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Acculturation, Acculturative Stress, Social Status, and Well-Being among English Language Proficient Immigrants

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ACCULTURATION, ACCULTURATIVE STRESS, SOCIAL STATUS, AND WELL-BEING AMONG ENGLISH LANGUAGE PROFICIENT IMMIGRANTS

By

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The effects of social status on well-being are pervasive (American Psychological Association Task Force on Socioeconomic Status, 2006; Marmot, 2004). Social status has been proposed to play a role (Berry, 1987; Padilla & Perez, 2003) in the complex association between both acculturation and acculturative stress and psychological well-being (Koneru, 2007). Subjective Social Status is a promising method of measuring social status (Adler, 2013) that has not been examined in regard to immigrants' well-being. In an attempt to fill this gap in the literature, this study explored questions about immigrants' well-being as they acculturate to and deal with acculturative stressors in the United States. In particular, the potential role of subjective social status (SSS) in the acculturation and acculturative stress process was examined. Based on a review of the literature, the expectation was that immigrant perceived social status would be related to well-being, and that this perceived social status would moderate the relationship between acculturation, acculturative stress, and well-being. To explore this hypothesis, two hundred and one adult immigrants were recruited using the Mechanical Turk website. The resulting sample was more acculturated to the United States than their own culture and approximately half the participants identified as non-Latino White/Caucasian. Overall, the results indicated a negative association between acculturative stress with both quality of life and psychological health. Increased acculturation was also positively

associated with quality of life and psychological health. Regression analysis also indicated that subjective social status moderated the association between acculturative stress and well-being. The results make the novel contribution that SSS is relevant to immigrants' well-being. Future research should be conducted in populations that are less acculturated to the United States and examine the factors that affect immigrant's subjective experience of status. Limitations and further direction for future study focusing on subjective social status in immigrants are discussed.

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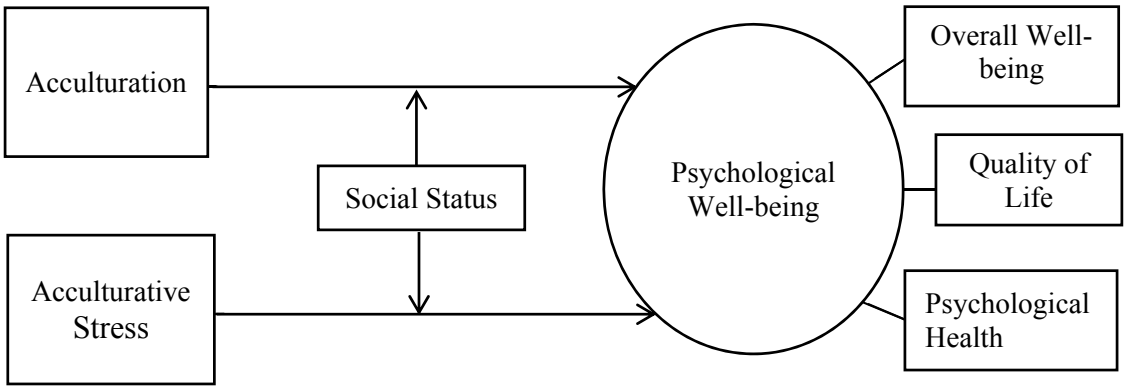
Acculturation
Social Status
Acculturative Stress
Psychological Well-being
Overall Well-being
Quality of Life
Psychological Health

CHAPTER 1: INTRODUCTION

Social status is important to mental health (Marmot, 2004). Subjective social status (SSS) is an emerging construct that promises a potentially more nuanced way of capturing social status (Adler, 2013). Considering that SSS is a promising variable in the study of overall well-being, it is reasonable to think that it plays a role in immigrant well-being. This emerging concept of subjective status may help clarify the conflicting results of studies of the acculturation process including the stresses associated with acculturation. Within the acculturation literature, the area of immigrant well-being has been particularly understudied (Gelatt, 2013). Moreover, until the present study, SSS had not been examined in the context of the association between acculturation and well-being. This study sought to clarify the association between acculturation and well-being while taking into account the role of SSS in this association. To further clarify immigrant well-being, acculturative stress, which is an important component of the acculturation process, was also examined.

Immigrants represent a significant portion of the U.S. population. In 2010, one out of every eight individuals in the U.S. identified as an immigrant (U.S. Census Bureau, 2012b). The U.S. is currently the top immigrant destination in the world and accounts for 20% of global migration (Migration Policy Institute, 2013). As a result of immigration, the demographic composition of the U.S. is undergoing a significant transformation. Specifically, there is a shift away from European Americans as the ethno-cultural majority. This shift has already occurred in children under the age of 1 year, where ethno-cultural minorities are the majority and non-Latino Whites represent 49.7% of children under age 5 (U.S. Census Bureau, 2012a). In adults, Latino individuals

represent the largest ethno-cultural minority group (U.S. Census Bureau, 2012a), and 36% of those who identify as Latino are foreign-born (Pew Research Center, 2013). The 40.3 million immigrants in the U.S. raise children, marry, work, redefine society, and shape U.S. culture (Migration Policy Institute, 2013).

When arriving in the U.S., immigrants face significant challenges such as the stress of adapting to a new culture and a possible decline in social status. Research on the effect of acculturation on psychological well-being has identified negative, positive, and null psychological effects on immigrants (Koneru et al., 2007). In addition to the challenge of adapting to U.S. culture, immigrants belong to new social groups in the U.S. (e.g., Hispanic and immigrant) and, as a result of this membership, may suffer from a diminution in social status (Schwartz et al., 2013). Social status is defined in this study as an individual's position in his or her societal hierarchy. Schwartz and colleagues (2013) pointed out that some immigrants who are part of the dominant culture in their native country may constitute a minority once they have moved to the new country. It is worth noting that this is not true for all immigrants. For example, Jewish immigrants from the former Soviet Union (Birman, Persky, & Chan, 2010) were a minority in their home country.

The social psychology concept of in-groups and out-groups may be applied to immigrants as they move from an in-group in their former country of residence to an out-group in their new country (Stephan, Ybarra, & Bachman, 1999). Therefore, constituting an immediate minority in a new country or being part of a seemingly uniform group may place the individual in an out-group, non-dominant group, and/ or ethnocultural minority.

Besides group membership, individual factors such as formal education may be affected by immigration. Formal education earned outside of the U.S. may not apply equally and therefore may lose value in the U.S. This loss of value is exemplified by the invalidation of qualifications, as in the case of an internationally trained nurse's credentials not allowing him or her to practice in North America (Salami & Nelson, 2013). Similarly, formal education may carry less weight; a degree from a foreign university may not have the same prestige as a degree from a U.S. university.

All of the aforementioned factors may lead to a decrease in both actual and perceived social status. This downward social movement has been associated with increased risk for depression (Nicklett & Burgard, 2009). Thus, understanding the role and influence of social status before and after immigration on immigrants' health is an important area of research that warrants further investigation. This study does not capture this potential change in status, but it paves the way for research on the effect of a drop in status by examining associations with current immigrant status levels.

Social status is an important psychological factor for immigrants in an increasingly socially divided U.S. (Berry et al.,1987). Social psychologist Susan Fiske argued that U.S. society is divided almost as much by social status as it is by racism (Fiske, 2011). The influence of immigrants' social status on their health has rarely been studied in psychological research and is of urgent importance for this emerging population in the U.S. Further, a finer understanding of social status is a pressing concern due to the growing social class disparity in the U.S. This widening social inequality was first documented over 30 years ago (Goyder, 1975) and continues to persist. Objective measures of economic status indicate that the disparity between upper

and lower classes is growing in the U.S. (Pew Research Center, 2011, 2012). In particular, the discrepancy in household wealth, defined by the Pew research center (2011) as "accumulated sum of assets (houses, cars, savings and checking accounts, stocks and mutual funds, retirement accounts, etc.) minus the sum of debt (mortgages, auto loans, credit card debt, etc.)" (p. 4) continues to expand in the U.S. In 2009, the median household net worth of Hispanic and African American households was $6,325 and $5,677, respectively, compared to $113,149 in non-Latino White households. Thus, non-Latino White households have a net worth of over 17 times that of Hispanic and African American households (Pew Research Center, 2011). Despite being different concepts, objective measures such as household wealth are often used as indicators or proxies for social status. Social status, therefore, represents a strong differentiating factor in people's sociological, psychological, economic, and daily experiences which supports the importance of studying this variable.

Social status is strongly associated with physical and mental health. The association between lower social status and increased prevalence of psychological problems has been clearly identified in non-immigrant populations in reviews of the scientific literature on socioeconomic status (American Psychological Association Task Force on Socioeconomic Status, 2006; Marmot, 2004). The seemingly universal gradient in which lower social status is associated with more negative health outcomes has been dubbed the Status Syndrome by Marmot (2004). Marmot (2004) defined the Status Syndrome as a pervasive association between health and social position in members of the British Civil Service. He argued that social status incorporates more than socioeconomic indicators (i.e., income, attained formal education, occupation) and is

predicated on the psychological experience of social inequality. To support this case, Marmot conducted longitudinal studies that highlight the relative nature of status. Marmot asserted that the specific income level of individuals in the British Civil Service is not as important as the social context of their income. However, despite evidence of the effect, this phenomenon has not been adequately studied in immigrant populations that may face sharp downward social mobility as a result of immigration.

Social status is often conceptualized as socioeconomic status (SES) and is measured by objective indicators such as income, highest level of formal education attained, and/or occupation (Singh-Manoux, Adler, & Marmot, 2003). This measurement may be less accurate in immigrants who potentially value these objective indicators differently than U.S.-born non-immigrants. Consistent with the work of Adler (2013), the current study was based on the tenet that a person's social status goes beyond finances and lifestyle to include social power and privilege. Thus, for the purpose of this study, power was defined as proposed by Fox, Prilleltensky, and Austin (2009), as "the capacity and opportunity to influence the course of events in one's life or in the life of others in the community" (p. 142).

To address this potential lack of specificity in socioeconomic status measurement, assessment of SSS has been proposed as a more nuanced approach (Adler et al., 2000). SSS entails individuals ranking themselves in society and results in a "cognitive averaging of standard markers of socioeconomic situation" (Singh-Manoux et al., 2003, p. 1). In comparison to objective measures (such as SES), the use of subjective measures of status in research has demonstrated stronger associations to health outcomes in a small

number of studies (Adler, Epel, Castellazzo, & Ickovics, 2000; Franzini & Fernandez-Esquer, 2006; Singh-Manoux & Adler, 2005).

There is an uncertain association between acculturation and well-being (Koneru, 2007). SSS, which has not been thoroughly examined in this context, may clarify the relationship. Although the effect of social status is argued to be ubiquitous in the lives of social animals (Marmot, 2004), the components of status are not universal and measurement of status should change depending on the group. The effect of social status may be the same across populations; however there may be nuances (such as using different comparison groups) in how immigrants assess their social status that are not captured with objective measures. For example, an immigrant may have enjoyed the prestige of attending the eminent university in his or her home country, but that status may lose value on arrival in the U.S. This loss of educational status may negatively affect that immigrant's perceptions about coping with acculturative stressors. Formal education may be an acceptable indicator of social status for non-immigrant citizens of the U.S. who are educated in the U.S.; however, formal education levels do not translate neatly into a social status for many immigrants (Aycan & Berry, 1996). Factors such as language ability, domestic work experience (Aycan & Berry, 1996) and ethnicity (Braveman, Cubbin, Chideya, & Marchi, 2005) affect the actual value of formal education levels. As a result, assessing status in immigrants based on formal education status alone has a greater chance of inaccuracy than using multidimensional assessment.

The subjective experience of status, based on comparison to other groups (i.e., "Am I higher, lower, or on par with other individuals?") is another important dimension of social status (Campbell et al., 2012; Franzini & Fernandez-Esquer, 2006). Immigrants,

however, use different reference groups. Depending on the situation, they may select as a yardstick other immigrants in their ethnic group, the general U.S. population, or their native population (Campbell et al., 2012; Franzini & Fernandez-Esquer, 2006). In addition, there is theoretical support for the notion that individuals tend to use people with similarities as a reference group for comparison; this is consistent with both Social Identity theory (Tajfel & Turner, 1979) and Social Comparison theory (Suls, Martin, & Wheeler, 2002). For example, Cuban immigrants who live in a Cuban community in the U.S. may compare themselves to other Cubans in their local community before comparing themselves to other groups.

Despite limited research on social status or SSS relating to immigrant mental health, there is a strong theoretical basis for proposing that social status is an important factor in immigrant mental health. In an attempt to remediate this deficit in the literature, this study examined the potential moderating effect of SSS in the association between acculturation, acculturative stress, and well-being in immigrants. To define and explore the acculturation process and its implications for immigrant well-being, the study drew on prominent theories of stress (Lazarus & Folkman, 1984), acculturation (Berry, 1987; Padilla & Perez, 2003), SSS (Adler, 2000) and social psychology (Suls, Martin, & Wheeler, 2002, Tajfel & Turner, 1979;).

Theories of stress and acculturation provide a foundation for expecting that SSS is important to immigrant mental health. The popular transactional theory of stress proposed by Lazarus and Folkman (1984) stipulates that appraisal of a stressor and the ability to cope with that stressor are key components of the stress response. The subjective self-appraisal of an individual, including his or her social position, is an

integral part of the stress response. In addition to playing a role in stress appraisal and coping, the role of social status is included in most modern acculturation models. For example, both models highlighted later in this document—Berry's (1987) acculturation model and Padilla and Perez's (2003) model based on social identity theory—explain the association between social status, acculturation, and acculturative stress. However, the inclusion of a subjective component of social status of the Padilla and Perez model is perhaps more fitting for the immigrant population and, as such, is a more appropriate basis for the current study. The Padilla and Perez (2003) model is based on a socio-cognitive approach that highlights the role of social context and its effect on immigrant cognitions and identity. SSS may provide a better gauge of how, and to what extent, immigrants' cognitions and context are related.

The aforementioned models underscore that how an immigrant feels about his or her status will affect how he or she appraise acculturative stressors. For example, if an immigrant feels his or her formal education and occupation are better in comparison to that of other immigrants, he or she may downplay the difficulties faced in integrating within the workforce. Downplaying difficulties of a common immigrant stressor, such as finding work, may lead to increased optimism and well-being. Therefore, SSS likely stands to play a moderating role in the stress faced during the acculturation process and in the association that stressors have on mental health.

This study sought to understand the previously unexamined association between acculturative stress, acculturation, social status, and well-being in a sample of immigrants. Based on the literature, it was expected that acculturative stress would be negatively related to immigrant well-being and increased acculturation would be

positively related to immigrant well-being. The study also sought to elucidate the potential moderating role of social status on the association between acculturative stress, acculturation, and well-being.

Given the promise of SSS, it is important that it is investigated as a moderator of immigrant well-being for scientific and social justice reasons. The examination of social status in an unrepresented research group such as immigrants is inherently a social justice issue. The context of health, treatment, and research disparities for the immigrant population is a particularly pressing social justice concern (American Psychological Association Task Force on Immigration, 2012). Smith (2008) stated that social status is "another dimension of the spectrum of identities that we address as part of the multicultural/social justice agenda" (p. 6). Prilleltensky stated in a forward to Smith's (2008) book on poverty and social exclusion that helping professions can perpetuate oppression by not examining the social complexity of psychological pain in these populations. For Prilleltensky (2012a), social justice , social stratification, and health disparities are central factors in the understanding of well-being. Social status may play a role in the association between acculturation, acculturative stress, and well-being in immigrants. Therefore, in the context of health disparities and a growing social divide (Pew Research Center, 2011, 2012), understanding the role of social status may be a small step towards responding in a more socially just manner to the potential negative effects of the acculturation process.

CHAPTER 2: LITERATURE REVIEW

This chapter highlights the role of social status, acculturation, acculturative stress, in mental health. In this study, mental health included both well-being and indicators of psychological pathology, such as depressive symptoms. This chapter provides a review of literature which defines and clarifies these concepts. Special emphasis was given to the importance of an individual's social status in the association between acculturation, acculturation stress, and well-being. In addition, literature on social status as a moderator of the association between well-being, acculturative stress as shown in figure one, and acculturation is examined. The chapter also provides an overview of models of acculturation, acculturative stress, and their association to well-being. Finally, a summary of the literature review and the focus of the current study are provided at the end of the chapter.

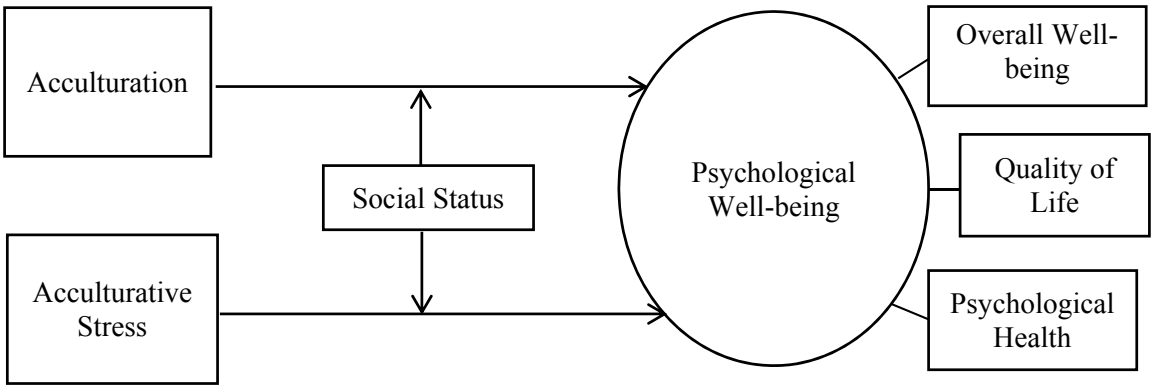

Figure 1.

Social Status

Individuals at the top of the social status hierarchy live longer and healthier lives (Marmot, 2004). Social status is defined as "a human created and defined position in

society" (Ferrante, 2012, p. 93). Overall, social status has been linked to a variety of positive and negative outcomes such as low social status contributing to premature death (Marmot, 2004), depression (Lorant et al., 2003), high body mass index (Nitzan-Kaluski, Demem-Mazengia, Shimony, Goldsmith, & Berry, 2009), birth complications (Ostrove, Adler, Kuppermann, & Washington, 2000), stress (Adler & Ostrove, 1999), sense of control (Adler & Ostrove, 1999), and pessimism (Adler & Ostrove, 1999). The term *status syndrome,* as coined by Marmot (2006), reflects a globally recognized phenomena that lower levels of social status equate to worse health outcomes As a result, the American Psychological Association (American Psychological Association Task Force on Socioeconomic Status, 2006), the U.S. Government (U.S. Health and Human Services, 2014), the National Institute of Health (The National Institute of Mental Health, 2001), the World Health Organization (World Health Organization, 2011) and several organizations focused on health disparity have committed to addressing the dilemma from scientific and political points of view. Although the discussion on social status or class is often focused on those at the low end of the social ladder, the effect of social status influences all individuals (Adler et al., 1994; Marmot, 2004), regardless of where they rank in the hierarchy.

This status syndrome or disparity in health is a social justice issue. Counseling psychology is rooted in social justice and is specifically concerned with matters of socioeconomic status (Horne, 2012). Moreover, immigrants often represent double minorities such as people of color and ethno cultural minorities. The potential compounding effect of adding low social status to these multiple minority statuses represents a condition or barrier that unfairly inhibits well-being. As a result, the

association between social status and psychological well-being is not only a scientific one, but also a social justice one.

Social status is an established and significant factor in physical and psychological health outcomes (Marmot, 2004). In many instances the prevalence of disease, mortality, and mental illness follows the same distribution as the social status gradient. The consistent moderate correlation of traditional variables of income, formal education, and occupation have been suggested to indicate the "common underlying component of social status" (Goodman et al., 2001, p. 2). However in research, social status is most often embodied as SES or social class exclusively. This reduction could fail to capture important dimensions of social status. Social status can be measured objectively using indicators such as income, formal education, and occupation or it can be measured subjectively by capturing the individual's self-appraised status.

Socioeconomic status is the primary objective indicator of social status. SES is a meaningful indicator, but it has limitations. SES may be associated with an immigrant's well-being directly or as a mediator. For example, social status on its own can present internal barriers to social advancement by altering career development and educational attainment. For instance, social class may affect occupational opportunities through a number of avenues including occupational aspirations (Aries & Seider, 2007), family educational expectations (Bozick, Alexander, Entwisle, Dauber, & Kerr, 2010), transition from school to work (Blustein et al., 2002), job instability, discrimination, and classism (Lott, 2012). All of these factors can, in turn, impact SES by lowering economic prosperity. Therefore, simply assessing current occupation may misrepresent the

direction of effect and association between social status and other individual variables such as psychological symptoms.

The measurement of social status affects the association found. For instance, education level is a common method of assessing socioeconomic status. Formal education taken out of context may lack precision as a SES proxy. Most frequently operationalized as the number of years in school or highest degree attained, formal education also fails to capture the quality of education and related earning potential. In this present study, education refers to the highest level of formal education attained. Simply having achieved a certain formal education level does not equate with being employed or working in a job commensurate to that level. Aycan and Berry (1996) found that other factors such as language and domestic work experience significantly interfered with Turkish immigrants' ability to gain employment fitting their formal education level in Canada. Similarly, Kassan and Nakamura (2013) found that lack of transferability of credentials, undeveloped social networks, and discrimination also interfered with career transition for immigrants. If these immigrants' social status was assessed based on formal education levels, the understanding of social status would be misleading.

Similarly, it is likely that at no time in the modern history of the U.S. has the achievement of the same formal education equaled earning the same income for different social groups. Educational attainment, career choice, and career entry have been found to be mediated by social class (Brown, Fukunaga, Umemoto, & Wicker, 1996). Immigrants (Duleep, & Dowhan, 2008). Women and ethnocultural minorities (Bureau of Labor and Statistics, 2013) regularly receive lower wages than other groups for equivalent positions. The glass ceiling and lack of salary parity for women has been thoroughly

documented and still exists, with women earning an average of 81% of the median earnings compared to the average male full-time worker (U.S. Bureau of Labor Statistics, 2012a). In a position paper on SES in health research, Braveman, Cubbin, Chideya, and Marchi (2005) outlined that, at any education level, African American and Hispanics are paid a lower wage than non-Latino White Americans. They also go on to point out that African American and Hispanics have lower wealth levels than their income-equivalent non-Latino White American counterparts. Blacks/African Americans and Hispanics/Latinos continued to experience higher rates of unemployment during the last U.S. recession which began in 2007 (Bureau of Labor Statistics, 2012b).

Formal education correlates with debt incurred in individuals and families without wealth (Houle, 2014) who must borrow or rely on student loans and financing to pay for tuition fees that often eclipse the financial means of a middle class family. The average student debt has grown consistently for undergraduate students and is currently around $35,200 at graduation (Fidelity Investments Institutional Services Company, 2013, p. 2). This average debt load is conservatively four times the median net worth of the average Hispanic American or African American households (Pew Research Center, 2011). The relationship between student debt and SES is non-linear and it has been shown that middle income families are actually at the highest risk for debt when compared to low and high income families (Houle, 2014). As a result, the effect of formal education can skew fiscally-based objective measures if future economic prospects of the individual are not accounted for.

Types of income (household and personal) are also commonly used as a proxy for SES (Franzini & Fernandez-Esquer, 2006), but these proxies rarely account for wealth or

ethnicity, which can change the accuracy of income as a measure of SES. Income therefore also has limitations as a measure of social status. The intergenerational transmission of wealth accounts for the majority of the wealth transfer in the U.S. (Havens & Schervish, 2003). In addition to the intergenerational transmission of wealth, income may be affected by discrimination against immigrants based on skin color, accent, or nationality among other differentiating factors. After the 2001 U.S. economic recession, unemployment rates have become more racially disparate with ethnocultural bias suggested as a likely contributing factor (Bertrand & Mullainathan, 2004). Both recent recessions have disproportionately affected ethnic minorities with median household income for African Americans and Hispanics falling as much as 27% in the 1999 - 2001 recession (Hamilton, 2009). Analysis of the after effect of the most recent 2007-2009 recession reveals that African Americans and Hispanics were more negatively impacted than non-Latino White households (Pew Research Center, 2011). The inflation-adjusted median wealth fell by 16% for white households as opposed to 66% for Hispanic households and 53% for Black households (Pew Research Center, 2011). Using potential employer callbacks from employment inquires as a metric, Bertrand and Mullainathan (2004) found that irrespective of levels of formal education, employment applicants with ethnic sounding names received fewer callbacks. The authors concluded what multiple data sources have asserted, namely that racial and ethnic minorities have been disproportionately affected by the economic downturn through diminished opportunity.

Beyond employment, formal education, and income, social status has also been theorized to include ethnicity, gender, and age (Sullivan, Burke Johnson, Calkins

Mercado, & Terry, 2009). Belonging to some of these groups, such as being an ethnic minority, may represent both a component of social status and a social barrier to higher status. Social status in immigrants may be affected by immigration status and naturalization as they can be integral parts of immigrant identity, and can potentially change social standing. Thus, social barriers represent one of the nuances that reflects a person's subjective appraisal of his or her status.

Social status, therefore, is an important factor in both the mental and physical health of immigrants (Leu et al. 2008). However, the use of traditional indicators of social status may be inaccurate in the immigrant population due to the aforementioned issues with income, formal education, and occupation. As a result, the use of subjective appraisal of social status as an indicator may produce a more accurate understanding of the association of social status and health in immigrants.

Socioeconomic Status and Subjective Social Status

Capturing how individuals place themselves within a sociopolitical dynamic is complex and challenging. Even the terminology demonstrates variability as social class researchers have identified 448 different words used to reference social class (Liu et al., 2004). The use of varied terminology also represents the multitude of social factors that are salient for individuals with regard to social class. The use of different factors may be particularly true of U.S. immigrants who bring a different culture of defining and relating to status, class, and socioeconomic status than their U.S.-born counterparts.

It may be difficult to determine the degree to which measurement of social status is reflecting internal (psychological) conditions, social conditions, or the combination of both. Social status can mediate objective dimensions of status such as occupational,

formal educational, and financial gain. Brown, Fukunaga, Umemoto, and Wicker (1996) stated that not only have researchers "failed to articulate and measure the psychological dimensions of social class" (p. 183) but also that the interconnected elements of power, prestige, and economic resources have been largely ignored. One popular social status measure, the Hollingshead's Four-Factor Index (Hollingshead, 1975), is comprised of formal education, occupation, gender, and marital status. Components such as gender and marital status that previously identified social status (Hollingshead, 1975) may be less salient and have undergone dramatic social change. For example, gender may denote more social power in male dominated societies than in societies that value gender equality. Depending on which part of society the individual chooses to compare to, a similar problem of social context arises. One example is the finding that Mexican–Americans use different factors (e.g., perceived differences in opportunity) or comparison populations (e.g., foreign-born versus local-born members) affected how social status was appraised by less acculturated individuals (Franzini & Fernandez-Esquer, 2006). As a result, categorization of social status must be done with respect to the psychological and social factors that vary between individuals in their assessment of class or status.

Subjective Social Status

Subjective social status (SSS) represents a "cognitive averaging of standard markers of socioeconomic situation" (Singh-Manoux et al., 2003, p. 1) and represents an individual's belief about his or her rank in the social order, independent of the objective status bestowed to the individual (Davis, 1956). SSS is an omnipresent individual difference that predates many socially contrived categories such as immigration status, SES, race labels and sexual orientation labels. A review of recent empirical studies

indicates that subjective social status is garnering renewed interest as a complimentary or more accurate component in the investigation of the association between social context and health (Nobles, Weintraub, & Adler 2013).

Objective measures of social status have an association with subjective measures of status (Goodman et al., 2003). In particular, social scientists have found associations between SSS and household income, formal education, and occupation (Chen et al., 2009). In addition, SSS has been related to both income and formal education separately (Franzini & Fernandez-Esquer, 2006; Lundberg & Kristenson, 2008; Wolff, Acevedo-Garcia, Subramanian, Weber, & Kawachi, 2010). Although SSS often overlaps with objective measures of status, it is a separate metric which has produced different findings. One key differentiating point between objective and subjective measures is self-awareness of social status. For example, the poverty threshold for an individual in the contiguous U.S. is $11,702 (U.S. Census Bureau, 2012c) and $10,890 according to the U.S. Department Health and Human Services (DHHS, 2012). Therefore, in the objective measures, the assumption is that a person with an income of $10,000 is somewhat cognizant that he or she are in the bottom 15% of income in the U.S. (U.S. Census Bureau, 2012c) because h annual income is below the poverty line in U.S. However, individuals may not be aware of the DHHS guidelines and may use anecdotal or other information to inform their appraisal of status. Individuals do, however, have the benefit of anecdotally income comparing to others, and this subjective comparison may be more important to them. The social context, such as immediate surroundings of community or school setting, is significant in determining social status as it provides a more salient point of reference for status appraisal. In fact, income inequality, which measures the

disparity in income levels between different members of a society, has demonstrated a stronger correlation to mortality than the actual income levels (Wilkinson, 1999), thus underscoring the centrality of comparison.

Subsequently, the direction of the association between physical health outcomes and SSS (i.e., more wealth results in better health) has been called into question. Both Garbarski (2010) and Nobles, Weintraub, and Adler (2013) argued for reverse causality, in line with the maxim "health is wealth," where freedom from malady fuels a perception of elevated status. Examination of 5,731 participants from the Wisconsin Longitudinal Study (WLS) over a 10-year period found an association between perceived social position and physical health, but did not find that lack of depressive symptoms was related to psychological well-being (Garbarski, 2010). However, Garbarski (2010) differentiated perceived social status from subjective social status by classifying SSS as an inherent characteristic as opposed to perceived social status which is temporal and formulated in response to a question. As a result, the relationship between subjective status and physical health could be bidirectional warranting exploration with statistical models sophisticated enough to test directionality.

SES and SSS have varying associations with health outcomes depending on their definitions, outcomes, and measures (Adler & Rehkopf, 2008). Studies that capture both SES and SSS have demonstrated a significant and sometimes more powerful association between subjective status and health outcomes than for SES alone (Adler et al., 2000; Goodman et al., 2001; Ostrove et al., 2000; Singh-Manoux et al., 2003; Singh-Manoux et al., 2005). Furthermore, when examining mental health outcomes, health scientists identified the separate role for social status using a local reference group as opposed to a

society-wide reference group. The use of a local reference point of social status in school illustrates that the social context is also important. Subjective status in school (with other students as reference point) demonstrated a stronger association to adolescent obesity than the associations found between objective indicators and adolescent obesity (Goodman et al., 2003). This outcome suggests that subjective measures may, in some instances, provide more meaningful information than objective measures.

Based on the aforementioned research, SSS itself is difficult to operationalize in psychological research due to the potential inaccuracy of self-report (Baumeister, Vohs, & Funder, 2007) and the idiosyncratic nature of the subjective experience. Despite the difficulty in operationalizing SSS, it is useful and has demonstrated an association with mental and physical health outcomes, as well as other more widely studied SES variables such as income, formal education, and occupation. However, attempting to capture the dynamic and multidimensional nature of social status through objective measures such as formal education level is useful but risks missing the cultural and individual nuance of a subjective rating. Thus, despite drawbacks the subjective approach has merit.

Social status, social class, and subjective social status represent related but different theoretical concepts that are all related to health. Social status is not SES but it is frequently represented by SES in the literature. SSS is related to SES but is a meaningful and separate concept that can produce distinct results. There is some research data suggesting that subjective appraisal of status may be affected by individuals comparing themselves to local or society level groups. The associations described in this section indicate that SSS is a meaningful factor in immigrant mental health.

Subjective Social Status Advantages

Subjective social status represents a more nuanced examination of a person's psychological perspective on status than SES (Nobles, Weintraub, & Adler 2013). The use of income, occupation, and formal education as proxies for social status is appropriate for economic, epidemiologic, and social investigations resulting from stratification of society. However, these socioeconomic proxies are less suited to the examination of the effect of social factors on an individual and the individual's psychological well-being. A review of psychological literature reveals the clear call for the inclusion of a more comprehensive approach with variables such as subjective social status (Adler et al., 2000), social justice (Prilleltensky, 2012a), and social class (Liu et al., 2004) to understand mental health. This study sought to help answer this call. In addition to reflecting these additional dimensions, SSS may include the individual's appraisal of future possibilities (Singh-Manoux et al., 2003). Identifying future prospects is particularly appropriate for individuals in flux, such as an immigrant acculturating to the U.S.

The body of research supporting the predictive power of subjective measures over objective measures continues to grow (Alder, 2009). A number of studies have found, after controlling for traditional SES variables, that SSS provides more significant data (Adler et al., 2000; Goodman et al., 2001; Ostrove et al., 2000; Singh-Manoux et al., 2003; Singh-Manoux et al., 2005). SSS represents a legitimate but understudied variable in the understanding of social status, the immigrant journey, and how this journey relates to mental health.

Social Status and Well-Being

Social status affects all areas of health including mental and physical health. The association between social status and health has been demonstrated most clearly with physical health (Marmot, 2006) but has also been found in mental health research as well (American Psychological Association Task Force on Socioeconomic Status, 2006). However, examination of the association with psychological well-being has just begun. This section provides an overview of the role of social status in overall health, mental health, and well-being while highlighting the use of subjective social status (or lack thereof) as a measure of status.

Social Status and Overall Health

The finding of an association between health and social status has been replicated in a variety of populations and countries around the globe using SES as an indicator (Marmot, 2004). The medical, epidemiological, and psychological data consistently identify a negative association to health outcomes such as Type 2 diabetes (Agardh, Allebeck, Hallqvist, Moradi, & Sidorchuk, 2011), obesity (Wang & Beydoun, 2007), alcohol use (Jones-Webb, Hsiao, & Hannan, 1995), fetal growth (Hoffman & Hatch, 2000), and coronary heart disease (Franks, Winters, Tancredi, & Fiscella, 2011). SSS has a smaller but meaningful body of research linking SSS to physical health outcomes. Demakakos and colleagues (2008) examined SSS in relation to both physical and psychological outcomes, such as depression, in their examination of health indicators in mid- and older-aged British adults. Depression, self-rated health, long-standing physical illness, high HDL-cholesterol, and diabetes were correlated with SSS (Demakakos et al., 2008). In a sample of 991 older adults in Taiwan, Hu, Adler, Goldman, Weinstein, and

Seeman (2005) also identified an association between low SSS and lower self-rated health after controlling for objective measures (e.g., income, formal education, and occupation). These studies indicate that the association between social status and health is also found when status is measured subjectively and that the association to health remains even when controlling for traditional measures of SES.

Social Status and Mental Health

Social status has been robustly associated with negative mental health outcomes, with depression being the most commonly studied outcome. Low social class groups have been moderately to strongly associated with a higher prevalence of depression in a meta-analysis of 60 studies (Lorant et al., 2003). This moderate to strong finding comes without a clear understanding of the direction of causation. Lorant and colleagues (2003) asserted that they found more consistent support for low status increasing risk of depression than vice versa.

Other areas of mental health, however, present a similar association of lower status predicting higher prevalence of negative mental health symptoms compared to higher status individuals. Longitudinal analysis comparing high versus low SES (income, formal education and occupation) reveal that high SES individuals were less likely than low SES individuals to experience mental disorders (Jokela, Batty, Vahtera, Elovainio, & Kivimäki, 2013). A meta-analysis of research in 53 countries by Rai, Zitko, Jones, Lynch, and Araya (2013) also supported this pattern. Analysis of responses from 18,496 participants established that lower formal education, economic inactivity, and fewer household assets (i.e., computer, mobile phone, and television) were associated with higher rates of depressive episodes. Accordingly, individuals with high status

typically report less negative symptoms. Jokela and colleagues (2013) replicated the gradient effect from others studies in which the higher an individual was on the status ladder, the better the health of that individual and vice versa (Marmot, 2004).

Unlike SES and mental health, the association between SSS and mental health has not been studied frequently or on a large scale. However, the SSS–depression association has been supported (Collins & Goldman, 2008; Cutrona et al., 2005; Demakakos, Nazroo, Breeze, & Marmot, 2008; Everson, Maty, Lynch, & Kaplan, 2002; Hoffman & Hatch, 2000; Singh-Manoux et al., 2003). One potential confound of the study of SSS and depression is that depression, from a cognitive perspective, is often associated with hopelessness and lack of optimism, which could negatively skew subjective appraisal. So depression may affect perceived social position.

Social Status and Well-being

Even though immigrants may be assumed to experience a measure of psychological well-being based on their tendency to report fewer symptoms of mental illness than their U.S.-born counterparts, the question of well-being and "are immigrants thriving and flourishing?" has not been investigated. Although there is some research on SSS and mental health in general, there is a paucity of research regarding positive mental health indicators. Additionally, much like mental health concerns, well-being cannot be examined outside the social context.

Similar to acculturation, well-being has grown into a multidimensional concept. Early concepts identified well-being to be on the opposite end of the spectrum from psychological pathology which is an oversimplification of the construct (Keyes, 2005; Westerhof & Keyes, 2010). For example, Prilleltensky (2012a) conceptualized social

justice as a central factor in understanding well-being. Additionally, disenfranchisement, language barriers, stigma, and prejudice all play into the consideration of social position for immigrant populations in the U.S.

The association between social status and well-being is not as clear as the association between social status and pathology. Despite lower socioeconomic status having a robust association with negative mental health and negative expectations for the future (Robb, Simon, & Wardle, 2009), SES has not demonstrated a similarly consistent association to well-being. A meta-analysis of research on older adults (Pinquart & Sörensen, 2003) found a connection between subjective well-being (life satisfaction, self-esteem, and happiness) and SES (formal education, occupation, and income) with income being more relevant to men. Subsequently, there have been indicators that SES does not have a direct effect on well-being (Diener, Suh, Lucas, & Smith, 1999). Additionally, recent efforts to link optimism to different levels of SES have been unsuccessful (Robb et al., 2009). The lack of clear association in the adult population is especially pronounced when well-being is conceptualized by using the absence of psychological pathology instead of the presence of positive mental phenomena.

The examination of well-being may become more complex in the cases of immigrants whose different cultural and social background may cause dimensions of social status, such as income, to be appraised differently. This interface of social and cultural backgrounds with subjective well-being will also change with the effects of acculturation. This potential difference in immigrants and the overall lack of research on acculturation and well-being warrants further investigation.

Acculturation

Acculturation is a much studied and little understood psychological process resulting from the interaction between two cultures. This section highlights that the inconsistent findings in acculturation literature are a product of the differences in the measurement of acculturation and different immigrant populations. Within the U.S. immigrant community, researchers initially identified an "immigrant paradox" in which mental health starts at a healthier than average level and then deteriorates for the immigrants who stay long-term in the U.S. (Burnam et al., 1987). This immigrant paradox emerged in line with other phenomena such as the "epidemiological paradox" that described that immigrant Hispanics reported better health than comparable non-Latino Whites and African Americans (Markides & Eschbach, 2011). Studies supporting the immigrant paradox typically equate levels of acculturation with length of time in the U.S. or language proficiency. This lower prevalence of psychological disorders in immigrants was found in foreign born Mexican Americans (Burnam et al., 1987) while Mexican Americans born in the U.S. with high acculturation levels, demonstrated poor mental health and higher prevalence of major depression, dysthymia, phobia, and substance abuse or dependence. These findings have been subsequently supported in ethnic groups such as Latinos (Alegría et al., 2008; Bauer, Chen, & Alegría, 2012; Cook, Alegría, Lin, & Guo, 2009).

To understand the potential underpinnings of the immigrant paradox, models of acculturation need to be explored in depth. The current study proposes that the role of social status may play a moderating role in the acculturation process and therefore contribute to the understanding of the inconsistent acculturation findings.

Models of Acculturation

Acculturation was first conceptualized by the use of a dichotomous model of foreign versus native culture. The ability to cleanly separate foreign versus native cultures into two distinct parts has become more precarious since the term 'acculturation' was coined in 1880. Acculturation was initially conceptualized using a one-dimensional continuum (Gordon, 1964), where greater acceptance of the new culture resulted in a diminution of the role/acceptance of the original culture. In other words, acculturation moved along a hypothetical line from the old culture to the new culture. Despite recognizing the cultural influence of immigrants in their host country, Gordon's linear approach to acculturation does not allow for immigrants to maintain high levels of enculturation in more than one culture. As a result, immigrants shed their old cultural values when acquiring new ones. Furthermore, the one-dimensional model is predicated on unidirectional change in which the immigrant becomes more or less acculturated with no theoretical room for immigrants to affect his or her environment. Although rarely used today, Gordon's model opened the door to the concept that individuals can retain some aspects of their culture while having varying degrees of assimilation.

Unidirectional models of acculturation maintain that though acculturation may occur in multiple arenas, the direction and outcome are singular. However, even with one direction as in unidirectional models, social status warrants exploration as it may affect the process. Unidirectional models and their measurement have found some empirical support. One study comparing 291 models of Asian Americans recommended a unidirectional model as a proxy for acculturation over the bidirectional model based on its parsimony (Flannery, Reise, & Yu, 2001). However, Flannery and colleagues (2001)

also reported that neither model distinguished itself as consistently superior to the other, but rather they produced marginally better results in different areas such as formal educational achievement and generational status. The equivalence of the result suggested that there was additional theoretical room to conceptualize acculturation in immigrants.

Later acculturation models included assimilation but added the dimension of adherence to original culture to form a bi-dimensional approach. In a bi-dimensional model, native and host cultures can co-exist and change can occur independently. In other words, one-dimensional acculturation models consist of a single spectrum from maintaining native culture to embracing new culture. On the other hand, bi-dimensional models represent multiple spectrums such as maintaining and embracing the dominant culture on one spectrum and maintaining and embracing native culture on the other spectrum.

Under the most prominent bi-directional model proposed by Berry and colleagues (1987), which states that when individuals are faced with the integration of a new culture they can chose marginalization, separation, assimilation, and integration as a manner of negotiating the conflict that arises between cultures. The marginalization approach refers to the immigrant who has little interest or rejects maintaining relations with the original culture or dominant culture; the marginalization strategy has been related to poor health outcomes and is often a reaction to discrimination or exclusion of the immigrant by members of the dominant culture. Separation occurs when the immigrant primarily values holding on to his or her culture and has little interest in absorbing the host culture. Assimilation occurs when the immigrant has low desire to maintain his or her original cultural identity and seeks to absorb the host culture. Integration occurs when the

immigrant values the original and the new cultures and seeks to maintain both while interacting in either culture frequently. This is associated with positive mental health outcomes (Berry et al.,1987).

The Berry model is based on the concept that immigrants have some autonomy in choosing acculturation strategies when the dominant culture facilitates choice. An immigrant's language, accent, economic means, or physical characteristics can all interfere with the process of acculturation and the use of acculturation strategies. An additional factor in adopting an acculturation strategy is the role of individualism or collectivism in the immigrant's culture of origin. Individualism was theorized as being more closely aligned with assimilation and separation whereas integration is more closely aligned with collectivist societies. In sum, Berry's acculturation model encompasses the effects of both the immigrant and dominant cultures. Additionally, the model underscores that acculturation strategies affect psychological and cultural change in an individual, which produces variation between individuals undergoing acculturation.

On the other hand, the theoretical framework of Padilla and Perez (2003) emphasizes modern social and cognitive perspectives into the formulation of acculturation. The Padilla and Perez (2003) model based on Social Identity Theory capitalizes on these interdisciplinary perspectives to feature four tenets: social identity, social cognition, cultural competence, and social stigma. The first tenet, social identity, is predicated on the concept that frame of reference, culture, or group membership influences a person's cognitions. Therefore, the person's level of identification with his or her culture, group, or frame of reference plays an integral role in the impact of the social context. The Padilla and Perez (2003) model stipulates that an immigrant's

identity is strongly influenced by his or her social context. For example, immigrants of low social status will perceive their chances of acculturating differently than higher social status immigrants. Based on this perception, the immigrant may be more or less inclined to acculturate. The effect of social status on acculturation would be more influential if the immigrant strongly identifies with his or her social status.

The second tenet, social cognition, refers to people's thoughts about themselves and others or how they make sense of themselves and others. The third tenet, social stigma, refers to possessing a characteristic that may engender negative judgment and actions from others. Perez and Padilla use the word "stigmatization" and specify devaluation based on a palpable characteristic of which the person is aware such as an accent or skin tone. The final tenet, cultural competence, refers to "learned ability to function in a culture in a manner that is congruent with the values, beliefs, customs, mannerisms, and language of the majority of the members of society" (Padilla & Perez, 2003, p. 42) as well as management of how and when to integrate into society. Overall, the model emphasizes the significance of the role of social context, awareness, and cognitive responses in the immigrant identity.

The relevance of an individual's strength of association with social status features in the Padilla model and was also posited by Fouad and Brown (2000) in their Differential Status Identity (DSI) Theory. A person's DSI is derived from his or her perceived social standing, and this perception is influenced by race, gender, and ethnicity. The theory underscores that the salience of social status is key and is affected by a person's ability to meet demands and interact in society. As a result, status will play a more significant role in the identity of persons of low social standing because it is more

salient. Under the DSI theory, individuals who interact more with different classes will experience their social status more prominently. It is also worth noting that Fouad and Brown (2000) state that individuals with the same income level were treated differently based on the interaction of factors such as ethnicity and social class.

Additional models capitalize on advanced statistics to include variables with a proven association to acculturation. For example, structural equation modeling has demonstrated SES to be a strong factor in acculturation among Chinese (Shen & Takeuchi, 2001) and Hispanic immigrants (Negy & Woods, 1992). The Shen and Takeuchi model incorporates SES, stress, social support, health perceptions, personality negativity, and acculturation levels. Socioeconomic status, measured by a latent variable of only income and formal education, displayed a robust .58 association with acculturation levels. The use of statistical modeling also allowed the authors to highlight the role of stress, which was negatively related to health and positively related to higher depressive symptoms. Overall, the results suggest that more nuanced analysis of the association between acculturation and mental health would reveal a variety of contributing factors such as SES, social support, and stress.

A potential weakness of many of these models is that acculturation is conceptualized as an overarching psychological phenomenon—overarching in the sense that acculturation is the main reason for the immigrant effect and it subsumes other factors. Calls for a more multidimensional approach to acculturation posit that individual factors, such as social status, may account for a meaningful amount of the variance in health outcomes. It has been suggested that particular areas of acculturation may be more salient to outcome variables (Abraído-Lanza, Armbrister, Flórez, & Aguirre, 2006). In

other words, the field is moving towards a more nuanced understanding of the effect of acculturation and recognizing that certain acculturative factors, stressors, or experiences (such as social status) may play a bigger role in health outcomes than others. As a result, recent studies have begun to examine specific cultural components, such as attitudes toward mental health or mental health stigma, which an immigrant may adopt or integrate as part of the acculturation process. The primary thrust of this research is focused on the association between specific variables with immigrant health and/or acculturative stress.

In sum, all major models of acculturation include social status. Padilla and Perez (2003) stipulate that an immigrant's identity is strongly influenced by his or her social context. Social status is identified as an important part of the acculturation process and may affect how stressful the process is. For example, immigrants of low social status will perceive their chances of acculturating differently than higher social status immigrants. Despite the inclusion of social status in the theoretical model, it has not frequently been examined and it has only been examined using subjective social status in relation to well-being (Gelatt, 2013). The present study sought to fill the gap of understanding the role of subjective social status in the acculturation process.

Acculturation and Mental Health

The association between acculturation and overall mental and physical health in immigrants to the U.S. is inconclusive. Research on the association of the duration of time in the U.S. and differences in nativity with indicators of acculturation have produced inconsistent findings regarding mental health outcomes. Being born outside of the U.S. (Mexico, Eastern Europe, Africa, or the Caribbean) and immigrating after the age of 13 was associated with lower prevalence rates of mood and anxiety than reported by U.S.-

born individuals (Alergria et al., 2008, Breslau, Borges, Hagar, Tancredi, & Gilman, 2009). Higher levels of acculturation in foreign-born youth have been associated with increased risk for substance abuse (Blake, Ledsky, Goodenow, & O'Donnell, 2001; Gfroerer & Tan, 2003; Vega, Gil, & Zimmerman, 1993), with substance abuse risk showing the greatest consistent association with acculturation.

Research has identified a linear relationship between acculturation and nativity, which is moderated by social status. Burnam and colleagues (1987) hypothesized that despite immigrants having lower social status than their native counterparts, the effect of status may be counteracted by improved conditions in North America. However, they also theorized U.S. culture may foster higher expectations for status which would, in turn, lead to additional distress through a status disparity effect. The hypothesis of a curvilinear relationship between acculturation and psychological disorder was not supported (Burnam et al., 1987).

Subsequent attempts to identify the association between acculturation and overall mental and physical health in immigrants to the U.S. have been inconclusive. As a result, acculturation has demonstrated a positive, negative, or even null psychological effect on immigrants (Koneru et al., 2007). Koneru argued that there is considerable variation in the association between acculturation levels and mental health outcomes.

High levels of acculturation have been associated with an increase in perceptions of stress (Buddington, 2002), depression symptoms (Cuellar et al., 2004; Ramos, 2005), anxiety and substance abuse (Gfroerer & Tan, 2003). However, similar high levels of acculturation have also been linked to a decrease in depression symptoms (Jang et al., 2005) and perceived stress (Lee et al., 2004).

Low levels of acculturation also demonstrate similar complexity regarding increased anxiety and depression symptoms (Foss, 2001), high levels of psychological stress (low bicultural assimilation) (Thoman & Surís, 2004), but also positive outcomes such as the aforementioned lower anxiety and depression levels. The most consistent finding across acculturation studies is that higher acculturation is related to increased substance abuse. Indeed, the heterogeneity of the effect of acculturation on well-being is an indication that further study is required. This study aimed to shed light on this area through the empirical inclusion of subjective social status as a component of the immigrant process.

After reviewing the literature, Koneru (2007) highlighted that the measurement of acculturation remains problematic. Reliance on self-report and a lack of behavioral measures may contribute to the lack of clear associations. An additional shortcoming identified by Koneru is the lack of understanding of potential mediators of the acculturation process. For example, family environment may be a possible underlying mechanism active in the association between acculturation and well-being. Attempts to understand other factors of acculturation such as gender and generational status have produced inconsistent associations. Finally, Koneru indicated that attributes of acculturation, such as increased familiarity with health systems, may be associated with positive outcomes such as a reduction in mental health symptoms. Whether researching positive or negative mental health outcomes in acculturation research, the findings have been inconclusive. In this inconclusive landscape immigrant social status may help clarify the inconsistent results of acculturation study.

Social Status and Acculturation

Social status may be associated with differences in acculturation patterns. Arguably, the prominent role of both social status and culture is to guide social interaction. Acculturation theorists agree that expectations for these interactions (e.g., how I was received in this culture) play a major role in the acculturation strategy and outcomes for immigrants. Padilla and Perez (2003) elucidate this process stating that:

> Within their new social context, newcomers form perceptions regarding expectations that members of the dominant group have of them. Perceptions are likely to affect the process of redefining their identity and whether and to what extent they choose acculturation and membership in the host culture. (p.50)

Padilla and Perez (2003) further argued that components related to social status, such as social cognition, identity, and stigma, provide more insight into individual differences in the acculturation process.

The variability between individuals seen in the study of acculturation reflects not only the complexity of acculturation but also illustrates the multiple economic, psychological, and social factors that affect an immigrant, the way he or she acculturates, and his or her health. Higher SES has been correlated with higher levels of acculturation (Kuo & Roysircar, 2004; Negy & Woods, 1992; Shen & Takeuchi, 2001) while the meaning of this association remains unclear. One unpublished longitudinal study indicates that pre-immigration financial health is associated with an easier acculturation process (Manhart, 2008).

Socioeconomic status is often used as an objective proxy to reflect the social status of an individual. One researcher asserts that, although SES is included, many

studies do not capture the reference groups that people compare themselves to and, therefore, were unable to capture the subjective experience (Gelatt, 2013). An early meta-analysis of acculturation and adjustment (Moyerman & Forman, 1992) identified SES as the factor that related to the largest changes in adjustment to the new culture. The analysis of 14 studies indicated individuals with higher levels of SES experienced less anxiety during the acculturation process (β=-3.10, $p<.05$) (Moyerman & Forman, 1992).

The role of SSS is even less clear because only a handful of published studies examined the association between social status and negative mental health in immigrants in the U.S. One limitation of this research is the heavy reliance on the NLAAS survey. There are three studies (Franzini & Fernandez-Esquer, 2006; Nicklett & Burgard, 2009; Leu et al. 2008) on subjective social status from the same sample. Although the NLAAS utilized strong methodology, the reliance on the same sample for multiple studies gives the impression that there are a larger number of studies asking the question about the role of SSS than actually exist. Therefore, future research needs to focus on validating constructs of SSS as compared to purely objective measures and studying SSS with additional samples.

Franzini and Fernandez-Esquer (2006) explored the association between subjective and objective social status (SSS and OSS, respectively). They examined self-reported physical health, mental health, and self-rated health in 1,745 Mexican-Americans using the Adler and colleagues (2000) contemporary version of the MacArthur Scale of Subjective Social Status (Kilpatrick & Cantril, 1960). They included education, household income, work status, reliance on assistance, and automobile and home ownership to represent objective social status. Acculturation was estimated based

on both the Spanish language proficiency and use as well as on questions taken from the Acculturation Rating Scale for Mexican Americans (ARSMA) (Cuellar et al., 1980). Results indicated that both OSS and SSS were related to health outcomes. In addition, hierarchical regression analysis supported the association between mental health and SSS that remained after controlling for OSS. Establishing a general mental health connection to SSS is a strong point of the study; however little can be said about the specific ramifications for well-being or any particular psychopathology outcomes.

Leu and colleagues (2008) assessed the association between SSS and mood dysfunction in their study on the effects of age at immigration in 1,451 Asian immigrants surveyed in the National Latino and Asian American Study (NLAAS). Regression analysis revealed that low SSS was related to negative mental health indicators. The national NLAAS survey collected SSS data-utilizing the modified MacArthur Scale of Subjective Social Status (Adler et al., 2000) and related the SSS to a mood dysfunction as measured by the Composite International Diagnostic Interview (World Health Organization, 1990). The researchers established this link and also supported their primary hypothesis that the age of immigration (operationalized as a dichotomous variable of over or under 25 years of age) was related to different developmental trajectories for immigrants. This developmental trajectory is shaped within the context of new language acquisition and use, variety in social opportunities, and exposure to healthy or stressful environments. Despite their emphasis on language proficiency and environmental stressors in an immigrant population, neither acculturation nor acculturative stress was examined in the study.

Nicklett and Burgard (2009) then explored a specific mental health indicator, depression, in relation to loss of social status in first generation Asian-Americans and Latinos. Using a sample size of 3,056 immigrants from the NLAAS, the authors identified that a loss of social status was related to higher likelihood of major depressive disorder. Respondents rated their current SSS using the MacArthur Scale of Subjective Social Status (Kilpatrick & Cantril, 1960). Specifically, Asian-American and Latino immigrants who reported their status was currently three rungs lower on the MacArthur ladder than when they were in their home country and were more likely to have had a depressive episode in the last 12 months. Nicklett and Burgard (2009) controlled for the effects of racial/ethnic group, sex, age, formal education, time of residence in the U.S., citizenship status, and spoken English ability and, therefore, were able to examine many of the common moderating variables. Using data from the large scale NLAAS study affords the authors the benefit of the rigorous methodology; however, it did not allow them to determine causality. In addition, the study relies on participants' recollection or estimation of their previous SSS in their country of origin and omits measurement of immigrants' SSS within their local community. Nicklett and Burgard (2009) represent the second study to link SSS and mental health in immigrants, by establishing a link with depressive episodes.

Gelatt (2013) published an analysis of the NLAAS database in reference to subjective status, immigrants, and dimensions the author asserts to be reflective of well-being. Despite purporting to measure well-being, the NLAAS does not include a dedicated measure of well-being. To capture well-being the author used a combination of absence of depression in the past month, the participant's assessment of reasons for

immigrating, and his or her assessment of the outcome of migration. Gelatt also examined the SSS of Asian and Latinos in the study and examined whether these immigrants compared themselves to their local group or the nation. Results indicated that participants used both groups as references and that both immigrant groups rated their social status as slightly higher when comparing to other immigrants rather than U.S. citizens. On a scale of 1-10, the mean comparison with U.S. immigrant community was 6.08, native country was 6.05, and U.S. citizen was 5.46 (Gelatt, 2013). Additionally, analysis supported the social status gradient finding that immigrants who reported higher SSS had less depression. Although Gelatt does examine SSS, the study does not focus on the potentially key impact of acculturative stress on well-being.

In sum, the negative psychological outcomes of SSS and acculturation have begun to be examined. The results of the handful of studies indicate the SSS is related to negative mental health such as depression (Nicklett & Burgard, 2009) and mood dysfunction (Leu et al. 2008). There has been only one study of immigrants to examine SSS and well-being (Gelatt 2013) and it did not include a specific measure of well-being. As a result, there is a void in the examination of immigration, SSS, and well-being that this study proposed to help address.

Social Status and Acculturative Stress

Acculturative stress refers to the psychological ramifications of the interactive process that occurs when moving to a new host country and culture (Sue & Chu, 2003). Immigrants to the U.S. are no exception and they face a number of potential stressors during the process of moving and adjusting. Berry characterized acculturative stress as the physical and psychological stress reactions resulting from the acculturation process

(Berry et al., 1987). This framework stipulates that the acculturation experience is subject to cognitive appraisal and the selection/employment of coping strategies that affect the short term outcomes which, in turn, contribute to the long term psychological effects (Sam & Berry, 2006). This type of stress has been theorized to be lifelong (Smart & Smart, 1995) and central to the immigrant experience (Ying, 2005).

Stress is considered a causal factor in illness (DeLongis, Folkman, & Lazarus, 1988) and acculturative stress is typically no different. Acculturative stress can be conceptualized using the well-cited Lazarus and Folkman (1984) transactional theory of stress. Lazarus and Folkman stipulate that stress is a result of a person appraising a potential stressor as negative and beyond his or her coping resources. Therefore, if an immigrant perceives acceptance into the dominant culture as a daunting undertaking, the process of integrating becomes a stressor. Similarly, if this same immigrant perceives acceptance into the dominant culture as neutral or positive and manageable, the event is less stressful and could be seen as a positive occurrence.

Results from previous studies noted that the experience of acculturation and acculturative stress varies per individual based on individual differences including phase of acculturation, formal education levels, and social differences such as status (Berry et al., 1987). Acculturative stress has been found to be most acute in the early period of the immigrant's time in the U.S. In a study of Chinese immigrants, Zheng and Berrry (1991) found that both psychological and physical distress increased in the first four months after arrival in the U.S.

Acculturative Stress and Well-being

The association between acculturative stress and well-being is less frequently studied than the association between acculturation and well-being. Most studies have examined the negative mental health effects (e.g., depression, anxiety, and suicidality) of both acculturation and acculturative stress, with few studies dedicated to the positive outcomes (e.g., life satisfaction). Acculturative stress is typically viewed as a negative health influence. As a result, scientists are more clearly able to discuss the potential diminution of well-being than factors that increase well-being. Accordingly, it was expected that increased level of acculturative stress would relate to lower levels of well-being in the current study.

Acculturative stress has been associated robustly with depression in a number of studies of Asian immigrants (Cho & Haslam, 2010; Mui & Kang, 2006; Xu & Chi, 2012), Arab Americans (Abdulrahim & Baker, 2009), Pakistani immigrants (Jibeen & Khalid, 2011), and Mexican Americans (Crockett et al., 2007; Hovey, 2000; Mejía & McCarthy, 2010; Mena, Padilla, & Maldonado, 1987). The association with depression has repercussions for other mental health concerns such as suicidality, anxiety, and diminished well-being. It can be assumed that acculturative stress is a factor or related to factors that exacerbate psychological mechanisms related to suicide.

As expected, based on the link between acculturative stress and depression, acculturative stress has also been linked to increased suicidal ideation. Although less frequently studied, this association to suicidality has been established in multiple studies including those of Mexican immigrants (Hovey, 2000; Hovey & King, 1996) and Korean sojourners (Cho & Haslam, 2010). The underlying factors of suicidal behavior in

immigrants have not, however, been well established; the majority of the studies identify the correlation but do not explore why acculturative stress, in particular, is linked to increased suicidal ideation.

Longitudinal examination of acculturative stress also appears to have galvanized this negative association with mental health. Tracking a group of mixed immigrant adolescents over two years revealed increased that acculturative stress was not only linked to more anxious or depressive symptoms but also to more frequent somatic complaints and withdrawal (Sirin, Ryce, Gupta, & Rogers-Sirin, 2013). Somatic complaints have not been the focus of much acculturative stress research and may be misinterpreted or overlooked as physical health issues.

Negative physical health outcomes, such as poor birth outcomes, poor dietary practices, and poor health care utilization, have been linked to acculturative stress in Latino populations (Lara, Gamboa, Kahramanian, Morales, & Bautista, 2012). Acculturative stress has been theorized to relate to health behaviors (e.g., exercise) and preventable chronic health conditions (e.g., obesity, diabetes, and hypertension), but research has not yet identified a clear association (Lara et al., 2012). In a review of the literature of acculturation and health (Lara et al., 2012), the authors speculate that this lack of a link for some health behaviors may be due to a lack of research rather than a lack of association.

Unlike acculturative stress, acculturation has displayed an inconsistent association to mental health. In a recent review of acculturation and mental health, Koneru and colleagues (2007) identified 30 quantitative studies of acculturation and depression in Latinos or Asian Americans or non-Latino and non-Asian/Asian American samples. Of

the thirty studies, 11 found no association with depression, five linked increased acculturation with greater depressive symptoms, seven linked greater acculturation with fewer depressive symptoms, and four found mixed results. The authors conclude that the association is equivocal and cited the lack of a multidimensional measurement of acculturation as problematic to understanding the association. The authors expect that a multidimensional measure could be more accurate and thus help to clarify the equivocal association.

Individuals cope with stress differently and coping with acculturative stress is no exception. Besides individual differences, the experience of acculturative stress has been found to be affected by SES (Kuo & Roysircar, 2004; Negy & Woods, 1992; Shen & Takeuchi, 2001; Williams & Berry, 1991), perceived discrimination (Finch, Hummer, Kol, & Vega, 2001), and length of stay (Kuo & Roysircar, 2004; Nicolas, Bernal, & Christman, 2011). High socioeconomic status has been theorized to act as a buffer of acculturative stress in adolescents (Hovey & King, 1996). Conversely low SES has been linked to increased levels of acculturative stress (Thomas, 1995). The role of SES with acculturative stress is so pronounced that after reviewing the literature, cross cultural scientists recommend that SES must always be controlled for when studying acculturation. Thus, before the role of coping in acculturative stress is examined in detail, the effect of subjective social status on acculturation needs to be examined. This study sought to bolster subsequent study of the role of coping mechanisms by establishing the effect of SSS on acculturative stress.

In sum, acculturative stress has been studied in the context of negative mental health. The association between acculturative stress and negative mental health has been

established. The association between acculturative stress and SSS has not been established. Similarly, the association between acculturation and well-being has not been established. Findings regarding the association between acculturation and well-being are inconsistent (Koneru et al., 2007). This study sought to explore whether acculturation and acculturative stress relate to well-being. Further, if there is an association, this study sought to understand whether SSS moderated this association.

Acculturative Stress and Social Status

Williams and Berry (1991) specifically identified SES as a moderator of acculturative stress. They explained that an immigrant may experience a "loss of status" when leaving his or her native culture and entering a new culture (with a corresponding new SES) and this loss of culture can play a role in the appraisal of stressors (Williams & Berry, 1991). Rogler, Cortes, and Malgady (1991) highlighted the role of social status by stating, "The migrant is also faced with problems of economic survival and social mobility in an unfamiliar socioeconomic system" (p. 585). They also argued that the interaction of nationality, SES, and the ethnic diversity of the local community may mitigate psychological distress. In a similar vein, Padilla and Perez (2003) identified SES as a key factor in the association between acculturative stress and mental health. Both models agree that appraisal of acculturation stressors is key and that appraisal, in turn, affects the immigrant's ability to cope with stress.

Acculturative stress can arise from a number of factors related to social status such as status loss (Aycan & Berry, 1996), limited status mobility (Aycan & Berry, 1996), gender roles (Sam & Berry, 2006), and cultural distance (Sam & Berry, 2006). Based on the theory that immigrants may not find work commensurate to their level of

formal education due to language, difficulty transferring credentials, and devaluation of foreign work experience, Aycan and Berry (1996) surveyed 250 Turkish immigrants and found that loss of status was related to negative psychological health. In addition, the authors found that employment experiences were meaningfully associated to cultural adaptation and well-being. These findings not only support the effects of the stress response on acculturation, but also underscore the need to go beyond objective assessment of social status. In Aycan and Berry (1996), years of formal education did not equate to the same social status as in the country of origin and, moreover, immigrants experienced a loss of status despite remaining in the same objective category.

Although the role of social status has been theorized to affect the relationship between acculturative stress and well-being, little research has directly attempted to elucidate the connection. SES is included as a variable in most studies on acculturative stress and mental health, but analysis of the association is incomplete because there is inadequate attention to the role of subjective social status or the positive elements of well-being.

Summary of Literature Review

This literature review outlined the importance of social status to well-being. The review then looked in depth at social status, which included highlighting the limitations of the objective measurement of social status. The focus on social status continued and then differentiated SES, social class, and SSS. Next the advantages of SSS, such as the incorporation of perceived standing for a more nuanced understanding of social status were covered. Subsequently, the associations between social status and well-being were examined, with a special focus on SSS. The key findings of these associations were that

social status is associated with well-being but SSS and well-being has not been robustly examined. The literature review then shifted to discuss what we know about acculturation and acculturative stress, why social status is relevant to acculturation, and what is missing in regard to the association with well-being.

Overview and Rationale for the Current Study

All major models of the acculturation review in this study identify social status as an important factor in acculturation process. Acculturation is a heavily studied but complex phenomenon that has produced conflicting associations to psychological outcomes (Koneru et al., 2007). The ensuing stress from acculturation demonstrates a more consistent association with negative mental health outcomes than with well-being. The effect of acculturative stress has ramifications for 40.3 million immigrants as well as non-immigrants in the U.S. Despite scientific efforts, the association between acculturation and well-being is unclear. These efforts have been hampered by measurement shortcomings, such as a linear conceptualization of acculturation, and a reliance on language as a gauge for acculturation. Furthermore, lack of research on potential moderating factors impedes understanding the underlying mechanisms and nature of the association between acculturation, acculturative stress, and well-being.

Social status is a potential moderator and has been hypothesized to affect acculturation and acculturative stress. Social status is robustly linked to physical and mental health in almost every population (Marmot, 2004). Social status as traditionally measured by SES is associated with conceptual and practical problems in the study of immigrant populations. There is a small but promising body of research indicating that SSS is a more meaningful measure of the effect of social position.

Well-being as conceptualized by Prilleltensky (2012a) is an integral part of social justice. Examining the association of social status to well-being is therefore an issue of social justice. The role of social status has not been adequately explored using subjective measurements. Based on this gap and gaps in measurement of acculturation and social status in the research reviewed here, this study aspired to contribute to the field by filling these gaps and expanding the body of research on SSS in immigrants. The specific aims of this study were:

AIM 1: Describe acculturation, acculturative stress levels, and social status of immigrants in this sample.

AIM 2: Examine the association between acculturation, acculturative stress, and well-being in immigrants.

- Hypothesis 1: Higher levels of acculturative stress will be related to lower levels of reported psychological health as measured by the WHOQOL-BREF.
- Hypothesis 2: Higher levels of acculturation and lower levels of acculturative stress will be related to higher levels of reported well-being as measured by the WHOQOL-BREF and the I COPPE.

AIM 3: Determine if subjective social status affects the association between acculturative stress, acculturation, and well-being.

- Hypothesis 1: Subjective social status will moderate the association between acculturative stress and well-being.
- Hypothesis 2: Subjective social status will moderate the association between acculturation and well-being.

Figure 2 graphically displays the expected direction of the relationships between SSS and acculturative stress and Figure 3 graphically displays the expected direction of the relationships between SSS and acculturation.

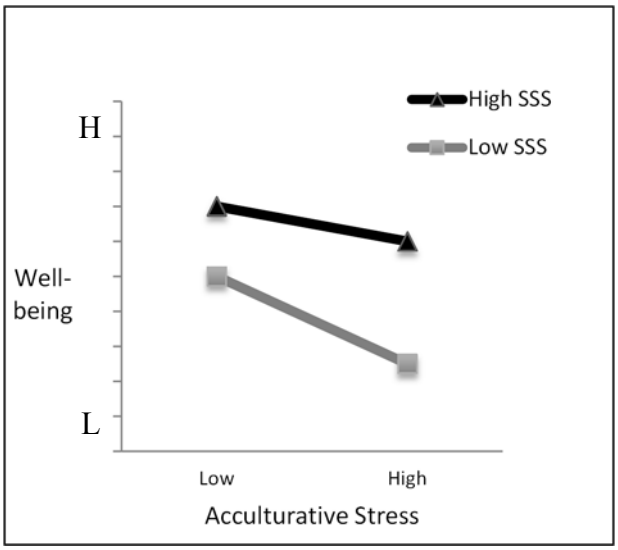

Figure 2. Expected direction of SSS and acculturative stress

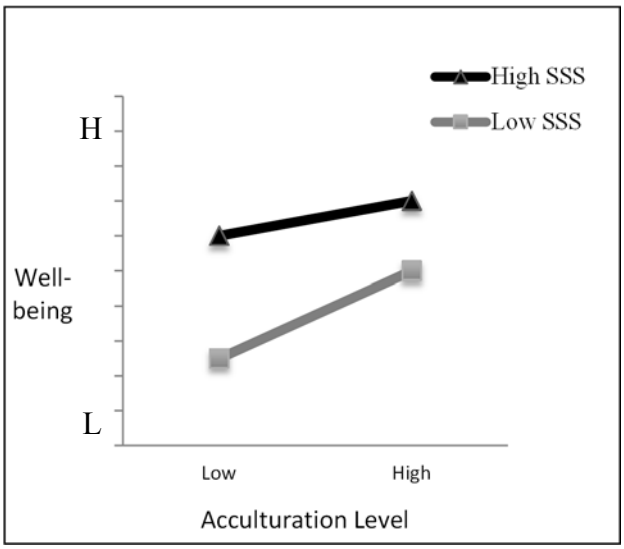

Figure 3. Expected direction of SSS and acculturation

CHAPTER 3: METHODS

This study used a cross-sectional survey to identify the role of social status, acculturation, and acculturative stress in immigrant well-being. To examine the role of subjective social status, this study relied on well-validated self-report measures of acculturation, acculturative stress, mental health, social status, and well-being.

Participants

Inclusion/Exclusion Criteria. To participate in this study, individuals must have been age 18 or older, born outside of the U.S., and identify as an immigrant. Participants must have migrated to the U.S. and currently reside in the U.S. Measures were administered in English; as a result, functional English reading skills were necessary. To facilitate recruitment and an adequate sample size, the amount of time of their residence in the U.S. was not restricted. However, in an effort to reduce high levels of acculturation in the final sample, participants born in the U.S. or having resided in the U.S. for the majority of their lives (defined as 75%) were also excluded from data analysis after data collection. The data from 66 participants were excluded from final data analysis because they had spent more than 75% of their lives in the United States. To examine the potential effect of excluding these participants, both data normality and correlations were run and examined. The exclusion of these participants generally resulted in stronger associations but did not change the significance of the results. The final analysis was conducted with the exclusion of these participants.

An a priori power analysis was conducted to determine the minimum number of participants required to discern a medium effect size ($f^2 = 0.15$) at an alpha of .05 using multiple regression. Using Gpower (Faul, Erdfelder, Buchner, & Lang, 2009; GPower

3.1) for the analysis, a sample size of approximately 120 participants was recommended. This study anticipated a number of non-completers based on general recommendations (Zhang, 1999) and Amazon's Mechanical Turk (MTurk) crowdsourcing website (Mason & Sure, 2011); however the sample did not include a high number of incomplete surveys. Due to power analysis and potential non-completion of surveys, the minimum desired sample size was 140 participants. At the end of data collection, 201 participants were analyzed for the purposes of this study.

The sample contains more males (n = 117, 58.2%) than females (n = 83, 41.3%), with one person identifying as transgender (n = 1, .5%). The age range of the sample was from 20 to 74 years old (M = 35.40, SD = 11.75). When asked to self-identify, participants responded: White/Caucasian (n = 101, 50.2%), Asian (n = 46, 22.9%), African American (n = 20, 10.2%), Hispanic/Latino, non-Caucasian (n = 32, 15.9%), Native American (n = 1, .5 %), and other (n = 5, 2.5%). This sample was comprised entirely of individuals based in the U.S.; MTurk excluded members connecting to the Internet from other countries. The majority (n=133, 66.2%) of the sample identified as U.S. citizens with (n=58, 28.9%) identifying as permanent residents and the remainder of the sample (n=10, 5%) having other immigration statuses. Participants all currently resided in the U.S. and hailed from over 68 countries including: Mexico (24), United Kingdom (21) Canada (18) Germany (11) Philippines (10), South Korea (8), Jamaica (8), India (6), China (6), Australia (5), Italy (5), Ireland (5), Hong Kong (4), France (4), Vietnam (3), Romania (3), Egypt (3), Dominican Republic (3) all the other nations represented had two or less participants. The amount of time participants spent in their

home country was not recorded, but participants who had spent more than 75% of their lives in the U.S. were ruled out.

Measures

The measures in this study were selected to reflect the following aims of this study:

to describe the acculturation, acculturative stress levels, and subjective social status of immigrants in the study;

To examine the association between acculturation, acculturative stress, and well-being and

To determine if subjective social status moderates the association between acculturation, acculturative stress, and well-being.

Demographic questions were presented first, based on the recommendations for reduction of attrition using MTurk (Mason & Sure, 2011). Measures were given in the following order: (a) demographics, (b) subjective social status, (c) acculturation, (d) acculturative stress, (e) quality of life, and (f) well-being.

Demographics. The demographics included participant variables such as age, ethnicity, gender, and association status. In addition, the demographics include variables typical to acculturation and social status studies such as time spent in respective countries, income, family income level, occupation, country of birth, country of residence, and education level. The demographic section was the first set of items presented to participants after completing the informed consent.

Acculturation. The Stephenson multi-group acculturation scale (SMAS) (Stephenson, 2000) was used to measure acculturation. The SMAS is comprised of 30

items rated on a point Likert-type scale (1=*False to* 4=*True)*. The SMAS was designed to assess behavioral and attitudinal aspects of acculturation and includes indicators such as: language knowledge, language use and preference; interaction with ethnic and dominant societies; and use and preference for foods and media in multiple ethnicities. The SMAS is one of the few validated multi-ethnic-specific acculturation measures normed on multiple ethnic groups. Initial validation studies of the SMAS found a Cronbach's alpha of .86.

Acculturative Stress. To measure the stress response to acculturation, the Social, Attitudinal, Familial, and Environmental Scale (SAFE) was used. The SAFE was developed with 60 Likert-type scale items (Padilla, Wagatsuma, & Lindholm, 1985) with Japanese immigrants. Subsequently, a short version was created consisting of 24 items validated on multicultural undergraduates (Mena et al., 1987). The short version was refined to include: reaction to acculturation related stressors (e.g., language/communication difficulties), perceived discrimination, and adaptation. Responses on the shortened version of the scale range from 1 to 5, with 1 representing *Not stressful* and 5 representing to *Extremely stressful.* Examples of items include*: I don't feel at home, People think I am unsociable when in fact I have trouble communicating in English,* or *It bothers me when people pressure me to assimilate.* The 24 item SAFE scale has since been used in a number of immigrant populations. The SAFE has demonstrated adequate internal consistency ($\alpha = .89$) (Mena et al., 1987).

Subjective Social Status. The McArthur self-anchoring scale was used to measure subjective social status. The original scale was modified into a visual ladder

format scale with 10 rungs (Adler et al., 2000). On this scale, participants were asked to mark where they feel there are currently located socially with the following instruction:

> Think of this ladder as representing where people stand in the United States. At the top of the ladder are the people who are the best off—those who have the most money, the most education, and the most respected jobs. At the bottom are the people who are worst off—who have the least money, least education, and the least respected jobs or no job. The higher up you are on this ladder, the closer you are to the people at the very top and the lower you are, the closer you are to the people at the very bottom. (Adler et al., 2000, p. 587)

The scale has been used in two formats: a national comparison and a local community comparison. Both were included in the study. The local community version of the scale is the same except the word "community" replaces "United States". Since the scale is a single question, psychometrics such as Cronbach's alpha are not applicable. However, the measure is significantly correlated with other measures of social status such as social class, income, and education (Chen et al., 2009; Franzini & Fernandez-Esquer, 2006) which suggests adequate convergent validity.

In addition, after participants gave their overall rating, they subjectively rated components of social status (i.e., occupation, income, power, and family status). As a result, participants answered seven separate subjective social status items using the same scale format: (a) overall status ranking (U.S. population) , (b) status ranking (Local community population), (c) income ranking, (d) social power/prestige rating, (e) their occupational ranking, (f) status before leaving their native country, and (g) current family social status.

Well-being. Well-being was measured by three indicators:

life satisfaction using the WHO Quality of Life-BREF (WHOQOL-BREF) (Murphy, Herrman, Hawthorne, Pinzone, & Evert, 2000) and

psychological health using the psychological health domain of the WHO Quality of Life-BREF 3 (Murphy, Herrman, Hawthorne, Pinzone, & Evert, 2000), and

overall perceived well-being using the overall dimension of the Interpersonal, Community, Occupational, Physical, Psychological, Economic, and Overall (I COPPE) scales (Prilleltensky et al., 2013).

Quality of life. The WHOQOL-BREF (Murphy et al. , 2000) is a shortened version of the full 100 item measure (WHOQoL-100) designed to be a cross-culturally valid quality of life measure. The shortened version was designed to be more compact for research purposes and was piloted in 15 countries. It is a 26-item measure that assesses individuals' perceptions in the context of their culture and value systems, as well as their personal goals, standards and concerns. The WHOQOL-BREF operationalizes these perceptions into four domains: physical health, psychological, social relationships, and environment. The measure uses a 5-point Likert-type scale with varying labels assigned to the points, such that a one on the scale could mean *Very Dissatisfied* or *Not at all* or *Very poor,* depending on the question. Examples of questions on the WHOQOL-BREF are *How healthy is your physical environment?* and *How satisfied are you with your access to health service?* The WHOQOL-BREF has demonstrated good to adequate psychometrics in the original validation with good discriminant validity and internal consistency demonstrate by the following Cronbach alphas' for the domains: .82, .75, .66, and .80, respectively.

Perceived Well-being. The I COPPE scales (Prilleltensky et al., 2013) complements the WHOQOL-BREF by measuring specific domains of well-being including: interpersonal, community, occupational, physical, psychological, economic, and overall well-being. The 21 items on the I COPPE are designed to measure perceptions of well-being across seven domains. This study used a modified version of the I COPPE. Due to a technical error with the version of image in the online survey, the current study presented 10 choices (rungs on the ladder) instead of 11. The original I COPPE used a numbered ladder format on which participants were asked to rank where they feel they best fit on it. The current study presented a numbered 10-rung ladder. Each of the domains assessed by the I COPPE is based on a question that asks participants to rate themselves in the past, present, and future. Examples of items are *When it comes to your main occupation (employed, self-employed, volunteer, stay at home), on which number do you stand now?* and *When it comes to your economic situation, on which number do you stand now?* Although data were collected on all seven domains, this study utilized an average of the past, present, and future ranking of the overall well-being domain to represent well-being. The choice to use the mean of the current overall well-being was employed to prevent overlap from common areas such as the WHOQOL-BREF psychological domain and the ICOPPE psychological domain. The I COPPE has been empirically validated resulting in convergent validity [$\chi^2_R(119) = 193$, $p < .001$, RMSEA = .038 (.028, .048), SRMR = .019, CFI = .991, and TLI = .972] (Prilleltensky et al., 2013).

Reliability Analyses of the Measures

Cronbach's alpha was calculated (see Table 5) for each measure to screen for low levels of reliability within the measures. The alpha of each measure was compared to the published alpha of the measure in other populations to assess convergent validity. All the alphas compared were comparable to other published alphas. Alpha levels published for the WHOQOL-BREF (Murphy et al., 2000) for the four domains (physical health = 70, psychological = 67, social relationships = 67, and environment = 63) were comparable to the current study (physical health = 74, psychological = 65, social relationships = 65, and environment = 65). the alpha levels of the WHOQOL-BREF calculated based on a sample including participants from 18 countries (Murphy et al., 2000). The Cronbach's alpha for the SAFE scale in this study was $\alpha = .94$. This Cronbach's alpha was comparable to other reported measures of internal consistency ($\alpha = .89$) (Mena et al., 1987). The Cronbach's alpha for the SMAS $\alpha = .86$ which matches the original validation study of the SMAS found a Cronbach's alpha of .86 (Stephenson, 2000). Based on the Cronbach's alpha results, the measures in the study appeared reliable.

Construct validity was assessed using convergent validity. Convergent validity, the degree to which two theoretically similar measures correlate (Campbell & Stanley, 1963) was assessed between the measures of SSS and SES. This study assessed 11 potential markers of social status (income, household income, formal education attained, employment status, subjective social status, subjective community status, subjective rank of income, subjective family status, subjective appraisal of social power, subjective social status in the participants ethnic group, and subjective social stats compared to home country.)

The overall measure of SSS used in the analysis was how rank participants gave themselves when they compared themselves to the general social status of the U.S. (SSS US) population. The SSS US ranking correlated significantly with four of the potential six other subjective status items as expected. Specifically, SSS US correlated with their community ranking (SSS Comm; r= .41, p<.00), their ranking when compared to their home country (SSS Home;r= .26, p<.00), their family status (SSS Fam;r= .36, p<.00), and their perceived social power (SSS Power; r= .29, p<.00). Their ethnic group ranking trended toward but did not correlate significantly with SSS US (SSS Eth; r= .39, p=.06) or (SSS Income; r= .47, p=.05). Similarly, the ranking of SSS in the local community compared to five out of the six other subjective items and one out of the four objective measures but none of the objective measures of status (education, income, family income, and current work status). SSS in their community correlated with most other subjective rankings (SSS Home; r= .26,p<.00) (SSS Fam; r= .31, p<.00) (SSS Income; r= -.16, p<.05), (SSS Power; r= .24, p<.00), with the exception of (SSS Eth; r= -.11, p=.12).

In general, the subjective status items correlated together frequently with each of the seven items correlating with at least three of the other subjective measures. Subjective ranking of where participants stood in reference to their ethnic group correlated with three other subjective measures (SSS Income, SSS Home, and SSS family) which represented the lowest number of correlations. Subjective family status correlated with all other subjective measures of status in the study and represented the most significant correlations. The full table of correlations is available in Table 7.

An unexpected association was the inverse correlation between objective income and subjective income (SSS Income; r= -.52, p<.00), social power (SSS Power; =-.17,

$p<.00$) and ethnic group (SSS Eth; $r= -.23$, $p<.00$). This inverse correlation may indicate that the more income participants made, the lower they felt their income ranked subjectively. Or, due to the nature of correlations, the relationship could be reverse where the higher the participants felt their income ranked subjectively the lower their reported income was. One takeaway from this association is that there is a difference between actual reported income and the subjective appraisal of income.

Procedures

The study used a cross-sectional survey method design drawing upon information gathered over the Internet. The survey did not pose any additional risk than may be encountered in daily conversation regarding mental health or immigration. The variables in this study were acculturation stress, psychological health, and self-rating of physical health and well-being. Independent variables consist of acculturation, acculturation stress, and social status. Definitions of these variables are available in Table 1. The study was approved by the University of Miami Institutional Review Board (IRB). Participants were given the option to participate in a follow-up study planned for 24 months after initial participation.

Recruitment. Participants were recruited over the Internet using Amazon's MTurk. It was initially planned to use two mechanisms: (a) a convenience sample through Internet forums frequented by immigrants and by (b) MTurk. However, due to the response rate of MTurk, convenience sampling was not used. As a result, all participants who completed the survey were compensated $2.00.

MTurk is a crowdsourcing Internet service founded by Amazon.com Inc. that seeks to provide an online market place for human intelligence tasks such as survey

completion, simple task completion, labor recruitment, and data collection. MTurk allows for the linking of participants to outside websites such as the UM Qualtrics site or SurveyMonkey. The site requires registration and allows for compensation of participants and collects a fee of 10% of the compensation. Research indicates that an average compensation rate is 50 cents per 30 minute survey received and an average of 16.7 surveys are completed per hour (Buhrmester, Kwang, & Gosling, 2011). As of April 2013, MTurk states it has a pool of 500,000 workers from 190 countries (Amazon.com Inc., 2013).

The MTurk interface lists the survey as a task that the participant is eligible to complete. Additionally, users of MTurk were able to search for participation opportunities. Once they selected the survey they were directed to the UM Qualtrics website. All parties completing the survey through MTurk received compensation of $2.00. MTurk has the capability to refer participants to Qualtrics online surveys. Upon reaching the study website hosted on the UM Qualtrics website, all participants were presented the informed consent form (Appendix A). The informed consent provided the following information: (a) study purpose, (b) potential risks and benefits, (c) compensation information, (d) investigator contact information, (e) UM Office of Human Subjects Research, (f) UM IRB contact information, and (g) directions for completing the survey.

A number of features of MTurk was utilized in this study. Using the MTurk country specification option, the participant pool was restricted to the U.S. Based on recommendations from MTurk, participants were required to have an acceptance rate higher than 97%. The acceptance rate is the rate of surveys submitted by the participant

that was deemed satisfactory by the survey provider. The acceptance rate attempts to gauge the quality of the participation, as surveys are rejected based on failing quality control, manipulation checks, and reading comprehension checks in other surveys. This restriction based on rejection rate is also a potential limitation as it limited the scope of participants to individuals who had some familiarity with MTurk. To enable follow up research, MTurk's unique worker ID and capability to restrict survey to previous participants features was utilized as recommended (Paolacci, Chandler, & Ipeirotis, 2010).

MTurk is a relatively recent development in Internet sampling and there is a small body of research supporting sample validity. Sprouse (2011) compared two groups of 176 participants, one group from MTurk and the other from undergraduate samples. The groups were indistinguishable when compared on participant rejection rates, statistical power, and judgments; however, MTurk produced slightly higher rejection rates (Sprouse, 2011). When examining a clinical population for prevalence of mental health (e.g., depression, anxiety, and trauma exposure), Shapiro, Chandler, and Mueller (2013) concluded that MTurk had the advantage of increased comfort disclosing clinical information and the disadvantage of a higher level of malingering.

MTurk has been the subject of much recent scrutiny as to whether it provides reliable data and if the participant pool differs from participants gathered through traditional recruiting methods. There is a substantial and growing body of research indicating that MTurk is a valid source of data with the only difference noted that it provides more diverse samples than typical college and Internet samples (Buhrmester et al., 2011). Suitable for the desired demographic of this study, the MTurk income

distribution included 66% of those who earned below $60,000 per year which is slightly lower than the U.S. population which included 45% of those who earned below $60,000 per year (Paolacci, Chandler, & Ipeirotis, 2010). Considering the concern that Internet sampling would result in an under-sampling of lower social statuses, this makes MTurk an attractive augmentation to the convenience sample.

CHAPTER 4: ANALYSIS AND RESULTS

This study aimed to understand how social status affects the relationship between acculturative stress as well as acculturation and well-being in adult immigrants to the United States. The variables used in this study were acculturation, acculturative stress, quality of life, social status, and well-being. To evaluate the hypotheses of the study, a combination of descriptive statistics and multiple regression analyses were used. There was not enough missing data to warrant special handling. The final data was checked before analysis for statistical assumptions such as independence of errors, multicollinearity, homoscedasticity, normality, and linearity. SPSS histograms were used to assess normality, skewness, and kurtosis of data. SPSS scatterplots were used to examine independence of errors, linearity, and homoscedasticity. When appropriate, factor analysis was used for scales or subscales. The data met all assessed measures of normality and statistical integrity and, thus, no further data preparation was required before analysis. To test the hypotheses, multiple regressions were conducted to examine the relationships between the independent and dependent variables.

Preliminary Analyses

The collected responses were analyzed using PASW (version 19.0.0; formerly Statistical Package for the Social Sciences - SPSS). Prior to statistical analysis, the data was inspected using descriptive statistics and normality indicators derived in PASW. Assessment of all measured variables was conducted. Normality and assumptions for regression, such as univariate skewness, kurtosis, outliers, and missing data, were met. Reliability information about the measures is included in the measures section. The collected data did not possess enough missing data to warrant special handling.

Consistent with the majority of psychological research, the alpha level was set at .05 for all data analysis.

AIM 1: Levels of acculturation, acculturative stress, and social status

After checking assumptions and data integrity, data analysis for Aim 1 paints a statistical picture of the sample. Descriptive statistics were generated in PASW. The standard deviations, range, means, and totals were examined for the SMAS, SAFE, WHOQOL-BREF, and I COPPE.

Acculturation. Levels of acculturation in the sample were assessed using the SMAS. However, demographic variables such as English language proficiency and time spent in the U.S. have been used in other studies as a proxy for acculturation (Koneru, 2007) and may provide a rough estimation. Using the SMAS results and the commonly used proxies for acculturation (English language proficiency and time spent in the U.S.), the acculturation level of the members of the sample was examined. The results indicated that the participants of the sample scored higher on acculturation to the U.S. (M = 3.29, SD = .44) than they did to their own ethnic culture (M = 2.99, SD =.57). On a scale of 1–100, participants indicated that they were highly proficient in English (M = 92.49, SD = 10.99) with a range of 31–100. The length of time immigrants resided in the U.S. ranged widely from 4–32 years (M = 15.44, SD = 8.80).

Acculturative Stress. The amount of reported acculturative stress in participants was measured by the SAFE scale. The mean score of the sample was 35.65 (SD = 20.78) with scores ranging from 3–103 out of a possible range of 0–120. As may be expected with a sample of participants that are highly acculturated to the United States, the sample reported somewhat low levels of acculturative stress. Relative to the mean (M = 39.1)

found on the original validation of the measure (Mena et al., 1987) on first generation immigrants ,this mean of 35.65 is slightly lower. Of the 24 items on the scale with a range of 1–5, the average score was 1.49 which would place the response between *not stressful* and *somewhat stressful*. This mean score of 1.49 indicated that, on average, the participants endorsed a low level of acculturative stress. English proficiency has been negatively associated with acculturative stress (Concha, Sanchez, de La Rosa, & Villar, 2013) and is also correlated negatively (r=-.21, p=.003) with English proficiency in this study. This finding supports the concept that language is an important differentiating factor in the experience of acculturative stress (Gil & Vega, 1996).

Social status. Participants provided objective and subjective information about their social status. Participants in the study were allowed to select from income categories that increased by 10,000 dollars; the full table of objective and subjective ratings of social status is provided in Table 3. The sample reported lower annual income than the U.S. population with 83.6 % earning below $60,000 per year, which is lower than the 45% of the general U.S. population that earned below $60,000 per year. Similarly, the mean income range reported by participants was between $30,000 and $39,999 as compared to the 2012 average of $52,371 for foreign-born U.S. population (U.S. Census Bureau, 2012).

AIM 2: Acculturation, acculturative stress, and well-being in immigrants

The second aim of the study was to examine the relationship between acculturation, acculturative stress, and well-being in immigrants. To analyze different levels of acculturative stress and the relationship with psychological health using the WHOQOL-BREF, simultaneous multiple regressions were employed. Psychological

health was regressed on acculturative stress (SAFE). The R^2 output was interpreted to indicate the amount of explained variance and full results are reported in Table 8. Results of the regression analysis confirmed the association between acculturative stress and lower levels of reported psychological health [$R^2 = .17$, $F(1, 193) = 40.76$, $p = .000$] posited in Hypothesis 1 as measured by the psychological health section of the WHOQOL-BREF. Thus, acculturative stress accounted for 17% of the variance of the psychological health of the immigrants in this study. For each *SD* unit increase in reported acculturative stress, the psychological health of participants decreased by .33 of a *SD* unit (i.e., $\beta = -0.33$).

To analyze different levels of acculturative stress and acculturation and their relationship to well-being, simultaneous multiple regressions were employed. Quality of life, as indicated by the corresponding item on WHOQOL-BREF, was regressed on acculturative stress (as measured by the SAFE) and acculturation (as measured by the SMAS). The association between quality of life and acculturative stress [$R^2 = .07$, $F(1, 193) = 16.62$, $p = .000$] was supported by the analysis. Thus, acculturative stress accounted for 7% of the variance in the quality of life of the participants. For each *SD* unit increase in reported acculturative stress, the quality of life of participants decreased by .28 of a *SD* unit (i.e., $\beta = -.28$). Similarly, the association between quality of life and acculturation [$R^2 = .03$, $F(1, 194) = 5.59$, $p = .000$] was also supported. Acculturation accounted for 3% of the variance in the quality of life of the participants indicating that, for each *SD* unit increase in acculturation, quality of life increased by 0.17 a *SD* unit

(i.e., β=.17). In summary, increased quality of life was associated with higher levels on acculturation to the United States and decreases in acculturative stress levels.

The association between the overall well-being domain (as measured by the I COPPE) and acculturative stress and acculturation was not supported by the analysis. In separate regressions, the mean of the overall current well-being score from the I COPPE was regressed on acculturative stress (SAFE) and acculturation (SMAS). The non-significant association between well-being and acculturative stress [R^2 = .003, F(1, 193) = .487, p = .486] did not support the hypothesis. Similarly, the association between well-being and acculturation [R^2 = .005, F(1, 194) = 1.00, p = .318] was also not supported. Results are reported in Table 8.

AIM 3: Subjective Social Status and the Association Between Acculturative Stress, Acculturation and Well-being

To examine whether SSS is a moderator of the relationship between acculturative stress and well-being an interaction term was used in multiple regression. The interaction term was based on the mean scores of acculturative stress and overall subjective social status. Overall SSS score was based on the question asking participants to compare themselves to the U.S. population in general. Current well-being, as measured by the I COPPE, and quality of life, as measured by WHOQOL-BREF, were entered as the outcome variables in two separate regressions. Acculturation stress and subjective social status comprised the first term and the interaction was entered into the equation next. The result indicated that SSS moderated a portion of the variance in well-being as measured by the I COPPE. A significant proportion of total variation in immigrant well-being was predicted by acculturative stress and SSS [R^2 = .13, F(1, 192) = 13.96, p

= .000]. The addition of the interaction term accounted for a small but significant portion of the variance (R^2 change = .02, F change = 4.05, p <.05). (See Table 9.) The results indicated that SSS predicted 2% of the variance in well-being. The expectation that SSS is a moderator of the association between acculturative stress and quality of life was not supported [R^2 = .02, F(1, 191) = 3.74, p = .05].

The hypothesis that SSS moderates the association between acculturation and well-being was not supported by the data. An interaction term in the multiple regression was used to determine if SSS was a moderator of the relationship between acculturation and well-being. The interaction term was comprised of the means scores of acculturation and subjective social status. The lack of finding of a significant interaction term (R^2 change = .01, F change = 1.26, p = .26) in the association between acculturation and well-being indicates that SSS did not moderate the relationship. Similarly, the relationship between acculturation and quality of life was not moderated by SSS [R^2 = .00, F(1, 192) = .03, p = .86]. Results are reported in Table 9 and 10 respectively.

CHAPTER 5: DISCUSSION

This study was designed to examine well-being and social status in the immigration process. The study focused on acculturation and acculturative stress in immigrants and examined if subjective social status (SSS) played a role in the process. More specifically, this study investigated whether the hypothesized association between acculturative stress, acculturation, social status, and well-being. The first aim of the study was to describe the acculturation, acculturative stress, and social status of immigrants. Findings indicate that participants reported being more acculturated to the United States than to their home countries. Accordingly, the acculturative stress levels were slightly lower than found in research on other immigrant populations. The overall social status of the sample was lower than the U.S average using objective indicators. The findings on the acculturation, acculturative stress levels, and social status of the participants are expanded upon in the chapter.

The second aim of the study was to examine the potential associations between acculturative stress, acculturation, and well-being. The results supported the negative association between acculturative stress with both quality of life and psychological health. Acculturation was also positively associated with quality of life and psychological health. Findings of an association between both acculturation and acculturative stress with psychological health and quality of life provided partial support for the second aim of the study, which was to confirm the association between the variables. Current well-being, however, was not associated with either acculturation or acculturative stress.

The third and final aim of the study examined the moderating role of social status in the associations between acculturative stress, acculturation, and well-being. The findings supported subjective social status (SSS) as a moderator of the association between acculturative stress and well-being. However, SSS did not moderate the association between acculturative stress or acculturation and quality of life. In sum, the findings partially supported the hypothesis and the supported associations, albeit mostly small but significant. Overall, acculturative stress was found to have a statistically stronger association to quality of life and psychological health than acculturation. In addition, acculturative stress had a stronger association to psychological health and quality of life than to well-being. The results indicated that SSS is relevant to immigrant mental health. In addition to this summary, this chapter will cover: (a) a discussion of the findings (b) limitations of the study, and (c) implications for future research.

Acculturation, Acculturative Stress, and Social Status

The first aim of the study was to describe the acculturation, acculturative stress levels, and social status of immigrants. The levels of acculturation and acculturative stress in the sample are discussed together followed by a discussion of the social status of the sample. These variables will be discussed in the context of theory and findings from other studies.

Acculturation. The participants in this study scored slightly higher on acculturation to the U.S. (M = 3.29, SD = .44) than they did to their own culture (M = 2.99, SD =.57). To provide perspective on these results, in the original validation study of the measure (Stephenson, 2000) the means for first generation immigrants were dominant culture (M = 3.05, SD = .69) and ethnic culture (M = 3.21, SD = .66). For

second generation immigrants in the same study, dominant culture had means of 3.60 (*SD* = .41) and ethnic culture 2.89 (*SD* = .72). Compared to results from the Stephenson (2000) validation sample, the immigrants in this study appeared more acculturated to the U.S. and less acculturated to their own culture. In addition, the participants had a high degree of confidence in their general English-speaking competence with an average self-rating of 92 out of a maximum confidence score of 100. This high level of participants' English proficiency is relevant, as language proficiency has been associated with lower levels of acculturative stress (Belizaire & Fuertes, 2011; Yeh & Inose, 2003). Language competence has also been proposed to be an important indicator of acculturation (Zea, Asner-Self, Birman, & Buki, 2003).

The findings in this study must be interpreted in light of the high acculturation level of the participants to the U.S. The finding that participants were acculturated similarly to the dominant culture and to their ethnic culture could be interpreted as an indication that the sample may be predominantly bicultural. The Stephenson multi-group acculturation scale (*SMAS*) (Stephenson, 2000) is not, however, a multidimensional acculturation measure and this weakness is discussed in the limitations section of this chapter. As a result of this limitation in the acculturation measurement, the means of the sample can only be interpreted as an indicator and not as confirmation of biculturalism in the sample. This indication is in line with the views of acculturation theory which posits that individuals often integrate and incorporate multiple cultures upon immigrating to a new country (Berry, 2003). Specifically, Berry (2003) conceptualized this stage as integration and posited that integration was associated with desirable psychological outcomes. The results of this study underscore the multifaceted nature of acculturation.

Acculturative Stress. The acculturative stress reported by the sample appeared lower than comparable samples. The current sample had a mean score of 36.65 in comparison to the original validation study (Mena et al., 1987) which reported an average score of 39.1 for first generation immigrants. The mean of the current sample was considerably lower than other studies such as Beliazaire & Fuertes (2010) who found an overall mean score of 51.46 (*SD* = 24.93) in Haitian participants. In a study examining a sample of Latinos from many regions of the U.S., Miranda and Matheny (2000) found average acculturative stress levels of 78.3 (*SD* = 11.6), which is more than double the current study's average. The comparison with these other studies underscores the finding of a low level of reported acculturative stress in the current sample.

Acculturation theorists such as Rumdin, Berry, and Schwartz all have individually underscored the importance of the context (e.g., ethnicity, nationality, SES, and language) in the acculturation process. Rumdin (2003) highlighted context by pointing out that the degree of similarity of culture of origin can affect acculturative stress. Schwartz and colleagues (2010) also emphasize context and cite the example, "White, English-speaking Canadian person who moves to the United States will likely have much less acculturating to do than an indigenous migrant from Mexico or Central America" (p.240). This assertion is reflected in the current study in which Canadians scored low (M =28.11) on acculturative stress. The context of the sample, namely ethnic and national background, is therefore relevant to the acculturative stress levels in the current study.

The finding of slightly lower levels of acculturative stress could be partially explained by ethnic and national characteristics of the sample. Unlike a majority of the aforementioned samples, half of the participants in the study identified as non-Latino

White/Caucasian. The non-Latino White/Caucasian population is a less frequently studied immigrant population and this is reflected by the small number of published journal articles. In the Koneru (2007) literature review of acculturation and mental health just nine of the 79 studies reviewed explicitly included non-Latino White/Caucasian participants. In an attempt to shed light on this ethnic component of context, the means of the ethnic groups were ascertained. Analysis of the means of different groups in the current study cannot be definitive due to small ethnic and national group sizes but may provide an explanation for the lower levels of acculturative stress. The acculturative stress of participants who identified as non-Latino White/Caucasian (M = 32.57, *n* = 99) was lower than other major immigrant groups in the study such as Black (M = 36.33, *n* = 18), Hispanic/Latino non-Caucasian (M = 45.94, *n* = 31), and Asian (M = 36.04, *n* = 45). Therefore, in this sample the presence of a large percentage of non-Latino White/Caucasian participants lowered the overall sample mean for acculturative stress.

In reference to non-Latino White/Caucasian immigrants, Schwartz and colleagues (2010) point out that similar to ethnic minority immigrants, social context can be expected to affect the non-Latino White/Caucasian immigrant's acculturation and acculturative stress experiences. One such factor that was not accounted for in the current study is being a minority based on a non-ethnic dimension such as religion (e.g., Russian Jews) (Birman, Persky, & Chan, 2010). However, despite these factors, countries that have a traditionally dominant Caucasian or European culture (The World Factbook 2013-2014, 2013) displayed a lower degree of acculturative stress levels: Canadians (M =28.11, *n* = 18), German (M = 32.45, *n* = 11), and United Kingdom (M =35.05, *n* = 19). Out of these aforementioned countries one German and one United Kingdom resident

identified as non-Caucasian. Therefore, the ethnic and national composition of the sample likely also had an effect on the acculturative stress findings.

***Social Status*.** The sample in this study consisted of a highly U.S. acculturated group of individuals that made a minimum of $10,000 less in annual salary than the average American. The Subjective Social Status (SSS) (M = 3.53) levels in this study were lower than those found in other samples. This lower level of SSS is in line with the income level in the sample that was below the national average. Compared to the original study using this SSS scale (Adler et al., 2000), the mean in the current study is much lower than the 6.8 (SE = .12) SSS average found in Adler et al.'s sample of 157 non-Latina White women with an average income of $44,345. Similarly, the current sample's mean score was lower than the mean score of 5.88 found in a sample of 7,433 civil servants in England (Demakakos, et al, 2008). Thus, relative to non-immigrant samples in which this measure has been used, this sample revealed a low level of SSS.

When compared to other U.S. immigrant samples, the mean of the current study is still low. In comparison to the average SSS of 5.77 found in Asian immigrants (Leu et al., 2008) or the average SSS of 5.00 (SD= 1.78) found in 1,745 Mexican-origin individuals (Franzini & Fernandez-Esquer, 2006), the mean of the current study suggests that this sample is characterized by individuals with self-reported lower status. This finding of low status is particularly noteworthy when compared to the Mexican-origin individuals in the Franzini study, who were drawn from low-income areas that had a median income in the $15,000–$20,000 range. Considering that the Mexican-origin individuals in the Franzini and Fernandez-Esquer (2006) study reported lower income than the current study, it could be expected that the Mexican-origin individuals would

report lower levels of SSS than participants in the current study. However, this was not the case as the Mexican-origin individuals reported higher SSS than participants in the current study. The difference in SSS and income between the Franzini and Fernandez-Esquer (2006) study and the current study may be explained by the difference in comparison groups between the Franzini study and the current study.

Franzini and Fernandez-Esquer (2006) found that the reference groups varied in their participants based on level of acculturation, where less acculturated individuals compared themselves to Mexican individuals in Mexico and more acculturated individuals compared themselves to Mexicans in the U.S. or the general U.S. population. Participants in the Franzini and Fernandez-Esquer (2006) study, as a whole, rated themselves better off financially than Mexicans in Mexico and Mexican immigrants but also rated themselves worse off than "Anglo-Americans." This trend was also present in the current study in which participants rated their social status in their ethnic group higher (M = 5.25) compared to the U.S. in general (M = 3.53). In light of Franzini and Fernandez-Esquer (2006) reference group findings, the higher level of U.S. acculturation in the current study suggests that participants in this study may have been more likely to compare themselves to the general population than their ethnic group and thus endorsed lower overall SSS scores due to comparison to a reference group with higher perceived status.

Within the current study, when comparing the participants' ratings on the different items of subjective social status (e.g., overall status, community, income ranking, and ethnic group), the items correlated as expected. The responses of participants on the subjective status items also correlated with some objective measures

of status. Objective measures, on the other hand, did not correlate as consistently. In particular, of all the items (subjective and objective) formal education was associated with the fewest number of other status items. These correlations lend credibility to the body of research (Adler et al., 2000; Goodman et al., 2001; Ostrove et al., 2000; Singh-Manoux et al., 2003; Singh-Manoux et al., 2005) that indicates that subjective measures may be more accurate. Additionally, results from the current study indicate that the subjective items may be reflecting the same construct as a person's social position.

Of the subjective status items, the subjective rating of income correlated the most (9 of 11) with other social status items, suggesting that it is a valid indicator. This correlation with other items of social status can be interpreted as an encouraging indicator that subjective appraisal of income reflects the underlying construct of social status. Subjective income, however, demonstrated an inverse association with actual income. This inverse association is surprising but might be attributed to social comparison. Both Diener and colleagues (1999) and Rath and Harter (2010) pull from research spanning over 30 years to underscore that one's income is often only as satisfying as to whom it is compared. Rath and Harter (2010) coin this term the "comparison dilemma", perhaps the latest of many labels for the phenomenon. This sense of comparison could explain the inverse effect found in this sample notably comprised of roughly 20% who were part-time workers. Working full-time may have given participants a wealthier economic comparison group. Part-time workers may be predominantly exposed to other part-time workers or at least fewer high-income members of the workforce than the full-time participants. With an average income in the range of $30,000–$39,999, participants may have been in a social range where despite having a higher salary for the sample, they

were prone to still be dissatisfied with it. Specifically, despite being on the upper end of the income distribution of the sample, a participant may still be making considerably less than their chosen comparison group's average and perceive themselves lower on the social income ladder. Thus, the difference in subjective rating could be a result of different comparison groups; the higher income participants are comparing with a higher level comparison group and thus feel subjectively lower.

Relationship Between Acculturation, Acculturative Stress, and Quality of Life

The second aim of the study was to examine the potential association between acculturation, acculturative stress, and well-being in immigrants. The findings partially supported the hypothesis in the second aim that an association existed. Findings about acculturation are discussed first and acculturative stress is discussed subsequently.

Acculturation and Quality of Life. Acculturation to the U.S. was associated with participants' quality of life and psychological health. The findings here are aligned with other research. Shen and Takeuchi (2001) identified that higher levels of acculturation were associated with lower depressive symptoms in Chinese Americans. This finding of lower depressed mood in immigrants has been replicated in a variety of populations such as Latinas (Newcomb & Vargas Carmona, 2004; Vinuesa Thoman & Surin 2004), Vietnamese (Liebkind, & Jasinskaja-Lahti, 2000), and Koreans (Jang, Kim, & Chiriboga, 2005) among other populations. Similarly, Chu, Hudley, and Back (2003) and other researchers have found that higher levels of acculturation were related to lower stress symptoms. These studies represent a small sample of the larger body of research that aligns with the positive association found in the current study. As mentioned in the

literature review, high levels of acculturation have also been linked to poor psychological outcomes.

Acculturation levels have been associated with both positive and negative associations with mental health (Koneru, 2007). As a result of these complex findings and the similarity in the participants' levels of acculturation to the U.S and their ethnic culture, results must be interpreted with care. The association between acculturation and quality of life and psychological health found in this study may be explained by being acculturated to both dominant and ethnic cultures.

This bicultural explanation is supported by acculturation theory's concept of integration. Berry (2003) conceptualized integration as a stage of acculturation where both cultures were included by the individual. LaFromboise, Coleman, and Gerton (1993) emphasized bicultural competence based on the alternation model in which an individual "gains competence within 2 cultures without losing his or her cultural identity or having to choose one culture over the other" (p. 395). In both these and other theories, biculturalism is theorized to associate with desirable psychological adjustment. These bicultural or multidimensional acculturation theories are also supported by research. A meta-analysis of 83 manuscripts revealed biculturalism had a strong positive association with psychological and social adjustment (Nguyen, & Benet-Martínez, 2013). Viewed in this light, bicultural participants in this study would have been expected to be psychologically well adjusted.

This finding in a multi-ethnic sample that included participants from over 68 countries also may be cautiously interpreted as support for the positive association to biculturalism or multidimensional acculturation. Despite the participants' varied national

and cultural backgrounds, higher levels of acculturation to the U.S. were associated with increased quality of life and psychological health. In other words, this could be interpreted as it may be advantageous for individuals from a wide range of national backgrounds to be acculturated in bicultural.

The effect of time spent in the U.S. and the cross sectional nature of the study may have affected the findings. The longer term effect of acculturation cannot be determined in this study. The average length of time in the U.S. was longer than the first five to seven years found in the "Immigrant Paradox," where mental health of immigrants begins to deteriorate the longer they stay in the U.S. (Alegría et al., 2008). Additionally, as this is a cross sectional survey, it is unclear whether the levels of immigrant quality of life and psychological health have declined over their time in the U.S. to this point. Similarly, due to the cross sectional nature of the study it is not possible to determine if the association found in the study was linear over the duration of immigrant's time in the U.S. However, despite these limitations, in the current context of this sample increased acculturation was associated with positive mental health outcomes.

Acculturative Stress, Quality of Life, and Psychological Health. Quality of life is multidimensional and subsumes psychological health. Thus it is not surprising that both overall quality of life and the subdomain of psychological health were both associated with acculturative stress. Quality of Life in this study based on the WHO definition (Murphy et al. , 2000), encompasses psychological health and three other domains: physical health, social relationships, and environment.

Participants who had increased levels of acculturative stress reported a slightly poorer overall quality of life. Specifically, acculturative stress accounted for 7% of the

variance in the participant's quality of life. This finding joins the body of research that identifies acculturative stress as a negative influence on mental (Abdulrahim & Baker, 2009; Jibeen & Khalid, 2011; Mejía & McCarthy, 2010; Xu & Chi, 2012) and physical health (Lara et al. , 2012). In accordance with these other findings, the association identified in this study underscores that acculturative stress affects psychological health and quality of life.

The association between acculturative stress and psychological health was supported. Specifically, acculturative stress accounted for 17% of the variance in the psychological health of the immigrants. Psychological health in the study reflected a broad range of psychological functioning as defined by the WHOQOL-BREF (Murphy et al., 2000), which included positive feelings (e.g., hopefulness, joy, happiness, and peace), negative feelings (e.g., nervousness, anxiety, sadness, and guilt), body image, self-esteem, learning memory, and concentration. This association of increased acculturative stress with decreased psychological health means that participants with more acculturative stress reported experiencing a more negative affect, a less positive affect, and worse psychological functioning.

The association between acculturative stress and psychological health has been established by researchers in a variety of populations. For example, Thoman and Surís (2004) found associations with acculturative stress and psychological health in Hispanic psychiatric patients and, notably, Thoman, and Surís (2004) also found that acculturative stress accounted for a small amount (6%) of the variance in psychological health. Researchers using the identical acculturative stress and psychological health measures found a similar correlation (r = -.34, p<.001) in Haitian immigrants (Belizaire & Fuertes,

2011) in comparison to this sample (r = -.38, p<.001). While the findings were similar in the Beliazaire and Fuertes study (2011), the sample was not similar to the sample in this study, which contained only two Haitians and 13 other Caribbean-born participants. A replication of this finding from the Beliazaire and Fuertes study (2011) with a different population hints at a common theme of acculturative stress having a negative association with well-being in many immigrant populations.

The association of acculturative stress to negative psychological health in this current study also aligned with other research that found similar deleterious outcomes. For example, acculturative stress has been demonstrated to have a negative association with self-esteem (Geeraert & Demoulin, 2013; Kim, Hogge, & Salvisberg, 2014; Liebkind & Jasinskaja-Lahti, 2000). In a study on immigrant adolescents in Finland, acculturative stress was negatively associated with life satisfaction, sense of mastery, and self-esteem (Liebkind & Jasinskaja-Lahti, 2000) indicating that acculturative stress is associated with a dimunition of positive apparaisals of self. This dimunition of postive self-apprasial is linked to positive self-regard and stress appraisal. This link to stress appraisal will be discussed in the framework of the Lazarus and Folkman (1984) transactional theory of stress that posits self-appraisal affects a person's stress response. Thus the self-esteem acculturative stress association is likely bi-directional.

Acculturative stress has also been linked to increased depressed mood by a number of studies (Abdulrahim & Baker, 2009; Jibeen & Khalid, 2011; Mejía & McCarthy, 2010; Xu & Chi, 2012). Based on the consistency of negative outcomes such as depressed mood, anxiety, and worry being associated to acculturative stress, the connection to the negative end of the mental health spectrum is relatively clear.

However, the dearth of research and the partial support found in this study dictates that negative outcomes such as depressed mood may be more affected by acculturative stress than positive phenomena such as hopefulness or happiness. Thus, the association between acculturative stress and quality of life and/or poor mental health may be stronger than the association with well-being. Furthermore, the findings suggest that low levels of acculturative stress on their own are not enough to result in well-being. Instead the low levels of acculturative stress can be thought of as removing a roadblock to well-being but not necessarily fostering well-being.

Clinical, occupational, and educational settings must be aware of this potential deleterious effect of acculturative stress on immigrants and adjust policy/treatment accordingly. Policies such as encouraging assessment of psychological well-being of new immigrants, psycho education about acculturative stress, and making resources available should be considered. These findings and suggestions are not novel but emphasize the need for mental health workers to account for the role of acculturative stress in assessing, treating, and conceptualizing the experiences of immigrants. This need has been recognized and the American Psychological Association (2012) has provided a useful overview to guide mental health workers in acculturative stress and working with immigrants. This study adds relevance to the association of acculturative stress to the positive end of the mental health spectrum with the finding of the association with quality of life.

Acculturation, Acculturative Stress, Not Directly Related to Well-being. The association between acculturative stress, acculturation, and well-being was not supported by the analysis. The lack of association between well-being, acculturation, and

acculturative stress is difficult to reconcile and it is premature to speculate about non-significant associations. This finding is unexpected based on the significant associations with quality of life, which has been used interchangeable with well-being in past research. The low levels of acculturation and acculturative stress in the sample may have contributed to the lack of an effect on well-being in participants. This lack of an association between acculturation and well-being is also contrary to other studies (Yoon, 2012) that found a relationship. The lack of a significant association is, however, in line with the complex nature of the association between acculturation and mental health. For example, the largest portion (41%) of the reviewed studies that examined depression and acculturation revealed no association (Koneru, 2007). This complexity, typified by the acculturation depression relationship, does not explain the lack of significant association in this study; however, it places it within a context in which non-significant associations are common.

Social Status and Well-Being

The third and final aim of the study examined the data for the potential moderating role of Subjective Social Status (SSS). Results proved SSS to be a moderator of the effect of acculturative stress but not acculturation, thus supporting the first, but not the second, hypothesis of this aim. More specifically, for the first hypothesis SSS moderated the association of acculturative stress to well-being. However, for the second hypothesis, the analysis revealed that SSS did not moderate the association between quality of life and acculturation.

In regard to the non-significant moderation of the quality of life and acculturation association, the acculturation level of the participants may explain this lack of

significance. The participants were predominantly U.S. citizens and were not recent immigrants. The citizenship and long length of time spent in the U.S. may have diminished the salience of SSS and other factors in the acculturation process. In other words, immigrants that are more acculturated to the U.S. may have minimal levels of acculturation to be moderated. Thus, with acculturation being not salient, SSS may not be a significant moderator.

Despite acculturation potentially not having a meaningful effect, time in the U.S. may have influence the immigrant's appraisal of acculturative stressors as these acculturative stressors may continue regardless of the level of acculturation. For example, the acculturative stressors assessed in this study, such as "*People look down upon me if I practice customs of my culture,*" are more focused on the present than the acculturation items such as "*I have never learned to speak the language of my native country*" which may be less salient in immigrants who have spent many years acculturating. In other words, it is possible that acculturative stress can be daily events which are affected by stress appraisal. Acculturation, on the other hand, can be more latent and less discrete, and therefore less affected by appraisal. Williams and Berry (1991) point out that acculturation can be an experience underlying acculturative stress but the experience of stress is affected by a number of other factors such as the nature of the society, status, and social support. Acculturation, therefore as an underlying experience, could be latent or have less of a direct association as that found in the study's moderation analysis.

In regard to moderation of acculturative stress, the finding that SSS moderated well-being and trended towards moderating quality of life (p=.05) is the first time this

association has been established and is backed by theory. Thus, SSS can now enter the body of research as a valid variable in the understanding of acculturative stress. This finding that social status moderates the effect of acculturative stress on well-being is supported by general and specific theory. In general, in the transactional theory of stress Lazarus and Folkman (1984) stipulated that self-appraisal, including a person's social position, affects the stress response. More specifically, the concept of SSS affecting the stress appraisal has been thoroughly covered in the Fiske (2011) book. Similarly, Williams and Berry (1991) went further to identify socioeconomic status that affects acculturative stress as a moderator by affecting immigrants' cognitions about themselves.

The finding of SSS as a moderator of acculturative stress is also supported by the theory of the Padilla and Perez (2003) socio-cognitive model. The social identity and social cognition components of the Padilla and Perez (2003) socio-cognitive model stipulate that how immigrants appraise themselves and their context has an effect on their cognitions. A positive self-appraisal may have a positive effect on how stress is appraised and the consequent outcome. As such, the literature supports the current study's results that, when faced with acculturative stress, immigrants in this study who appraised their social status more positively were associated with slightly better levels of well-being. Thus SSS could be considered a protective factor if further research establishes a causal relationship.

Similarly, Lazarus and Folkman (1984), Padilla and Perez (2003), and Williams and Berry (1991) theories all align to underscore that a person's appraisal of his or her status affects how he or she reacts to acculturative stressors. This reaction to acculturative stress varies and could be positive, neutral, or negative. Berry (2005) went

on to posit that acculturative stress presents both positive and negative components for immigrants. In this sample, the moderating role of SSS indicates that an immigrant's positive perception of their social standing has a positive effect on how stress from immigrating affects his or her well-being.

The moderation of the acculturative stress to well-being association by SSS has not been published and is indirectly supported by a very small body research. The association between SSS and well-being has been demonstrated (Franzini & Fernandez-Esquer, 2006a; Gelatt, 2013; Leu et al., 2008; Nicklett & Burgard, 2009) in recent research. These studies confirm that SSS has an effect on well-being, but SSS has not been established as a moderator. Encouragingly, objective social status (SES) has been shown to mediate the acculturation to mental health in Chinese Americans (Shen & Takeuchi, 2001). Specifically, Shen and Takeuchi (2001) found that association of higher acculturation to lower depressive symptoms was mediated by SES. Therefore, if SES and SSS are measuring a similar construct, then it is reasonable to expect SSS to moderate the relationship with acculturation and possibly acculturative stress. Thus, the finding of SSS as a moderator in this study is not surprising based on comparable research.

If future research identifies a causal relationship, then the perceptions of social status can be included in interventions targeting immigrant well-being. Kraus, Côté, and Keltner (2010) produced short term changes in a participant's subjective sense of status by asking them to compare themselves to high or low status groups. These short-term changes provide evidence that a person's subjective appraisal is malleable and can be affected. Therefore, psychological interventions such as psychoeducation about social

status (including social comparison) should be explored to compliment other interventions such as those based in positive psychology. As with most cognitive therapies, it may be easier to change the person's perspective of a situation than alter the situation the person is in.

The moderating role of SSS in the association between acculturative stress and well-being also galvanizes the argument that both objective and subjective measurement and experience of status are important psychological factors. Objective status is commonly accepted as a meaningful variable in mental health outcomes studies (American Psychological Association Task Force on Socioeconomic Status, 2006; Marmot, 2004). These findings signify that SSS should be added as an alternate or complimentary variable in future research to explain its additional variance in mental health outcomes. This can be argued to be particularly necessary in populations such as this sample where perceptions of income and actual income do not align neatly.

The support in the current study for SSS as a moderator of and as a factor in the association between acculturative stress and well-being suggests that the intersection of factors that comprise subjective social status affect the trajectory of immigrants' mental health. The cognitive averaging of socioeconomic factors (Singh-Manoux et al., 2003) can be taken a step further in light of the correlation of the different dimensions of social status in this study. The association of items such as perceived social power, subjective income, and perceived community status can be tentatively considered part of the subjective status experience. This provides a scientific basis for further research on the individual dimensions of subjective social status, with the intent to identify the most salient factors. Understanding these factors of social status that affect immigrant

psychological health also move forward the social justice agenda highlighted by Smith (2008) in her book on psychology, poverty, and social exclusion. The findings of this study legitimize the emphasis of social justice scholars who state that social class (Smith, 2010) and social status (Fiske, 2011) are psychological and much more than objective indicators.

Limitations

This study sought to explore the acculturation, acculturative stress, and well-being of immigrants. This study also intended to explore the previously unexamined association between subjective social status and immigrant well-being. This study represents the first time that well-being and subjective social status have been explored with specific well-being variables and, as a result of the novelty, it has limitations. The quantitative and cross-sectional nature of the study does not allow for the establishment of causality.

The participant pool poses a number of limitations on the ability to answer further questions and to generalize the results outside the scope of the study. Specifically, selection bias represents a particular threat to the validity of this study. Despite the attempt to include a wide array of immigrants in the sample, recruitment and measurement were conducted in English. This may have limited the participation of immigrants who are not primarily English speakers. External validity similarly is threatened by the population, which was comprised of English-proficient, dominant-society, acculturated immigrants who had spent a long time in the United States.

The use of the crowd sourcing MTurk website posed a number of issues. The incentivized task-based website milieu meant that recruiting was not random.

Additionally, Internet recruiting hinders the ability to look at immigrants of the lowest financial status as the may be excluded by the basic technological hurdle of lack of access. However, the use of the Internet did facilitate getting a lower income range than the U.S. average which is a positive but, nonetheless, fails to capture the full socioeconomic spectrum. Thus, despite aiming to explore social status this study does not represent the extreme ends of socioeconomic status. In addition, despite validation checks, the anonymity of MTurk could foster disingenuous responses. MTurk is a website that attracts user who are motivated by profit. So while MTurk also has the advantage of making participants comfortable divulging information (Shapiro, Chandler, & Mueller, 2013), it could affect the validity of responses. However, this risk appears minimal based on the research indicating the MTurk provides an equally valid sample to college students (Buhrmester et al., 2011; Sprouse, 2011).

Similarly, the use of Internet means that participants are more likely to be swimming in the soup of globalization. Berry (2003) highlights that globalization results in increased cultural exchange which affects the individual through direct (individual) and indirect (group-level) changes. Internet access and potentially the Internet savvy enough to use MTurk disposed the participants in this study to have access to sources of multiple cultures through the Internet. This access to multiple cultures (potential acculturation sources) may have influenced their level of acculturation. For example, it is not uncommon for news/information sources such as Google news or Twitter to provide information from several countries on the same page without user input. Thus, rendering items such as *I regularly read an American newspaper* or *I regularly read magazines of my ethnic group* on the SMAS acculturation scale less meaningful. In sum the use of

MTurk and the Internet for recruiting meant the sample and format had legitimate, but acceptable drawbacks.

The measurement of well-being and subjective status in the current study also posed a number of limitations. The measurement of well-being had has the limitation that the I COPPE was presented with one less choice than the original I COPPE. This modification from the 11-rung ladder to a 10-rung ladder format limits this study's ability to reflect the original I COPPE measure. The similarity in format between subjective rank of social status and subjective rank of well-being appeared to be a potential threat due to the similarity of the subjective and ladder format of both the I COPPE and the SSS measures. However, the variation of responses and the lack of correlation between the subjective rating of well-being on the I COPPE and the subjective social status scales indicate that this was not a limitation of the study. Additionally, social status researchers have posited that social status is situation specific and not a stable psychological trait (Fiske, 2011). Therefore, social status may be experienced differently depending on the context of the social interaction. For example, an individual may feel lower in status when interacting with a higher-status individual than when interacting with a lower- or same-status individual. This study operated on the premise that social status was more of a trait than a state phenomenon. SSS is a relatively new research variable and empirical data is still being gathered to discern this and other considerations on the measure.

Finally, the acculturation measure in this study did not measure biculturalism or multidimensional cultural identities. In hindsight, based on the likelihood that the sample contained many of the bi- or multicultural individuals, a multidimensional measure would have been helpful. The findings of this study could have been strengthened by the use of

a specific multidimensional acculturation measure such as the Abbreviated Multidimensional Acculturation Scale (AMAS-ZABB) (Zea, Asner-Self, Birman, & Buki, 2003) or the Bicultural Identity Integration Scale – Version 1 (BIIS-1) (Benet-Martínez & Haritatos, 2005). Similarly, no measure in the study identified which population the participants compared themselves to when making their appraisals of status. Considering the findings of Yoon et. al.(2012) and Franzini and Fernandez-Esquer (2006a) understanding who is being compared is important but it becomes an even more important option in highly bicultural individuals, as they could conceivable compare to either culture or population.

Recommendations for Future Research

Based on the theoretical background and findings in this study, replication of this study should be carried out with other immigrant populations. Specifically, it would be informative to replicate this study with immigrants with higher levels of acculturative stress or lower levels of acculturation. As outlined in the literature review, the lower a person is on the social ladder, the more likely he or she is to live shorter, more mentally and psychically unhealthy lives. To further understand the role of subjective social status, future studies should be carried out in populations that better represent the entire socioeconomic range.

Participants demonstrated differences in the way they rated their status in the U.S. versus in the community. This difference warrants further investigation. Future research should examine to whom participants are comparing themselves and their social connectedness. Franzini and Fernandez-Esquer (2006a) have begun this line of research with their study on comparative subjective status measurement. Their work identified

that, depending on their acculturation level, Mexican–Americans in their sample used different reference points and criteria for social comparison. This understanding of who a person compares him- or herself to helps to complete the understanding of how a person subjectively appraises his or her social status.

Equally important to whom a person compares oneself is to, is whom he or she are socially connected. Social connectedness is defined as "a subjective sense of closeness and belonging to mainstream society and the ethnic community" (Yoon et al., 2012, p. 66). These authors have begun to investigate the role of social connectedness to mainstream or ethnic society as a factor in acculturation. In one of the few studies to examine acculturation and well-being with a specific measure, social connectedness was identified as a mediator of the relationship between acculturation and well-being (Yoon et. al., 2012). This concept is a natural complement to research exploring the social status in the community, as connectedness to an ethnic or mainstream group may illuminate acculturation levels and simultaneously may indicate which group a person is likely to compare themselves to.

Another difference in the way participants rated their status that warrants further investigation is their subjective rating of income. Subjective rating of income correlated with 9 of the 11 other items and represents an intriguing measure for further study. In this study, the association was an inverse one where higher objective income correlated with lower subjective appraisal of income. The income level in this sample was low and it is not clear if this negative association would remain if higher income brackets were included. However, when dealing with immigrants with wages below the U.S. mean, this difference in psychological impact of income versus actual income is meaningful. Thus,

this difference is worth remembering when researching or working clinically with immigrants around mental health, socioeconomic, or acculturative issues. These findings show that making the assumptions regarding what an immigrant's income level means to them could be inaccurate. Therefore, asking an individual how he or she feels about his or her financial state may be more meaningful than assumptions based on his or her occupation or ability to pay for services.

Demographic and economic changes in the U.S. make the use of SSS more compelling. Firstly, the shift away from European Americans as the ethnocultural majority in the U.S. slightly changes the connotations of minority status. Ethnic minority status is often a significant component of social status through self-perception (Fouad & Brown, 2000) and perception of how others perceive them (Fiske, 2002). Differential Status Identity (DSI) Theory states that a person's perceived standing is affected by race and ethnicity. Thus, changes in what it means to be an ethno-cultural minority affects the experience of social status. These changes in ethno-cultural minority status will impact both those in the cultural minority and those in the dominant culture. The widening income gap in the U.S. dictates that social comparison groups and potential social class boundaries will also change to reflect this evolving economic landscape. Combined with the association between economic disparity and well-being (Diener et al., 1999), SSS can reflect an averaging of both these factors in a similar way that it represents an averaging of SES factors (Singh-Manoux et al., 2003). In addition, a widening income gap means that social status and well-being will become a more significant psychological factor in the health of Americans.

Subjective social status research should be continued and may be particularly suited to capturing the psychological effects of status change due to widening economic gap, aging, globalization, and immigration. SSS may represent a more accurate measure of the intersection of the objective and the lived experience of the social hierarchy. Finally, it is worth undertaking longitudinal studies to understand the role subjective social status plays in the psychological impact of status changes in a world that is simultaneously shrinking and becoming more socially divided.

Conclusion

The findings of this study contribute to gaps in the research on SSS, acculturative stress, and well-being. The sample consisted of a diverse set of immigrants who were more acculturated to U.S. culture than to their own culture. Despite this level of acculturation both psychological health and quality of life were associated with acculturation and acculturative stress. Overall, the association between well-being and acculturative stress had a statistically stronger association to well-being than to acculturation. The findings help illuminate the complex nature of well-being in the acculturation process. SSS was confirmed to slightly moderate the association from acculturative stress to well-being. This finding furthers the evidence that SSS is a meaningful and relevant component of immigrant mental health. Thus, in the context of widening socioeconomic disparity, SSS can be considered a relevant factor in the immigrant experience.

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TABLES

Table 1

Definition of Key Terms

Key Terms	Definition
Social Class	A hierarchical division of groups or individuals dependent primarily on various economic or social conditions (Sullivan, Burke Johnson, Calkins Mercado, & Terry, 2009)
Subjective social status	A "cognitive averaging of standard markers of socioeconomic situation" (Singh-Manoux et al., 2003, p. 1) and a person's belief about their rank in the social order, independent of the objective status bestowed to them (Davis, 1956).
Socioeconomic standing (SES)	Index of social standing in comparison to large scale society or nation. Typically uses income, education, and occupation as indicators.
Perceived social position	Transient self-assignment to a location in the societal "stratosphere" in response to a query i.e., SSS is a trait characteristic while perceived social position is a temporary self-assessment.
Well-being	"well-being is a positive state of affairs, brought about by the simultaneous and balanced satisfaction of diverse objective and subjective needs of individuals, relationships, organizations, and communities"(Prilleltensky, 2012a, p. 2)

Table 2

Description of Measures

Aim	Measure	Publication	Construct	Scale	Psychometrics
1,2,3	Demographic Form	Ad Hoc form.	Demographic	Varied	none
1,2,3	Social Attitudinal Familial and Environmental Scale (SAFE)	(Padilla, Wagatsuma, & Lindholm, 1985)	Acculturation stress	10 items; 5-point Likert-type response format	Cronbach alpha = .94
1,2	Stephenson multigroup acculturation scale (SMAS)	(Stephenson, 2000)	Acculturation	30 Likert-type scale 4 point response format	Cronbach alpha = .86
2,3	Subjective Social Status	(Adler, 2000)	Subjective Social Status	2 items. 2 ladders (1 local, 1 national) where each rung represents ordinal rank of status.	Single item measure
2, 3	World Health Organization Quality of Life --BREF	(WHOQOL, 1991)	Physical health, psychological health, social relationships, and environment	26 items, 5-point Likert-type response format	Cronbach alphas'= .82, .75, .66, .80
2,3	Perceived Well-being (I COPPE)	(Prilleltensky et al., 2013)	Measures 7 domains of well-being	21-item 10 point sliding scale	

Table 3

Descriptive Statistics for the Sample (N = 201)

	n	%
Gender		
Female	83	41.3
Male	117	58.2
Transgender	1	.5
Income		
Below $10,000	31	15.4
$10,000 - $20,000	27	13.4
$20,000 - $29,999	34	16.9
$30,000 - $39,999	32	15.9
$40,000 - $49,999	31	15.4
$50,000 - $59,999	13	6.5
$60,000 - $69,999	12	6.0
$70,000 - $79,999	10	5.0
$80,000 - $89,999	3	1.5
$90,000 - $100,000	4	2.0
I prefer not to answer	2	1.0
Educational Attainment		
Less than High School	5	2.5
High school degree or equivalent	29	14.4
Some college but no degree	46	22.9
Associates Degree	24	11.9
Bachelor Degree	65	32.3
Master's Degree	25	12.4
Professional Degree	4	2.0
Doctorate Degree	3	1.5

	n	%
Time in the US		
Under 4 years	19	9.5
5-7 years	34	16.9
8-11 years	45	22.4
12-15 years	37	18.4
16 - 19 years	14	7.0
20 - 23 years	16	8.0
24 - 27 years	8	4.0
28-31 years	5	2.5
32 or more years	23	11.4
Current work status		
Working, full time	128	63.7
Working, part time	40	19.9
Not working	33	16.4
Immigration Status		
U.S. Citizen	133	66.2
Permanent Resident	58	28.9
H Visa	5	2.5
F Visa	2	1
Other	3	1.5

Table 4

Descriptive Statistics of the Racial Categories with which Participants Identified (N = 201)

Racial Category	*n*	%
White/Caucasian	101	50.2
African American	20	10.2
Hispanic/Latino, non caucasian	32	15.9
Asian	46	22.9
Native American	1	.5
Pacific Islander	0	0
Other	5	2.5

Table 5

Psychometric Properties of Major Study Variables

Aim	Variable	*n*	*M*	*SD*	α	Potential Range	Actual	Skew	Kurtosis
1,2,3	WHO psychological	194	65.65	18.86	.87	4.17-100	4-100	-.64	.184
1,2,3	Acculturation SMAS DSI	196	3.30	0.44	.86	1.8-3.93	1-5	-0.77	-0.02
1,2,3	Well-being I COPPE.	190	5.01	1.98	.87	1-11	1-11	.342	-.402
1,2,3	Acculturative Stress SAFE	195	36.65	20.78	.94	1-120	24-103	.66	.12
1,3	Subjective Social Status	197	3.53	2.16		1-10	1-10	.69	-.02

Table 6

Correlation Matrix for Study Variables

	1	2	3	4	5
Subjective Social Status	--				
I COPPE well-being	.356**	--			
WHO Psychological	-.123	.082	--		
SMAS Acculturation	-.196**	.072	.288**	--	
SAFE Acculturative Stress	.139	.05	-.327**	-.462**	--

*p <.05 level. **p <.001 level.

Table 7

Correlation Matrix for Subjective Status Items

Subjective Social Status	1	2	3	4	5	6	7
United States	--						
Community	.405**	--					
Social Power	.287**	.243**	--				
Income	-.052	-.162*	.182*	--			
Home country	.258**	.258**	.081	-.187**	--		
Family	.351**	.306**	.204**	-.177*	.534**	--	
Ethnicity	.061	-.113	.102	.350**	-.158*	-.167*	--

*p <.05 level. **p <.001 level.

Table 8

Linear Regression Analysis Predicting Psychological Well-being from Acculturation and Acculturative Stress

Psychological Well-being Predictor				Confidence Interval	
WHO Psychological	ΔR^2	*b*	*R*	Low	High
Acculturation	.083**	12.	.288	6.608	18.380
Acculturative Stress	.103**	-.297**	.327	-.419	-.175
WHO Quality of Life					
Acculturation	.028*	.299	.167	.05	.549
Acculturative Stress	.079**	-.011**	-.28	-.016	-.005
I COPPE now					
Acculturation	.005	.325	.072	-.315	.064
Acculturative Stress	.003	.005	.05	-.009	.018
n	194				

*p <.05 level. **p <.001 level.

Table 9

Linear Regression Analysis Subjective Social Status Moderating Acculturation and Psychological Well-being.

Psychological Well-being				
	Well-being		Quality of life	
Predictor	ΔR^2	*b*	ΔR^2	*b*
Step 1	.037*		.148**	
Acculturation		.148		.147**
Subjective social status		.-099		.385**
Step2	.00		.006	
Acculturation		.145		.162
Subjective social status		-.098		.376
Subjective social status x acculturation		.013		-.07
Total R^2	.037		.154	
n	195		194	

*p <.05 level. **p <.001 level.

Table 10

Linear Regression Analysis Subjective Social Status Moderating Acculturative Stress and Psychological Well-being

Psychological Well-being				
	Well-being		Quality of life	
Predictor	ΔR^2	*b*	ΔR^2	*B*
Step 1	.13**		.086**	
Acculturative stress		.001		-.27*
Subjective social status		.356**		-.08
Step 2	.02*		.018 (p=.05)	
Acculturative stress		-.022		-.25
Subjective social status		.326**		-.05
Subjective social status x Acculturative stress		.14*		-.139
Total R^2	.15		.104	
n	195		194	

*p <.05 level. **p <.001 level.

APPENDICES

Appendix A: Recruitment E-mail

Dear Prospective Participant:

This is an invitation to participate in my research study on the role of immigration, social status and well-being. My name is Darren Bernal; I am currently a completing my doctoral studies in Counseling Psychology at the University of Miami. I am recruiting individuals who have immigrated to the United States to participate in an online survey. The web-survey is expected to take 18 to 24 minutes to complete. The web-survey will include measures that assess: a) psychological health b) acculturation, c) psychological well-being and d) social status

To participate in this study you must be) above the age of 18 2) have been born outside of the United States and 3) have spent less than 75% of your life in the United States. If you chose to participate in this study, can receive compensation of $2.00 through Mechanical Turk or you can bypass Mechanical Turk and go directly to the survey at http://umiami.qualtrics.com/.

The proposed study is non-intrusive survey that does not pose any additional risk than may be encountered in daily conversation regarding mental health. The study is be approved by the University of Miami Institutional Review Board

If you wish to learn more about the study please contact Darren Bernal at d.bernal@umiami.edu 202.549.9509 or Dr. Guerda Nicolas at nguerda@miami.edu.

Thank you in advance for your time and efforts.
Warm Regards,

Darren Bernal, MA
Doctoral Candidate

Appendix B: Demographic Measure

Please respond to the following questions.
Age: _____

Gender/Sex:

- ☐ Female
- ☐ Male
- ☐ Transgender

What country do you currently reside in?
Select One
How long have you been you resided in your current country? _____ year(s)

What country were you born in?
Select one

What is your primary preferred language?
Select one

How proficient are you at speaking and understanding English? On a scale of 1-10 with 10 being completely proficient and 1 being very little English language skills.

What is your relationship status?

☐ Single, never married
☐ Cohabitating
☐ Domestic Partnership
☐ Married
☐ Separated
☐ Divorced
☐ Widowed

What is the highest degree or level of school you have completed? If currently enrolled, mark the previous grade or highest degree received.

☐ Did not complete high school
☐High School Graduate or the equivalent (e.g. GED)
☐ Some College
☐ Associate Degree (e.g. AA, AS)
☐ Bachelor's Degree (e.g. BA, AB, BS)
☐Master's degree (e.g. MA, MS, MEng, MEd, MSW, MBA)
☐ Professional degree (e.g. MD, DDS, DVM, LLB, JD)
☐ Doctorate degree (e.g. PhD, EdD)

What is your current work status?

☐ Working, full time
☐ Work, part time.
☐ Not working

What is your total household income?

☐ I do not have an income
☐ Less than $10,000
☐ $10,000 to $19,999
☐ $20,000 to $29,999
☐ $30,000 to $39,999
☐ $40,000 to $49,999
☐ $50,000 to $59,999
☐ $60,000 to $69,999
☐ $70,000 to $79,999
☐ $80,000 to $89,999
☐ $90,000 to $99,999
☐ $100,000 or more

Your Ethnicity: Check all that Apply

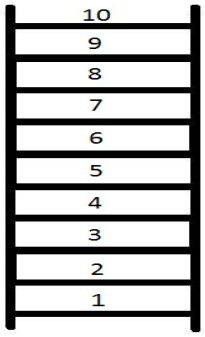
☐ Black including African American, Caribbean, Haitian, African, and others
(Please specify: _____)
☐ Asian or Asian American, including Chinese, Japanese, and others
(Please specify: _____)
☐ Hispanic or Latino, including Cuban, Mexican, and others
(Please specify: _____)
☐ White, Caucasian, Anglo, European American, not Hispanic
(Please specify: _____)
☐ Pacific Islander including Tongan, Samoan, and others
(Please specify: _____)
☐ Other
(Please specify: _____)

Citizenship status

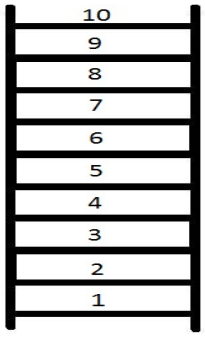
(1) American citizen (2) Permanent resident (3) Other

Appendix C: I COPPE

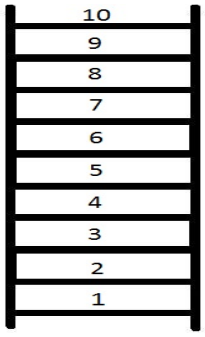
On the vertical scale below, the top number ten represents the best your life can be. The bottom number zero represents the worst your life can be. When it comes to the best possible life for you, on which number 0 (worst) to 10 (best) do you stand now?



When it comes to the best possible life for you, on which number 0 (worst) to 10 (best) did you stand a year ago?

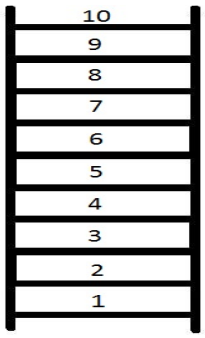


When it comes to the best possible life for you, on which number 0 (worst) to 10 (best) do you think you will stand a year from now?

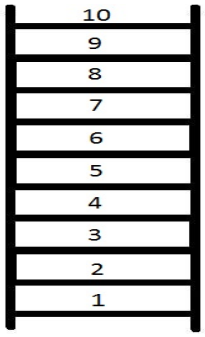


On the vertical scale below, the top number ten represents the best your life can be. The bottom number zero represents the worst your life can be. When it comes to relationship

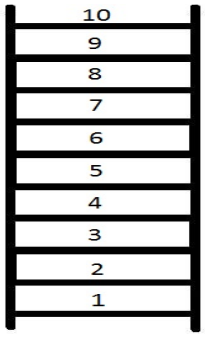
with important people in your life, on which number 0 (worst) to 10 (best) do you stand now?



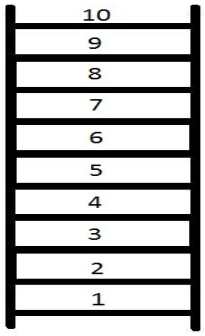
When it comes to relationships with important people in your life, on which number 0 (worst) to 10 (best) did you stand a year ago?



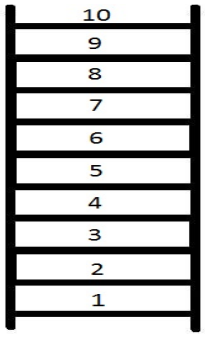
When it comes to relationships with important people in your life, on which number 0 (worst) to 10 (best) do you think you will stand a year from now?



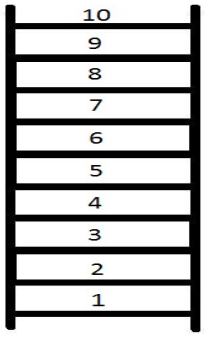
On the vertical scale below, the top number ten represents the best your life can be. The bottom number zero represents the worst your life can be. When it comes to the community where you live, on which number 0 (worst) to 10 (best) do you stand now?



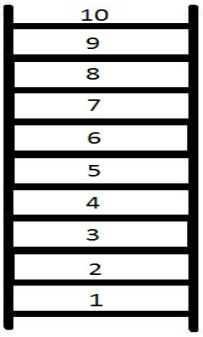
When it comes to the community where you live, on which number 0 (worst) to 10 (best) did you stand a year ago?



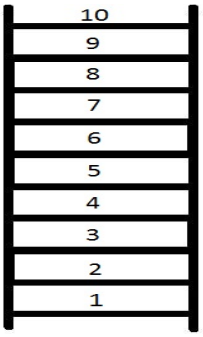
When it comes to the community where you live, on which number 0 (worst) to 10 (best) do you think you will stand a year from now?



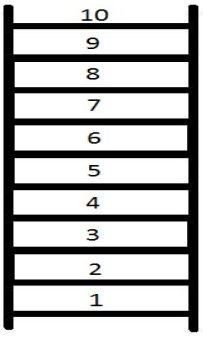
On the vertical scale below, the top number ten represents the best your life can be. The bottom number zero represents the worst your life can be. When it comes to your main occupation (employed, self-employed, volunteer, stay at home), on which number do you stand now?



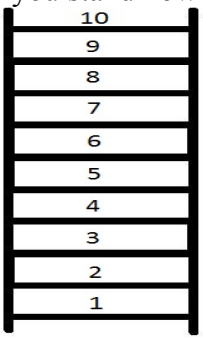
When it comes to your main occupation (employed, self-employed, volunteer, stay at home), on which number did you stand a year ago?



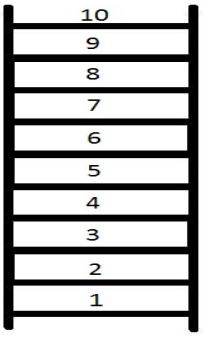
When it comes to your main occupation (employed, self-employed, volunteer, stay at home), on which number do you think you will stand a year from now?



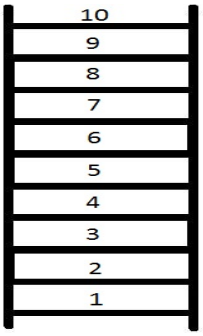
On the vertical scale below, the top number ten represents the best your life can be. The bottom number zero represents the worst your life can be. When it comes to your physical health, on which number do you stand now?



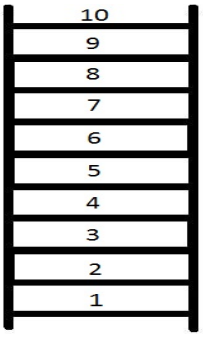
When it comes to your physical health, on which number did you stand a year ago?



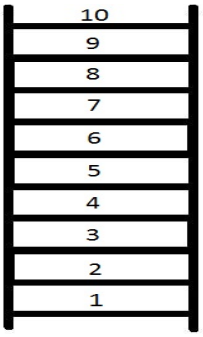
When it comes to your physical health, on which number do you think you will stand a year from now?



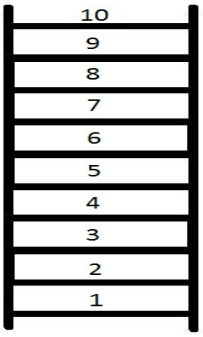
On the vertical scale below, the top number ten represents the best your life can be. The bottom number zero represents the worst your life can be. When it comes to your emotional and psychological well-being, on which number 0 (worst) to 10 (best) do you stand now?



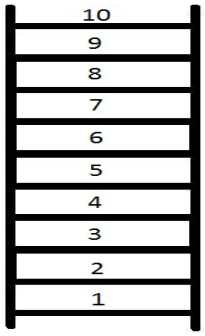
When it comes to your emotional and psychological well-being, on which number did you stand a year ago?



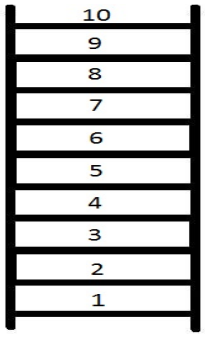
When it comes to your emotional and psychological well-being, on which number do you think you will stand a year from now?



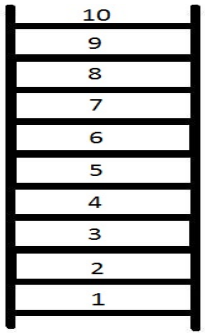
On the vertical scale below, the top number ten represents the best your life can be. The bottom number zero represents the worst your life can be. When it comes to your economic situation, on which number 0 (worst) to 10 (best) do you stand now?



When it comes to your economic situation, on which number did you stand a year ago?



When it comes to your economic situation, on which number do you think you will stand a year from now?



Appendix D: Social Attitudinal Familial and Environmental Scale (SAFE)

(Mena et al., 1987)

Below are a number of statements that might be seen as stressful. For each statement that you have experienced, circle only one of the following numbers (1, 2, 3, 4, or 5), according to how stressful you find the situation.

If the statement does not apply to you, circle number

0 = have not experienced

1 = not at all stressful

2 = somewhat stressful

3 = moderately stressful

4 = very stressful

5 = extremely stressful

Statements

1. I feel uncomfortable when others make jokes about or put down people of my ethnic background. 0 1 2 3 4 5
2. I have more barriers to overcome than most people. 0 1 2 3 4 5
3. It bothers me that family members I am close to do not understand my new values. 0 1 2 3 4 5
4. Close family members have different expectations about my future than I do. 0 1 2 3 4 5
5. It is hard to express to my friends how I really feel. 0 1 2 3 4 5
6. My family does not want me to move away but I would like to. 0 1 2 3 4 5

7. It bothers me to think that so many people use drugs. 0 1 2 3 4 5

8. It bothers me that I cannot be with my family. 0 1 2 3 4 5

9. In looking for a good job, I sometimes feel that my ethnicity is a limitation. 0 1 2 3 4 5

10. I don't have any close friends. 0 1 2 3 4 5

11. Many people have stereotypes about my culture or ethnic group and treat me as if they are true……0 1 2 3 4 5

12. I don't feel at home. 0 1 2 3 4 5

13. People think I am unsociable when in fact I have trouble communicating in English. . . . . …… 0 1 2 3 4 5

14. I often feel that people actively try to stop me from advancing. 0 1 2 3 4 5

15. It bothers me when people pressure me to become part of the main culture 0 1 2 3 4 5

16. I often feel ignored by people who are supposed to assist me. . . . . …0 1 2 3 4 5

17. Because I am different I do not get the credit for the work I do. 0 1 2 3 4 5

18. I bothers me that I have an accent. 0 1 2 3 4 5

19. Loosening the ties with my country is difficult. 0 1 2 3 4 5

20. I often think about my cultural background. 0 1 2 3 4 5

21. Because of my ethnic background, I feel that others often exclude me from participating in their activities. 0 1 2 3 4 5

22. It is difficult for me to "show off" my family. 0 1 2 3 4 5

23. People look down upon me if I practice customs of my culture. 0 1 2 3 4 5

24. I have trouble understanding others when they speak. 0 1 2 3 4 5

Appendix E: Stephenson Multigroup Acculturation Scale (SMAS)

(Stephenson, 2000)

Below are a number of statements that evaluate changes that occur when people interact with others of different cultures or ethnic groups. For questions that refer to "COUNTRY OF ORIGIN" or "NATIVE COUNTRY," please refer to the country from which your family originally came. For questions referring to "NATIVE LANGUAGE," please refer to the language spoken where your family originally came.

Circle the answer that best matches your response to each statement

1. I understand English, but I'm not fluent in English.
   False Partly false Partly true True

2. I am informed about current affairs in the United States.
   False Partly false Partly true True

3. I speak my native language with my friends and acquaintances from my country of origin.
   False Partly false Partly true True

4. I have never learned to speak the language of my native country.
   False Partly false Partly true True

5. I feel totally comfortable with (Anglo)American people.
   False Partly false Partly true True

6. I eat traditional foods from my native culture.
   False Partly false Partly true True

7. I have many (Anglo)American acquaintances.
   False Partly false Partly true True

8. I feel comfortable speaking my native language.
   False Partly false Partly true True

9. 1 am informed about current affairs in my native country.
   False Partly false Partly true True

10. I know how to read and write in my native language.

False Partly false Partly true True

11. I feel at home in the United States.
False Partly false Partly true True

12. I attend social functions with people from my native country.
False Partly false Partly true True

13. I feel accepted by (Anglo) Americans.
False Partly false Partly true True

14. I speak my native language at home.
False Partly false Partly true True

15. I regularly read magazines of my ethnic group.
False Partly false Partly true True

16. I know how to speak my native language.
False Partly false Partly true True

17. I know how to prepare (Anglo) American foods.
False Partly false Partly true True

18. I am familiar with the history of my native country.
False Partly false Partly true True

19. I regularly read an American newspaper.
False Partly false Partly true True

20. I like to listen to music of my ethnic group.
False Partly false Partly true True

21. I like to speak my native language.
False Partly false Partly true True

22. I feel comfortable speaking English.
False Partly false Partly true True

23. I speak English at home.
False Partly false Partly true True

24. I speak my native language with my spouse or partner.
False Partly false Partly true True

25. When I pray, I use my native language.
False Partly false Partly true True

26. I attend social functions with (Anglo) American people.
False Partly false Partly true True

27. I think in my native language.
False Partly false Partly true True

28. I stay in close contact with family members and relatives in my native country.
False Partly false Partly true True

29. I am familiar with important people in American history.
False Partly false Partly true True

30. I think in English.
False Partly false Partly true True

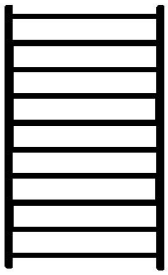
31. I speak English with my spouse or partner.
False Partly false Partly true True

32. I like to eat American foods.
False Partly false Partly true True

Appendix F: Subjective Social Status

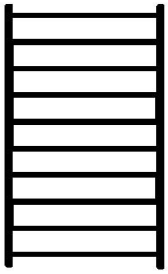
*Think of this ladder as representing where people stand in the **United States**. At the top of the ladder are the people who are the best off—those who have the most money, the most education, and the most respected jobs. At the bottom are the people who are worst off—who have the least money, least education, and the least respected jobs or no job. The higher up you are on this ladder, the closer you are to the people at the very top and the lower you are, the closer you are to the people at the very bottom.*

Place an *X* on the rung that best represents where you stand on the ladder.



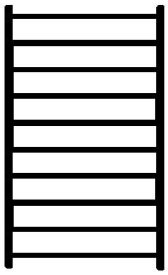
*Think of this ladder as representing where people stand in your **Ethnic group in the United States**. At the top of the ladder are the people who are the best off—those who have the most money, the most education, and the most respected jobs. At the bottom are the people who are worst off—who have the least money, least education, and the least respected jobs or no job. The higher up you are on this ladder, the closer you are to the people at the very top and the lower you are, the closer you are to the people at the very bottom.*

Place an *X* on the rung that best represents where you stand on the ladder.



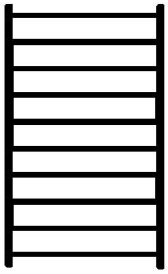
*Think of this ladder as representing where people stand in the United States as separated by **income**. The higher up you are on this ladder, the closer you are to the people at the very top and the lower you are, the closer you are to the people at the very bottom.*

Place an *X* on the rung that best represents where you stand on the ladder.



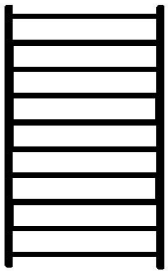
*Think of this ladder as representing where people stand in the United States as separated by **education**. The higher up you are on this ladder, the closer you are to the people at the very top and the lower you are, the closer you are to the people at the very bottom.*

Place an *X* on the rung that best represents where you stand on the ladder.



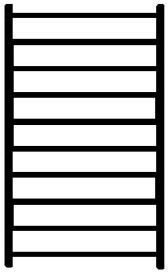
Think of this ladder as representing where people stand in the United States as separated by ***social power (the ability to get things accomplished and influence people).*** *The higher up you are on this ladder, the closer you are to the people at the very top and the lower you are, the closer you are to the people at the very bottom.*

Place an *X* on the rung that best represents where you stand on the ladder.



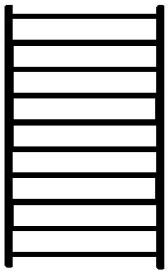
Think of this ladder as representing where people stand in the ***native country****. The higher up you are on this ladder, the closer you are to the people at the very top and the lower you are, the closer you are to the people at the very bottom.*

Place an *X* on the rung that best represents where you currently stand on the ladder.



*Think of this ladder as representing where people stand in your **native country**. The higher up you are on this ladder, the closer you are to the people at the very top and the lower you are, the closer you are to the people at the very bottom.*

Place an *X* on the rung that best represents where your family currently stands on the ladder.



Appendix G: World Health Organization Quality of Life – BREF

The following questions ask how you feel about your quality of life, health, or other areas of your life. I will read out each question to you, along with the response options. Please choose the answer that appears most appropriate. If you are unsure about which response to give to a question, the first response you think of is often the best one.

Please keep in mind your standards, hopes, pleasures and concerns. We ask that you think about your life in the last four weeks.

1. How would you rate your quality of life?

Very poor	Poor	Neither poor nor good	Good	Very Good
1	2	3	4	5

2. How satisfied are you with your health?

Very dissatisfied	Dissatisfied	Neither satisfied or dissatisfied	Satisfied	Very satisfied
1	2	3	4	5

The following questions ask about how much you have experienced certain things in the last four

3. To what extent do you feel that physical pain prevents you from doing what you need to do?

Not at all	A little	A moderate amount	Very much	An extreme amount
5	4	3	2	1

4. How much do you need any medical treatment to function in your daily life?

Not at all	A little	A moderate amount	Very much	An extreme amount
5	4	3	2	1

5. How much do you enjoy life?

Not at all	A little	A moderate amount	Very much	An extreme amount
1	2	3	4	5

6. To what extent do you feel your life to be meaningful?

Not at all	A little	A moderate amount	Very much	An extreme amount
1	2	3	4	5

7. How well are you able to concentrate?

Not at all	A little	A moderate amount	Very much	Extremely
1	2	3	4	5

8. How safe do you feel in your daily life?

Not at all	A little	A moderate amount	Very much	Extremely
1	2	3	4	5

9. How healthy is your physical environment?

Not at all	A little	A moderate amount	Very much	Extremely
1	2	3	4	5

The following questions ask about how completely you experience or were able to do certain
things in the last four weeks.

10. Do you have enough energy for everyday life?

Not at all	A little	A moderate amount	Mostly	Completely
1	2	3	4	5

11. Are you able to accept your bodily appearance?

Not at all	A little	A moderate amount	Mostly	Completely

1	2	3	4	5

12. Have you enough money to meet your needs?

Not at all	A little	A moderate amount	Mostly	Completely
1	2	3	4	5

13. How available to you is the information that you need in your day-to-day life?

Not at all	A little	A moderate amount	Mostly	Completely
1	2	3	4	5

14. To what extent do you have the opportunity for leisure activities?

Not at all	A little	A moderate amount	Mostly	Completely
1	2	3	4	5

15. How well are you able to get around?

Very poor	Poor	Neither poor nor good	Good	Very Good
1	2	3	4	5

16. How satisfied are you with your sleep?

Very dissatisfied	Dissatisfied	Neither satisfied or dissatisfied	Satisfied	Very satisfied
1	2	3	4	5

17. How satisfied are you with your ability to perform your daily living activities?

Very dissatisfied	Dissatisfied	Neither satisfied or dissatisfied	Satisfied	Very satisfied
1	2	3	4	5

18. How satisfied are you with your capacity for work?

Very dissatisfied	Dissatisfied	Neither satisfied or dissatisfied	Satisfied	Very satisfied

1	2	3	4	5

19. How satisfied are you with yourself?

Very dissatisfied	Dissatisfied	Neither satisfied or dissatisfied	Satisfied	Very satisfied
1	2	3	4	5

20. How satisfied are you with your personal relationships?

Very dissatisfied	Dissatisfied	Neither satisfied or dissatisfied	Satisfied	Very satisfied
1	2	3	4	5

21. How satisfied are you with your sex life?

Very dissatisfied	Dissatisfied	Neither satisfied or dissatisfied	Satisfied	Very satisfied
1	2	3	4	5

22. How satisfied are you with the support you get from your friends?

Very dissatisfied	Dissatisfied	Neither satisfied or dissatisfied	Satisfied	Very satisfied
1	2	3	4	5

23. How satisfied are you with the conditions of your living place?

Very dissatisfied	Dissatisfied	Neither satisfied or dissatisfied	Satisfied	Very satisfied
1	2	3	4	5

24. How satisfied are you with your access to health services?

Very dissatisfied	Dissatisfied	Neither satisfied or dissatisfied	Satisfied	Very satisfied

1	2	3	4	5

25. How satisfied are you with your transport?

Very dissatisfied	Dissatisfied	Neither satisfied or dissatisfied	Satisfied	Very satisfied
1	2	3	4	5

The following question refers to how often you have felt or experienced certain things in the last four weeks.

26. How often do you have negative feelings such as blue mood, despair, anxiety, depression?

Never	Seldom	Quite Often	Very Often	Always
5	4	3	2	1