner, worker, family member, friend, voluntary organization/social group member, religious/spiritual person] identity is?
Obligatory and Voluntary Meanings

“How strongly do you agree or disagree with the following statements?”
Responses: 1 = strongly agree, 4 = strongly disagree

1. If I wanted to, it would not be very hard for me to [leave my spouse/partner, quit my job, lose my family, lose my friends, quit my volunteer/social group, quit my religious/spiritual affiliation].

2. It would be upsetting to me if [my marriage/romantic relationship ended, I lost my job, I lost contact with my family, I quit my social group, I gave up my religious/spiritual affiliation].

3. If I wanted to, it would not be very hard for me to spend less time with [my spouse/partner, the people I work with, my family, my friends, members of my social group, people who share my religious/spiritual affiliation].

4. It would be upsetting to me to spend less time with [my spouse/partner, the people I work with, my family, my friends, the members of my volunteer/social group, people who share my religious/spiritual affiliation].

5. I have many responsibilities [as a spouse/partner, at my job, as a family member, as a friend, as a social group member, as a religious/spiritual person].

6. There are many people who count on me [as a spouse/partner, at my job, as a family member, as a friend, as a social group member, as a religious/spiritual person].

7. Others would be very disappointed if I were not a good [spouse/partner, worker, family member, friend, social group member, religious/spiritual person].

8. Most of the people I have met in my role as a [spouse/partner, worker, family member, friend, social group member, religious/spiritual person] have been or will be part of my life for a long time.
Centrality

“How strongly do you agree or disagree with the following statements?”
Responses: 1 = strongly agree, 4 = strongly disagree

1. Being a(n) _________ is an important reflection of who I am.

2. When I think of myself, the first thing that comes to mind is myself as a _________.

3. In order for people to know who I am, it is important that they know I am a _________.

Interactional Commitment

1. How often do you do things with [your spouse/partner, people you work with, your family, your friends, people in your voluntary organizations/social groups, people associated with your religious/spiritual affiliation]?
   - Daily
   - Several times a week
   - Once a week
   - Less than once a week
   - Once a month
   - Seldom
   - Never

2. In an average week, how many hours do you spend with [your spouse/partner, people you work with, your family, your friends, people in your voluntary organizations/social groups, people associated with your religious/spiritual affiliation]?
   _____ Number of Hours Per Week
3. Of the money you do not need for rent, food, clothing and other essentials how much do you spend on things you do with [your spouse/partner, people you work with, your family, your friends, people in your voluntary organizations/social groups, people associated with your religious/spiritual affiliation]? Things like, going to the movies and gifts?

Almost all
More than half
About half
Less than half
Almost none

**Affective Commitment**

1. How much would you miss [your spouse/partner, people you work with, your family, your friends, people in your voluntary organizations/social groups, people associated with your religious/spiritual affiliation] if you were not able to see him/her?

Miss him/her a great deal
Miss him/her somewhat
Miss him/her a little
Miss him/her not at all

2. How close (in personal and emotional terms) are you to [your spouse/partner, people you work with, your family, your friends, people in your voluntary organizations/social groups, people associated with your religious/spiritual affiliation]?

Very Close
Somewhat Close
Not very Close
Not Close at all

3. How important is/are [your spouse/partner, people you work with, your family, your friends, people in your voluntary organizations/social groups, people associated with your religious/spiritual affiliation] to you?

Very important
Somewhat important
Not very important
Not at all important
4. After I do things with [my spouse/partner, people I work with, my family, my friends, people in my voluntary organizations/social groups, people associated with my religious/spiritual affiliation], I often feel unhappy.

   Strongly Agree
   Agree
   Disagree
   Strongly Disagree

Distress Questions

“In the past month, how distressed were you by each of the following?”
Responses: 0=not at all, 4=extremely

Somatization

1. Faintness or dizziness
2. Pains in heart or chest
3. Nausea or upset stomach
4. Trouble getting your breath
5. Hot or cold spells
6. Numbness or tingling in parts of your body
7. Feeling weak in parts of your body

Depression

1. Thoughts of ending your life
2. Feeling lonely
3. Feeling blue
4. Feeling no interest in things
5. Feeling hopeless about the future
6. Feelings of worthlessness
7. Your feelings being easily hurt
Anxiety

1. Nervousness or shakiness inside
2. Suddenly scared for no reason
3. Feeling fearful
4. Feeling tense or keyed up
5. Spells of terror or panic
6. Feeling so restless you could not sit still

Self-Concept Questions

“How strongly do you agree or disagree with the following statements?”
*Responses: 1= strongly agree, 4= strongly disagree*

Mastery

1. I have little control over the things that happen to me.
2. There is really no way I can solve some of the problems I have.
3. There is little I can do to change many of the important things in my life.
4. I often feel helpless in dealing with the problems of life.
5. Sometimes I feel that I’m being pushed around in life.
6. What happens to me in the future mostly depends on me.
7. I can do just about anything I really set my mind to do.

Self-esteem

1. I feel that I am a person of worth, at least on an equal plane with others
2. I feel that I have a number of good qualities.
3. All in all, I am inclined to feel that I am a failure.
4. I am able to do things as well as most other people.
5. I feel I do not have much to be proud of.
6. I take a positive attitude toward myself.
7. On the whole, I am satisfied with myself.
8. I wish I could have more respect for myself.
9. I certainly feel useless at times.
10. At times I think I am no good at all
APPENDIX B

CALIFORNIA STUDY QUESTIONNAIRE

Screening and Demographic Questions

1. In what year were you born? _____

2. What best describes your current marital status?
   - Single, not dating
   - Single, but dating
   - Living with a partner
   - Married
   - Divorced
   - Widowed

3. Are you currently employed, unemployed, retired, a homemaker, or a full-time student?
   (note: employed, either full or part time = eligible for worker identity)
   - Employed
   - Unemployed and/or looking for a job
   - Retired
   - Homemaker
   - Student
   - Independent self sufficient
   - Disabled
   - Other
4. How would you describe your racial background?

White
Hispanic
African-American or Black
Asian
American Indian
Other

5. How many years of schooling have you completed?

________ Years of Schooling

6. Which category best describes your personal income?

Less than $10,000
More than $10,000 but under $15,000
More than $15,000 but under $20,000
More than $20,000 but under $25,000
More than $25,000 but under $30,000
More than $30,000 but under $35,000
More than $35,000 but under $40,000
More than $40,000 but under $45,000
More than $45,000 but under $50,000
More than $50,000 but under $60,000
More than $60,000 but under $75,000
Above $75,000

7. Gender (interviewer coded by voice)

Identity Questions

Self and Other Appraisals

1. On a scale of 0-10, where 0 is not at all good, and 10 is very good, how would you rate yourself [at your job, as a friend]?

2. On a scale of 0-10, where 0 is not at all good, and 10 is very good, how do you think [your co-workers, your close friends] would rate you [at your job, as a friend]?
**Distress Questions**

“Now I would like to read you some statements about how you might have felt recently. Please answer for the last week.”

*Responses: 0=none of the time, 10=all of the time*

**Depression**

1. I felt I could not shake off the blues even with help from my family or friends.
2. I had trouble keeping my mind on what I was doing.
3. I felt depressed.
4. I was happy.
5. I felt lonely.
6. I enjoyed life.
7. I felt sad.

**Social Anxiety**

1. I often feel nervous even in casual get-togethers.
2. I usually feel uncomfortable when I am in a group of people I don’t know.
3. I am usually at ease when speaking to a member of the opposite sex.
4. Parties often make me feel anxious and uncomfortable.
5. I seldom feel anxious in social situations.
6. In general, I am a shy person.
Self-Concept Questions

“How strongly do you agree or disagree with the following statements?”

Responses: 1 = strongly agree, 4 = strongly disagree

Mastery

1. I have little control over the things that happen to me.
2. There is really no way I can solve some of the problems I have.
3. There is little I can do to change many of the important things in my life.
4. I often feel helpless in dealing with the problems of life.
5. Sometimes I feel that I’m being pushed around in life.
6. What happens to me in the future mostly depends on me.
7. I can do just about anything I really set my mind to do.

Self-esteem

1. I feel that I am a person of worth, at least on an equal plane with others.
2. I feel that I have a number of good qualities.
3. All in all, I am inclined to feel that I am a failure.
4. I am able to do things as well as most other people.
5. I feel I do not have much to be proud of.
6. I take a positive attitude toward myself.
7. On the whole, I am satisfied with myself.
8. I wish I could have more respect for myself.
9. I certainly feel useless at times.
10. At times I think I am no good at all.