FROM DISCRIMINATION TO ACTION:
UNDERSTANDING EMPOWERMENT IN THE DEAF COMMUNITY

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ABSTRACT

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Although deafness is traditionally conceptualized as a medical problem or disability, about 500,000 deaf people in the United States identify as members of an ethnon-linguistic minority that takes pride in being Deaf. Previous research suggests that D/deaf people face considerable discrimination and take action to empower their community. In the present empirical study, Deaf and hard of hearing adults (N=175) completed an online questionnaire to share their views of their D/deaf identity and their experiences with discrimination and empowered action. The present study proposed and tested a conceptual model in which identifying with the Deaf community directly contributes to taking action to better the situation of Deaf and hard of hearing individuals, and this direct relationship is mediated by perceiving discrimination against the group and experiencing emotional upset from that discrimination (affective group relative deprivation). Study results suggest Deaf individuals report taking action to empower the Deaf community and that their reports of motivation for empowered action varied by their endorsement of Deaf group identity. For individuals identifying completely with the Deaf community, experiencing discrimination and affective group relative deprivation motivated their action to empower their group, as suggested by the proposed model. However, for individuals who identify as bicultural (identifying with the Deaf and hearing worlds) discrimination and affective group relative deprivation were not mediating factors. Participants’ endorsement of experiencing group-level discrimination and affective relative deprivation are presented. Implications of focusing on various types of Deaf identity and implications of community level empowerment strategies for the Deaf community are discussed.
This dissertation is dedicated to all who work for social justice.
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TABLE OF CONTENTS

INTRODUCTION ................................................................................................................. 1

Group Identity............................................................................................................ 3

Discrimination............................................................................................................. 7

Relative Deprivation .................................................................................................. 10

Empowerment ............................................................................................................ 15

Summary ............................................................................................................ 18

Present Study ............................................................................................................ 20

METHOD .............................................................................................................................. 22

Participants ............................................................................................................ 22

Measures ............................................................................................................ 24

Procedure ............................................................................................................ 28

RESULTS .............................................................................................................................. 29

Data Analysis Procedures .......................................................................................... 29

Descriptive Statistics .................................................................................................. 31

Preliminary Analysis .................................................................................................. 37

Testing a Mediation Model ......................................................................................... 40

DISCUSSION ........................................................................................................................ 52

Group Identity ............................................................................................................ 53

Discrimination ........................................................................................................... 55

Group Affective Relative Deprivation ....................................................................... 58

Empowerment and Group Identity .......................................................................... 61
## LIST OF FIGURES/TABLES

<table>
<thead>
<tr>
<th>Figure/Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Figure 1: Theoretical Model (Hypotheses 1-4)</td>
<td>19</td>
</tr>
<tr>
<td>2 Table 1. General Demographics</td>
<td>41</td>
</tr>
<tr>
<td>3 Table 2. Deaf Demographics</td>
<td>43</td>
</tr>
<tr>
<td>4 Table 3. Correlations Among DAS-M and DIDS Measures</td>
<td>44</td>
</tr>
<tr>
<td>5 Table 4. Correlations Among Discrimination Variables and Empowerment</td>
<td>45</td>
</tr>
<tr>
<td>6 Table 5. Impact of Discrimination, Affective RD, Bicultural and Immersion Identities on Action for Community Empowerment</td>
<td>46</td>
</tr>
</tbody>
</table>
INTRODUCTION

An estimated 35 million people in the United States are considered deaf or hard of hearing (National Center for Health Statistics, 1997-2004 in Mitchell, 2005). As a group, deaf people in the United States have a historical legacy of marginalization, inadequate schooling, and unjust treatment (Ladd, 2003) and continue to face discrimination in the areas of housing, employment, and education (U.S. Department of Housing and Urban Development, 2005; Cornell Employment and Disability Institute, 2008). In their daily lives, deaf people frequently must cope with negative and stereotyped attitudes held by hearing people (Nikolaraizi & Makri, 2004). Socially constructed meanings of deafness emphasize disability, loss, and limitation (Lane, 2002). Surgical solutions, such as cochlear implants that carry significant medical risks, are frequently advanced as preferred treatments for deafness (Valente, Hosford-Dunn, & Roeser, 2008).

Despite this view of deafness as medical disorder or disability, roughly half a million people in the United States view deafness primarily from a cultural framework (Lane, 2005). These people do not consider themselves disabled, but rather identify as members of an ethno-linguistic minority that takes pride in being Deaf (De Clerck, 2007). In fact, many writers in the field, including the present authors, use the convention of Deaf with a capital ‘D’ to refer to issues of cultural identity among this population, and deaf with a small ‘d’ to refer specifically to a lack of hearing (Padden & Humphries, 1988). Previous ethnographic studies have examined issues of D/deaf identity (De Clerck, 2010) and depicted life in a Deaf community (Groce, 1985). However, little is known about the role of Deaf identity as a factor in
understanding how D/deaf people take empowered action against discrimination faced by this marginalized group.

Research done on groups that are marginalized based on race (Sellers & Shelton, 2003; Sue, Bucceri, Lin, Nadal, & Torino, 2007), immigrant status (Grant, 2008), or physical appearance (Jetten, Branscombe, Schmitt, & Spears, 2001) suggests that higher levels of group identification are associated with greater perceptions of discrimination against that group. Additionally, research on disadvantage and social action has examined affective group relative deprivation, a condition in which a marginalized group feels unfairly mistreated in comparison to other groups. Studies have found that, compared with members who do not experience affective group relative deprivation, those group members who do are increasingly likely to engage in collective action to better their group’s situation (Grant & Brown, 1995; Major, 1994; Smith & Ortiz, 2002).

The present study attempts to synthesize research regarding partial pathways between the constructs of group identity, discrimination, relative deprivation, and action to empower one’s marginalized group. Further, the present study applies these findings to the D/deaf population to assess the impact of Deaf group identification on experiences of discrimination and actions to empower D/deaf people as a group. To provide a framework for the present study, a literature review is presented detailing research and theory in the areas of group identity, perceiving and emotionally reacting to discrimination, and community level empowerment. Particular attention is given to theories and studies about relationships between group identification, perceived discrimination, and affective relative deprivation as they relate to social action to improve the treatment of deaf people.
Group Identity

Group identity is defined as “that part of the individuals’ self-concept which derives from their knowledge of their membership in a social group (or groups) together with the value and emotional significance of that membership” (Tajfel 1981, p. 255, as cited in Tajfel, 1982). Group identity is an important concept as it has been found to relate to the perception of discrimination (Operario & Fiske, 2001; Grant, 2008; Sellars & Shelton, 2003) and indirectly to action for group betterment (Klandermans, 1997; Stürmer & Simon, 2004; Van Zomeren, Postmes, & Spears, 2008; Van Zomeren, Spears, & Leach, 2008).

Research and theory indicate that strength of group identity is positively associated with perceiving discrimination against oneself and one’s group (Operario & Fiske, 2001; Grant, 2008; Sellars & Shelton, 2003). For example, Operario and Fiske (2001) conducted a study with 111 Black, Latino and Asian American undergraduate students. These researchers found through a questionnaire administered to the students that those participants who identified more strongly with their ethnic group reported more personal and group-level discrimination. In a second study, Operario and Fiske (2001) placed 54 Black, Latino and Asian undergraduate participants, one at a time, in a situation with a White confederate. This confederate either exhibited clear or ambiguous prejudice toward the participant. Researchers found that participants who identified highly with their racial group were more likely to identify the ambiguous prejudice they encountered in the experiment as discrimination compared to participants who did not identify highly with their racial group. From this research, Operario and Fiske proposed a theory in which perceiving discrimination leads to increased group identification, and that this identification increases sensitivity to perceiving discrimination.
Grant (2008) conducted a study that indicated that immigrants who identified more strongly with their culture of origin than their adopted country were more likely to perceive being a target of discrimination. In this study, 180 underemployed foreign-trained immigrants in Canada completed questionnaires assessing their cultural identity, Canadian identity, and perceptions of discrimination faced by immigrants. Grant found that as participants’ cultural identity increased and national (Canadian) identity decreased, they perceived greater discrimination against immigrants. Grant conceptualized identity as influencing participants’ perception of this group discrimination.

Sellers and Shelton (2003) also found that group identification was positively associated with perceptions of racial discrimination experienced in the past year. In their study of 267 African American college freshmen, they found that the more salient being African American was to participants’ identities, the more discrimination participants reported personally experiencing. Furthermore, these researchers explored multiple aspects of group identity including racial ideology. They defined racial ideology as the qualitative meaning that being Black has for one’s self-conceptualization.

Sellers and Shelton proposed that African Americans may fall into one of at least four ideologies in terms of what it means to be a member of their racial group. They described these ideologies as: nationalist, or focused on the uniqueness of being of African descent; oppressed minority, which highlighted the similarities of African Americans with all other oppressed groups; assimilationist, or focused on similarities between the African American and dominant American culture; and humanist, or focused on the commonalities of African Americans with all humans. In their analysis of individual differences, researchers found that those participants with a nationalist ideology reported the most discrimination, and those participants with a
humanist ideology reported the least amount of discrimination. Findings suggest that the strength of one’s identity with a group that is seen as separate from other groups can make one more aware of discriminatory treatment.

Some research has investigated the relationship of certain within group characteristics, such as skin color, and experiences of discrimination. This research suggests that members of racial minority groups who have darker skin are more likely to be targets of discrimination. For example, Hersch (2008) found that immigrants to the United States with the lightest skin color earn on average 17% more than comparable immigrants with the darkest skin color, even after controlling for education, English language proficiency, occupation in source country, ethnicity, race and country of birth. Similarly, Hochschild and Weaver (2007) found that in the United States, dark-skinned blacks have a lower socioeconomic status, more punitive relationships with the criminal justice system and less likelihood of holding elective office as compared to their lighter skinned counterparts. These findings suggest that it is not only one’s own group identity but how members of the mainstream dominant group categorize one that contributes to discrimination.

**Deaf Group Identity.** Unlike racial minorities, the vast majority (90% or more) of deaf people are not born into a Deaf minority group (Mitchell & Karchmer, 2004; Schein & Delk, 1974); in other words, their family is hearing. Not having a Deaf background, the majority of parents of deaf people do not socialize their children about who they are as Deaf people or expose them to Deaf culture. Research suggests that deaf people not born into a Deaf family have a longer period of identity development, and that most people do not become a part of the Deaf community until their teen years (Bat-Chava, 2000; Trybus, 1980). This longer period of identity development is likely largely because D/deaf people have to seek out other group
members themselves. Due to being socialized in the hearing world, it follows that people commonly would identify as hard of hearing rather than Deaf.

For many people, the barriers to identifying with the Deaf community extend beyond a simple lack of awareness of the group, including the need to abide by Deaf cultural rules, such that people in transition between hearing and Deaf worlds or people with multiple disabilities may feel excluded. Indeed, some Deaf activists who are committed to a cultural model of deafness view deaf people who take a medical model perspective as hearing and reject them as a threat to their community’s strength (Corker, 1998). Perhaps because of this desire for group loyalty, the Deaf community has been known to have reservations about welcoming people outside of their community. This can make identifying with the group difficult for the many deaf people born into hearing families and not raised in the Deaf community, as well as for people lose their hearing later in life.

Much like Sellers and Shelton (2003), Glickman (1993), in his study of D/deaf identity, believed that beyond the sense of identity with just the hearing or Deaf world, four distinct types of identity could be present within the population. Glickman proposed the four identities of: hearing, marginal, immersion and bicultural. Hearing identity is described as adopting the mainstream social frame of reference such that the person is living in the hearing world including functioning as a hearing person would in terms of modes of communication. The marginal identity is described as not feeling a sense of belonging in Deaf or hearing worlds. Immersion identity is held by those who feel connected to the Deaf community and has a sense of “Deaf pride”. Bicultural identity occurs when a person feels a sense of belonging in both Deaf and hearing worlds.
Discrimination

Discrimination has been defined as differential treatment or denial of opportunities based on a person’s group membership (Allport 1954/1979 as cited by Araujo & Borrell, 2006). As an expression of oppression, discrimination exists at a broad systems level and is supported by a socio-historical context (Hardiman & Jackson, 1997). Being a systemic issue, discrimination cannot be explained simply by the personal characteristics of a racist or sexist or homophobic individual. Discrimination can be found in a variety of environments, including social, psychological, political, language, architectural, service, and economic (Corker, 1998).

Discrimination is so integrated into society that people can engage in discrimination without being conscious of their actions. This type of behavior has been captured by the term microaggression. Microaggressions are brief, subtle, everyday verbal or non-verbal slights directed at marginalized groups or their members (Sue et al., 2007). Understanding discrimination as a systemic and often subtle phenomenon sheds light on the ubiquity of discrimination and informs how best to measure discriminatory experiences.

Researchers of discrimination have recognized a distinction between acute and chronic discrimination (Harrell, 2000). Acute discriminatory stressors include significant life experiences that are time limited, such as employment and housing discrimination or police harassment. Chronic discriminatory stressors include daily hassles such as microaggressions. Research on discrimination most commonly assesses acute discriminatory events. However, chronic stressors are considered better predictors of mental health outcomes (Araujo & Borrell, 2006).
Discrimination is commonly assessed through self-report measures (Paradies, 2006). This methodology is thought to be potentially problematic because discrimination may be so pervasive that it may not be perceptible to individuals (Paradies, 2006). When it is perceived, discrimination may not be reported by people for a variety of reasons including denial, internalized oppression, or choosing to not report discrimination out of feelings of discomfort or danger (Paradies, 2006; Krieger, Carney, Lancaster, Waterman, Kosheleva, & Banaji, 2010). Self-reported experiences of discrimination are likely an under-representation of the discrimination that members of minority groups face (Krieger & Sidney, 1996; Krieger, et al., 2010). Previous research shows that individuals belonging to disadvantaged groups frequently do not report high levels of discrimination (Crosby, 1982; Jetten, et. al., 2001).

Despite potentially being under-perceived and under-reported, discrimination has been found to disadvantage members of subordinate groups in multiple areas as compared to dominant group members. Studies reviewed by Bourguignon, Seron, Yzerbyt and Herman (2006) in the last decade found that members of non-dominant groups experience higher levels of unemployment and poorer health, earn less money, and are less well educated than members of dominant groups. These findings suggest that discrimination persists in American society today.

There is very little research examining the impact of discrimination in the D/deaf population and their reactions to discrimination (see Humphries & Humphries, 2010; Leigh, 2009; and Skelton & Valentine, 2003 for recognition of marginalization of the Deaf community). However, it is apparent that discrimination is a significant obstacle for this group. Around the world, hearing people primarily control D/deaf people’s organizations, clubs and schools, and as a group D/deaf people lack political power, economic and social resources (Kyle
& Pullen, 1988). Their health needs are understudied and underserved (Barnett, McKee, Smith, & Pearson, 2011). Because of insufficient funding for and access to interpreters and technology, D/deaf people often have not been able to fully hold valued social roles such as employee, patient, parent, and citizen (Harris & Bamford, 2001). D/deaf people face far higher unemployment rates (Cornell Employment and Disability Institute, 2008), wage disparities, and over-qualification for jobs (Welsh & MacLeod-Gallinger, 1992) than hearing people. In addition, D/deaf people typically endure negative and stereotyped attitudes held by hearing people (Nikolaraizi & Makri, 2004; Lane, 1995).

Bourguingnon and colleagues’ (2006) review of the literature concluded that the discrimination people experience “itself adds to the plight of stigmatized group members over and above their objective standing.” (p 774). In light of this finding, people with disabilities become a particularly important group to consider. Although society tends to view limitations faced by people with disabilities as caused by the disability, people with disabilities often view their limitations emanating from the discrimination they face (Longmore, 1995, as cited in Loewenn & Pollard, 2010). “For the vast majority of people with disabilities, prejudice is a far greater problem than any impairment…” (Longmore, 1995, as cited in Loewenn & Pollard, 2010).
Relative Deprivation

Research investigating perceptions of discrimination, inequality or general disadvantage has discovered that people’s experience of discrimination is not absolute, rather discrimination is perceived in relation to other individuals and groups. In the field of social psychology, the theory of relative deprivation embodies the notion that one’s assessment of one’s situation is made in relation to the situations of comparable others. Relative deprivation theory focuses on the degree to which group members perceive their disadvantage as connected to their group identity (Kawakami & Dion, 1993) and the perceptions of illegitimacy and unfairness associated with that disadvantage (Crosby, 1976).

Relative deprivation (RD) has been conceptualized as occurring at the personal and group levels. The personal level refers to discrimination that is unique to an individual in comparison to other individuals within his or her own group. Relative deprivation at the group level refers to the relative deprivation a person experiences because of their group membership, or that a group experiences when compared to another group (Runciman, 1966; Taylor, 1995). Perceiving group RD involves a combination of identifying with one’s group and implicating one’s group identity as a way to interpret disadvantageous situations (Tropp & Wright, 1999).

Group level RD is particularly relevant to the present study because it is associated with taking social action (Major, 1994; Smith, Pettigrew, & Vega, 1994 paper presentation as cited by Smith & Ortiz, 2002). Smith and colleagues (1994, paper presentation as cited by Smith & Ortiz, 2002) conducted a meta-analysis to assess the degree to which RD accounted for variations in individual and collective behavior and individual emotional response. The results of the research that distinguished between individual and group level RD suggested that an
unjust disadvantage that is perceived as group based strongly predicts collective action ($d^+ = .63$, $r = .31$), while individual disadvantage does not. Furthermore, the results of this meta-analysis clarify that some past research has not supported the theory of relative deprivation simply because researchers have not always differentiated between individual and group level discrimination (Klandermans, 1997).

Group RD makes inter-group comparisons salient, a focus which makes social action intentions integral to one’s response (Kawakami & Dion, 1993). Understandably, individuals respond to disadvantage at the level in which they perceive it (Hafer & Olson, 1993; Koomen & Fränkel, 1992). Research has found that compared to people who do not experience group RD, those people who do are more likely to participate in social change movements and work to change a social system rather than focusing on their personal success (Guimond & Dubé-Simard, 1983; Kawakami & Dion, 1993). For example, in their study of 70 working women, Hafer and Olson (1993) found that personal discontent was related to behaviors intended to change one’s personal situation, while group discontent was related to behaviors intended to change one’s group’s status.

Similarly, Koomen and Fränkel (1992) conducted a study with 81 Surinamese (a Dutch ethnic minority group) participants in which the researchers examined support for taking action for social change. The study found that personal RD was significantly correlated with personal satisfaction and not with support for social action, whereas group RD was significantly correlated with support for social action and not personal satisfaction. Researchers concluded that inter-personal comparisons will lead to individual-level behavior, while inter-group comparisons will lead to group-level behaviors in response to the situation, such as social action.
Social psychology theory suggests and research supports that group identification is a precursor and predictor of group RD (de la Sablonneière & Tougas, 2008). De la Sablonneière and Tougas (2008) conducted a study of 108 nurses who recently faced several negative changes at their place of work, which left them feeling deprived in relation to other nurses and comparable professionals. Using path analysis to analyze relationships between constructs, de la Sablonneière and Tougas found that a model in which group identity predicted group RD had a very good fit, and the association between these variables was significant. However, an alternative model in which RD predicted group identity yielded an insignificant pathway.

Research also suggests that as the relevance of individuals’ group identity and RD increases, people become more likely to engage in action to address a disadvantage faced by their group (Kelly & Breinlinger, 1995; Klandermans, 1997; Stürmer & Simon, 2004; Van Zomeren, et. al., 2008). Kelly and Breinlinger (1995) conducted a questionnaire-based longitudinal study of 387 women in Britain. This sample consisted of women who were members of various groups, 87% of which had missions related to women’s issues, and a matched sample of women who were not involved in groups but were pursuing postgraduate education. At two time points 12 months apart, these women completed measures that assessed their sense of gender identity, group RD, and level of activity in promoting women’s issues. At time one, participants completed a measure of readiness to participate in future action (such as engaging in a collective protest, talking with friends about women’s issues, contacting government representatives, or the media), and at time two, reported their political activity for the past 12 months.

Data showed that gender identity was significantly positively correlated with experiencing RD. Furthermore, a regression indicated that gender identity was highly
significant with taking action to better women’s situations. To further examine the impact of group identification, the authors split the sample by strength of gender identity. Women with lower than a 3.80 mean score were placed in a weak-identifier group and women with greater than a 4.00 mean score on gender identity were placed in a strong identifiers group. A clear difference between these groups was found in regard to the factors related to their engagement in collective action. For women who held a strong gender identity, RD was predictive of action to benefit the situation of women while RD was not associated with collective action for the weak-identified group.

In addition to researching individual and group RD, researchers have noted the importance of recognizing the existence of cognitive and affective RD. The cognitive component of RD involves knowing about one’s situation in relation to others. However, one can perceive significant discrepancy in one’s situation compared to another’s without feeling dissatisfaction about one’s situation. The affective component of RD is the dissatisfaction associated with the knowledge of one’s discrepant situation.

It is an individual’s affective response to RD that research has found to be more predictive of taking action for change and therefore is a chosen construct for the present study (Guimond & Dubé-Simard, 1983; Koomen & Fränkel, 1992; Tougas & Veilleux, 1988). Meta-analytic results have suggested that research that assessed emotional response to RD better predicted individual and collective action, as well as depression and self-esteem (Smith, et. al., 1994 paper presentation as cited by Smith & Ortiz, 2002). Indeed, some research indicates that affective RD mediates group identification and action to improve one’s group’s situation such that feelings of dissatisfaction regarding in-group treatment are necessary to engage in social action to improve in-group status (Tougas & Veilleux, 1988). However, other research finds
that perceiving discrimination against one’s group directly motivates engagement in action to empower one’s group while affective RD is not significantly related to social action (Grant, 2008).
Empowerment

The Cornell University Empowerment Group defines empowerment as, "an intentional, ongoing process centered in the local community, involving mutual respect, critical reflection, caring and group participation, through which people lacking an equal share of valued resources gain greater access to and control over those resources" (1989, p. 2). Many writers who research empowerment conceptualize it as the capacity people have to take control of their lives and issues of community concern (Laverack & Wallerstein, 2001; Rappaport, 1987; Staples, 1990).

Individual empowerment and community empowerment are two levels of empowerment described in the literature (Staples, 1990). Individual level empowerment is described as “a function of factors such as critical consciousness, sense of entitlement, knowledge, resources, opportunities, competencies, skills and self-respect” (Staples, 1990, p. 39) that allow one to act on one’s own behalf. Community level empowerment describes actions aimed at bettering one’s group (Zimmerman, 2000). Individual and community level empowerment are thought to be interdependent; to have community empowerment there must be empowered individuals (Zimmerman, 2000). These levels of empowerment are also thought to be inter-related; for example, by identifying with a group one gains a community with which to act collectively and through this action, one may increase sense of self-efficacy (Drury & Reicher, 1999; Williams, Labonte & O’Brien, 2003).

Empowerment and Group Identity. Identification with and participation in one’s marginalized in-group appears to be key to empowerment. The concept of community narratives (Rappaport, 1995) propose that cognitive alternatives to the dominant narrative that
can be accessed by identifying with one’s marginalized in-group, support the empowerment of
group members. Groups in general support alternative views of their members through
community narratives that value members and create new possibilities for what they deserve
and can accomplish.

Community level, rather than individual level empowerment, is the most appropriate
focus for research concerned with group identity’s impact on perceptions of and reactions to
discrimination at the group level. Additionally, it is most relevant to conceptualize
discrimination at the level of groups because even discrimination directed at an individual is
motivated by the perceived connection between that individual and a larger marginalized group.
Therefore, to address discrimination, change must occur at the level of the group. Although
some individuals may defy their oppressive situation, social action is necessary to address the
systematic inequality faced by a marginalized group (Staples, 1990). For these reasons, the
present study will measure actions taken for community level empowerment.

Theory and research in social psychology suggest that group identity is related to
feelings of outrage at the group’s illegitimately low status and unfair treatment (Kawakami &
Dion, 1995), and the likelihood of social action being taken to address a disadvantage faced by
one’s group (Klandermans, 1997; Stürmer & Simon, 2004; Van Zomeren, Postmes, & Spears,
2008; Van Zomeren, Spears, & Leach, 2008). Drury and Reicher (2009) spotlight the
connection between group identity and action for community empowerment, arguing that,
“social identity is the fulcrum of social change precisely because it is through the collective
empowerment of those with otherwise subordinated identities that broader social relations can
change” (p. 708). They argue that a shared identity is a precondition for empowerment and
social change. Implied with these perspectives is the notion that empowerment necessitates
both collective action, and the collective, or group. Furthermore, based on his and prior research, Grant (2008) argues that individuals with strong group identity are more predisposed to support action to improve in-group social status both for the improvement itself and to demonstrate group loyalty.

Additionally, research in the field of social psychology (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987) highlights the importance of identifying with an in-group so that one can perceive comparative out-groups. These comparisons are necessary for group members to experience relational deprivation, which may motivate collective action. Empirical research on RD (de la Sablonnière & Tougas, 2008), as well as interviews conducted with protesters (Drury & Reicher, 1999) and African Americans involved in the Civil Rights Movement (Searles & Williams, 1962) support the salience of an out-group (and therefore an identified in-group) to motivate members to engage in collective action.
Summary

Issues of social inequality abound and the factors that encourage marginalized groups to take action to improve their status are not fully understood. The reviewed literature suggests that direct and indirect relationships exist between identifying with one’s marginalized group and taking action to empower that group. The direct relationship between these factors indicates that as the relevance of one’s group identity increases, one becomes more likely to engage in action to address a disadvantage faced by one’s group (Kelly & Breinlinger, 1995; Klandermans, 1997; Stürmer & Simon, 2004; Van Zomeren, Postmes, & Spears, 2008; Van Zomeren, Spears, & Leach, 2008).

The indirect relationships between group identity and social action appear to involve two factors: perceiving discrimination and experiencing group-based affective relative deprivation (RD). Research suggests that a sense of group identity increases individuals’ perception of discrimination against their marginalized group (Grant, 2008; Operario & Fiske, 2001; Sellers & Shelton, 2003). Social psychology theory suggests and research supports that group identification (de la Sablonnière & Tougas, 2008) and perceived disadvantage (Koomen & Fränkel, 1992) can be considered precursors of RD. It should be noted that the particular type of RD most related to social action seems to be at the level of the group (Smith, et. al., 1994 as cited by Smith & Ortiz, 2002), and affective (Guimond & Dubé-Simard, 1983; Koomen & Fränkel, 1992; Tougas & Veilleux, 1988) rather than cognitive in nature.

Some researchers have found that perceiving discrimination against one’s group motivated engagement in action to empower the group, while affective group RD was not significantly related to social action (Grant, 2008). However, other research indicates that RD
increases the likelihood of taking action to address inequalities faced by one’s group beyond the influence of perceived discrimination (Koomen & Fränkel, 1992). Additionally, some research indicates that affective group RD mediates the relationship between group identification and action to improve one’s group’s situation (Tougas & Veilleux, 1988). A conceptualization involving affective group RD proposes that individuals’ feelings of dissatisfaction, not just their awareness of inequality regarding in-group treatment, are necessary to motivate peoples’ engagement in social action to improve in-group status.

Researchers have drawn various conclusions regarding the relationship between group identification and action to empower one’s group. That is, some research suggests affective RD contributes significantly to the relationship between discrimination and social action, while other research does not find affective RD to be a significant variable. Contradictory findings from past research can be expressed by alternative regression models and tested in the present study. Specifically, using the proposed model, the present study can test the strength of the contribution of affective RD on action for group empowerment relative to an alternative model, which does not include affective RD. In the present study, it is proposed that Deaf people’s identification with the Deaf community will be significantly positively associated with perceiving discrimination directed at this minority in-group; a sense that D/deaf and hearing deserve equal treatment, and discontent over not receiving equal treatment (affective group RD); and taking action to empower D/deaf people.
Present Study

The present study examines the influence of perceived discrimination and affective relative deprivation as mediators in the relationship between D/deaf identity and action taken to empower D/deaf people as a group. Specifically, a model is proposed that examines relationships between D/deaf adults’ perceptions of their D/deaf identity (Deaf as a cultural identification; deaf or Hard of hearing as an auditory disability), perceptions of discrimination against one’s D/deaf group and perceived group affective relative deprivation as it motivates action to empower D/deaf people. This model posits that adults’ reports of identifying with the Deaf group will be significantly positively associated with having taken action to empower D/deaf people.

The relationship between Deaf identity and empowering action is proposed to be partially mediated by two other variables, namely, perceiving discrimination against one’s group, and affective group relative deprivation. In other words, it is proposed that identifying with the Deaf community increases the likelihood of perceiving discrimination against D/deaf people as a group, and that this perception increases the likelihood of experiencing affective relative deprivation, and that experiencing relative deprivation relates to taking action to improve the group. These relationships are outlined below as hypotheses in the present study.

Should identity be found to be a strong predictor variable, independent of the proposed mediating variables in the present research, the associations between identity and empowerment will be further explored. Specifically, the more nuanced reports of identity as measured by the Deaf Identity Development Scale (DIDS) will be examined in relation to action taken to empower the group. These four identity types (immersion, hearing, marginal and bicultural)
will be examined in the proposed mediation model to assess whether one type of identity is a better fit for the model than other identity types.

It is hypothesized that:

H1: Participants’ reports of Deaf identity are positively associated with their reports of action for community empowerment.

H2: Participants’ reports of Deaf identity are positively associated with reports of perceiving deaf group discrimination.

H3: Participants’ reports of perceiving deaf group discrimination mediate the relationship between Deaf identity and affective group relative deprivation.

H4: Participants’ reports of affective group relative deprivation mediate the relationship between perceived group discrimination and action for community empowerment.

Figure 1. *Theoretical Model (Hypotheses 1-4)*

Deaf Group $\rightarrow$ Perceived Grp $\rightarrow$ Affective $\rightarrow$ Action for

Identity $\rightarrow$ Discrimination $\rightarrow$ Grp RD $\rightarrow$ Community Empowerment

$\downarrow$

$\uparrow$
METHOD

Participants

The present sample consists of a total of 175 adults with hearing loss (120 women, 53 men and two participants who declined to report gender). An additional 28 individuals who began the study were eliminated from the research due to incomplete data. Participants were invited to participate in the research in one of the following three ways: 1) through emails or links to the study provided by five Deaf and hard of hearing organizations in the United States that included the National Black Deaf Advocates, Worcester Deaf Club, Michigan Coalition for Deaf and Hard of Hearing, Deaf and Hard of Hearing Services Center Inc. and Deaf Women United 2) through undergraduate psychology classes at Gallaudet University (instructors in three classes informed students about the study via email); and 3) through emails to Deaf and hard of hearing individuals known to the author. The response rate for potential participants who linked to the online survey was 62%.

Individual characteristics. Demographic information about the sample can be found in Table 1. The majority of the present sample was Caucasian (84.6%). Adults in the study ranged in age from 18 to 65 years old or older, with 37% of the sample between the ages of 18 – 34, 39% of the sample between the ages of 35 – 54 and 22% of the sample 55 years of age or older. The present sample was well educated, with 78.9% of participants reporting having a bachelor’s or post-graduate degree. Nearly 60% of the sample reported incomes ranging from zero to $49,999 per year, and 39% reported annual incomes ranging from $50,000 to $150,000 or more.

Sample information related to participants’ deafness can be found in Table 2. The majority of the participants (N=151, 74.8%) were prelingually deaf, meaning their deafness occurred before the age of three years old. Regarding hearing loss, the sample was evenly
divided. Seventy-five participants (43%) reported having normal hearing or mild to moderate hearing loss such that they are able to hear much of a conversation when using hearing aids or a cochlear implant. Eighty-three participants (47%) reported having severe to profound hearing loss even when using a hearing aid or cochlear implant and 17 participants (10%) declined to state their degree of hearing loss with a hearing aid or cochlear implant.

A total of 21.2% of participants in the present study reported that they had at least one parent who was deaf; a statistic that is higher than the national average of less than 10% (Mitchell & Karchmer, 2004). Forty-five percent of participants reported being the only person in their family who is deaf or hard of hearing. However, only 3.4% of the sample reported having no deaf friends. Conversely, 74.3% of participants reported having 11 or more deaf friends.

In terms of chosen identity categories, 57.7% of the sample identified as Deaf, 22.3% of the sample identified as Hard of Hearing, 13.7% of the sample identified as deaf and 5.1% of the sample identified as Hearing impaired.
Measures

Measures utilized in this dissertation can be found in Appendix A. Additionally, measures completed by participants but not used in the dissertation can be found in Appendix B.

**Modified Deaf Acculturation Scale.** A modified version of the Deaf Acculturation Scale (DAS-M) was developed for the present study to measure participants’ Deaf and hearing identity. This 19-item scale is based on 13 items from the original Deaf Acculturation Scale (DAS) (Maxwell-McCaw and Zea, 2011) and the six items on an unnamed scale used by Jambor and Elliot (2005) to assess Deaf identity. The DAS-M contains a Deaf and a hearing subscale. Participants were asked to read each statement on the scale and respond using a 5-point Likert scale (1= strongly disagree and 5= strongly agree).

**Deaf subscale.** The strength of participants’ Deaf identity was measured using the four DAS deaf identity items with factor loadings of above r =.60, along with the six Deaf identity items generated by Jambor and Elliot’s (2005) study designed to measure Deaf identity. One of Jambor and Elliot’s items was reverse scored. These 10 items constitute a continuous scale on which participants can score between 10 and 50 points with higher scores indicating stronger Deaf identity. Internal consistency for the DAS-M Deaf subscale in the present study was (α=.93).

**Hearing subscale.** The strength of participants’ hearing identity was measured using the DAS-M Hearing subscale. This subscale is comprised of nine items from the DAS hearing identity subscale. These nine items constitute a continuous scale on which participants can score between nine and 45 points with higher scores indicating stronger hearing identity. Internal consistency for the DAS-M Hearing subscale in the present study was (α=.86).
Deaf Identity Development Scale. In addition to the DAS-M Deaf subscale and DAS-M Hearing subscale, to gain a more nuanced understanding of Deaf and hearing identity, the 47-item Deaf Identity Development Scale-Revised (DIDS) (Fischer & McWhirter, 2001) was utilized. This scale measures four types of identity: immersion (12 items endorsing Deaf identity), hearing (10 items endorsing hearing identity), bicultural (13 items endorsing identity with both Deaf and hearing worlds), and marginal (12 items endorsing the experience of not identifying with either hearing or Deaf worlds). Participants were asked to read each statement on the scale and respond using a 5-point Likert scale (1= strongly disagree and 5= strongly agree). Scores on each subscale are continuous with higher scores indicating stronger identification with the identity type. In the present research each DIDS subscale achieved a strong level of internal consistency: DIDS Immersion (α=.82), DIDS Hearing (α=.86), DIDS Bicultural (α=.84) and DIDS Marginal (α=.85).

Deaf Group Discrimination. The Deaf Perceived Group Discrimination Scale consists of nine items that assess the degree to which participants perceive that deaf people as a group face discrimination. Two items for the present scale were adapted from Garstka, Schmitt, Branscombe and Hummert’s (2004) 4-item scale of age discrimination (e.g. Deaf people as a group have been victimized by society. and, Historically, deaf people have been discriminated against.). Seven items for the measure were generated from existing literature on discrimination in various areas that include gaining access to equal education, employment, housing and social status (Krieger & Sidney, 1996). Participants were asked to rate each statement on a 5-point Likert scale (1= strongly disagree and 5= strongly agree) with higher scores indicating greater perceptions of group-level discrimination against deaf people. Internal
consistency of the Deaf Perceived Group Discrimination Scale in the present research was found to be acceptable ($\alpha=.68$).

**Individual Discrimination.** The Everyday Discrimination Scale (Forman, Williams, & Jackson, 1997) is a 9-item scale designed to measure the individual discrimination that the participant perceives because of his or her outsider status, in this case the participant’s hearing status (Clark, Coleman, & Novak, 2004). The internal consistency of this measure in the present research was found to be strong ($\alpha=.89$).

**Affective Group Relative Deprivation.** The 8-item Deaf Affective Group Relative Deprivation scale was developed for the present study and designed to measure respondents’ strength of emotional reactions to the treatment of deaf people in comparison to hearing people. Five of these items were adapted for this population from previous studies of affective group relative deprivation (Koomen & Fränkel, 1992; Grant, 2008). Grant (2008) used three items measuring participants’ feelings of anger, frustration and resentment about how their minority group is treated compared to the majority group. In the present study these items were adapted for the D/deaf population, for example, *I am angry about how deaf people are treated as compared to hearing people.* A forth item, *I am happy about how deaf people are treated as compared to hearing people,* was adapted from a study by Koomen and Fränkel (1992). To expand the spectrum of emotions assessed on this scale, one item was added to measure participants’ sadness about how deaf people are treated in comparison to hearing people and one item was added to assess whether participants were pleased with the treatment of deaf people.

The final two items in this measure were designed based on research findings regarding the importance of feelings of deserving and wanting equal treatment (Crosby, 1984). These items are, *Deaf people deserve to be treated equal to hearing people* and, *I want deaf people to
be treated equal to hearing people. Items were measured on a 5-point Likert scale measuring level of agreement with the statement from 1 (strongly disagree) to 5 (strongly agree). Internal consistency for the Deaf Affective Group Relative Deprivation scale measure in the present study was found to be strong (α=.81).

**Actions for Community Empowerment.** The Action Scale for Community Empowerment (Schulz, Israel, Zimmerman, and Checkoway, 1995) was used in the present study to assess participants' efforts to address issues of concern for D/deaf people. This scale consists of 12 items that ask individuals to indicate (yes or no) whether they have engaged in various forms of social action, such as attending a public meeting or rally, complaining to a business or corporation about a community issue, or taking part in a boycott in the past year. For this study, items on the Action Scale for Community Empowerment were modified to reduce the Flesch-Kincaid reading grade level from 11.3 to 9.7. Consistent with Schulz, et al., procedures, yes responses were given a score of five and no responses a score of one. A composite score across the 12 items was calculated for each participant. Higher scores on this scale indicate higher levels of empowered action. In previous studies (Schulz, Israel, Zimmerman, and Checkoway, 1995), the internal consistency for the measure was high (α=.80) as it was in this study (α=.81).

**Demographics.** Demographic items in the present study included 13 items to obtain information about participants' gender, race, age, age of onset of hearing loss, severity of hearing loss, level of education, and annual income. Participants were also asked to indicate their preferred modes of communication, frequency of use of American Sign Language, hearing status of parents, number of deaf family members and friends, and their self-identification as Hearing impaired, Hard of Hearing, deaf, or Deaf (Maxwell-McCaw & Zea, 2011).
Procedure

Data for the present research was collected using either online or paper surveys. All assessment measures were presented to participants in Standard English since it was unknown how many participants would have knowledge of American Sign Language due to the diversity of the sample. Prior to beginning the survey, each participant provided their consent to engage in the study by indicating that they read and understood the minimal risks associated, as explained through the study’s online or paper consent page. Based on pilot study feedback, the survey was estimated to take about 15 minutes to complete. Participants had the opportunity to enter a lottery to win one of 12 gift cards valued at $50 each. At the close of the survey (upon collection of 175 complete surveys), 12 participants were randomly selected and emailed $50 gift cards for the online store Amazon.com.
RESULTS

Data Analysis Procedures

Descriptive statistics, including means and frequencies, were calculated on main study variables to provide information on the sample’s views of discrimination and affective RD. Bivariate correlations were calculated to examine the convergent and discriminant validity of the measures by testing theoretically predicted relationships between complete measures and between subcategories within measures (e.g. types of D/deaf identity). One-way analyses of variance tests were conducted to examine differences in the main study variables of identity, discrimination, affective RD and action to empower the group as a function of age, education, gender, race and annual income.

Hierarchical regression analyses were used to examine the influence of perceived discrimination and affective relative deprivation as mediators in the relationship between D/deaf identity and action for empowerment. In order to test for mediation between predictor (Deaf identity) and outcome variables (action to empower D/deaf people), these variables must be significantly related. Complete mediation occurs when the relationship between two variables can be entirely explained by a third variable, a mediator. Specifically, when accounting for the completely mediating variable, the relationship between the predictor and outcome variables is no longer significant. When complete mediation is not found, partial mediation is typically explored.

Partial mediation occurs when accounting for a mediating variable reduces the significance between the predictor and outcome variables but does not render the relationship between the predictor and outcome variables non-significant. In this case, a Sobel test is
utilized to determine whether the decrease in the strength of the relationship between the predictor and outcome variables is statistically significant. In partial mediation, the difference in the correlation of the direct relationship (c) and the mediated relationship (c’) indicates the strength of the mediator in explaining the relationship between the predictor and outcome variables. For example, if complete mediation were found in the present study, then perceived group discrimination and affective group RD variables would render a significant relationship between the Deaf identity predictor variable and the action for empowerment outcome variable to be non-significant. If partial mediation were found in the present study, then perceived group discrimination and affective group RD variables would reduce the strength of the relationship between the Deaf identity predictor variable and the action for empowerment outcome variable, such that it would remain significant but decrease by a significant degree.
Descriptive Statistics

**Group identity.** The responses to the 10-item modified DAS-M Hearing subscale of the Deaf Acculturation Scale, ranged from 13 to 48 with an average of 30.4 ($M=30.4; SD=8.1$). Given this finding, the average response to items on this subscale was a 3, or a response of *unsure*. The responses to the 9-item DAS-M Deaf subscale ranged from 13 to 45 with an average of 37 ($M=37.0; SD=7.7$). Thus, the average response to items on this subscale was 3.8, or *agree*.

Participants’ responses to the Deaf Identity Development Scale were also analyzed. On average, participants were most likely to endorse items related to bicultural identity. The response options for the 13-item bicultural subscale of the DIDS range from 13 to 65. In the present study, participants scored between 23 and 65 points, with a mean score of 52 ($M=52; SD=7.8$). The average response to this subscale therefore was 4 or *agree*, indicating that on average participants identified with the items on the bicultural subscale.

The next most highly endorsed subscale was the 12-item immersion identity subscale with a mean of 29.9 out of a range of 12 to 60 with participants attaining scores of between 16 and 55 ($M=29.9; SD=8.1$). Thus, average response endorsed by participants was 2.5, indicating that on average they responded to items on this subscale with *disagree or uncertain*. Out of a possible range of 12 to 60 on the marginal subscale, participants scored between 11 and 43 and the mean total response for the marginal identity subscale was 22.4 ($M=22.4; SD=7.4$). Therefore, on average, participants responded to items on the marginal subscale with a 1.9, or *disagree*.

Finally, the 10-item hearing identity subscale with a range of 10 to 50 points and participant scores between 10 and 34 had a total mean score of 17.1 ($M=17.1; SD=6.8$). These
data indicate that participants on average responded to items on the hearing identity subscale with a 1.7 or disagree.

**Group discrimination.** Overall, participants reported perceiving discrimination against deaf people as a group. The response options for the 9-item Deaf Perceived Group Discrimination Scale range from 9 to 45 points. In the current study, the mean score on this measure was 32 with a mode of 34 ($M = 32; SD = 4.8$). Over 75% of the sample (N=132) agreed or strongly agreed that, *Deaf people are likely to be discriminated against by the general public*. Over 90% (N=158) agreed or strongly agreed that, *Deaf people have historically been discriminated against*. Eighty-five percent (N=147) disagreed or strongly disagreed that *Deaf and hearing people are treated equally*.

This perceived group discrimination appears to be contextual. For example, 79.4% of participants (N=139) reported that they agreed or strongly agreed that, *Deaf and hearing people are treated equally in the workplace*, while 77.7% of participants (N=136) reported that they disagreed or strongly disagreed that, *Deaf and hearing people are treated equally in education*. This finding suggests that there are certain life spheres in which D/deaf people are more likely to perceive that their group receives unequal treatment.

**Individual discrimination.** Participants also reported personally perceiving discrimination against themselves as individuals. The response options for the 9-item Everyday Discrimination Scale range from 9 to 36 points. Participants’ mean response on this scale was 20 ($M=20; SD=5.8$). Fifty-five percent of the sample (N=96) reported sometimes being treated with less courtesy than hearing people, with 15% (N=26) reporting often being treated with less courtesy than hearing people. When asked how often hearing people act as if the participant is not smart, 44% (N=77) said this happens sometimes and 25% (N=44) said it happens often.
Over 70% of the sample (N=123) reported perceiving that hearing people sometimes or often act as though they are better than the participant.

These findings indicate that D/deaf people reported that they experience individual level discrimination and that there is not a large discrepancy between participants’ perceptions of their personal treatment and their perceptions of how the group as a whole is treated by society. For example, 75% of the sample reported that deaf people as a group are likely to be discriminated against by the general public and 70% of participants reported that they are sometimes or often treated with less courtesy than hearing people.

**Affective group relative deprivation.** The majority of the sample endorsed feeling affective group RD, that is, feeling upset at the treatment of deaf people as compared to hearing people. The response options for the 8-item Deaf Affective Group Relative Deprivation scale range from 8 to 40 points. On average, participants’ total scores were over 26 points, suggesting they agree that the treatment of deaf people is upsetting ($M=26.6; SD=4.7$). Over 95% of the sample (N=167) reported that they agreed or strongly agreed that deaf people *deserve* to be treated equally to hearing people and all but one participant reported agreeing or strongly agreeing that they *want* deaf people to be treated equally to hearing people. Over 78% of the sample (N=157) reported that they agreed or strongly agreed that they feel frustrated by how deaf people are treated. Additionally, over 64% (N=113) reported being sad and 55% (N=96) reported feeling resentful about how deaf people are treated as compared to hearing people. Only 14% (N=26) of the sample agreed or strongly agreed that they are pleased with how deaf people are treated.

**Community empowerment.** Participants also reported taking action to improve the standing of D/deaf people as a group within the last year. The response options for the 10-item
Action Scale for Community Empowerment range from 10 to 50 points, with participants indicating *yes* (5-points) *no* (1-point) for whether they have engaged in a certain action to empower the community. Participants’ mean total score on this scale was 31.4 ($M=31.4$: $SD=11.2$). Participants were least likely to have given money to a candidate, political party or group concerned with a deaf issue or problem ($M=1.8$: $SD=1.6$) and most likely to have talked about deaf issues with friends or family ($M=4.7$: $SD=1.1$) or worked with others to do something about a deaf issue ($M=4.1$: $SD=1.7$).

**Individual Differences in Perceived Deaf Identity, Discrimination, Relative Deprivation, & Empowerment.** A series of one-way ANOVAs were conducted to examine differences in the study’s main variables (Deaf identity as measured by the DAS-M Deaf subscale, group discrimination as measured by the Deaf Perceived Group Discrimination Scale, affective group RD as measured by the Deaf Affective Group Relative Deprivation Scale and action to empower the group as measured by the Action Scale for Community Empowerment) as a function of gender, age, education, annual income and race.

**Gender.** ANOVA results indicated that scores on the Action Scale for Community Empowerment differed significantly by gender ($F (2, 160) = 15.47, p< .001$). Female participants ($M=33.6$: $SD=10.4$) were significantly more likely to report higher scores on the Action Scale for Community Empowerment as compared to male participants ($M=26.4$: $SD=11.3$), such that women were more likely to have taken action to empower D/deaf people as a group than men in this sample. No other differences were found in study variables as a function of gender.

**Age.** Age was categorized into three groups: 18-34 (37% of the sample), 35-54 (39% of the sample), and 55 or older (22% of the sample). ANOVA results indicated significant
differences by age group in reports of Deaf identity ($F(2, 161) = 4.25$, $p< .05$) and in reports of community empowerment ($F(2, 159) = 6.14$, $p< .01$). Participants aged 35 to 54 years old had significantly higher mean scores on the DAS-M Deaf subscale and the Action Scale for Community Empowerment as compared to both the younger and older groups. This finding indicates that middle-aged participants were more likely to endorse a Deaf identity and having taken action to empower the group compared to younger and older participants. No other differences were found in study variables as a function of age categories.

**Education.** Levels of education were categorized into two groups. One group was created for the 52% of the participants who reported having post-graduate degrees, and all other levels of education (high school through bachelor’s degree), comprising 46% of the sample, were placed in a second group. ANOVA results indicated significant differences by education level in reports of Deaf identity ($F(2, 162) = 7.00$, $p< .01$), perceptions of group discrimination ($F(2,160) = 7.69$, $p< .01$) and action taken to empower D/deaf people as a group ($F(2, 160) = 25.94$, $p< .001$). In each case, participants with more education, that is the post-graduate group, had higher mean scores on the DAS-M Deaf subscale ($M=38.5: SD=6.7$ vs. $M=35.4: SD=8.5$), the Deaf Perceived Group Discrimination measure ($M=33.0: SD=4.2$ vs. $M=30.9: SD=5.2$), and the Action Scale for Community Empowerment ($M=35.3: SD=10.0$ vs. $M=26.9: SD=10.8$) than participants with less education. Thus, participants with post-graduate degrees were significantly more likely to endorse higher scores on measures of Deaf identity, report perceiving more discrimination against D/deaf people as a group, and report having taken more action to empower the group compared to participants with less education. No other differences were found in study variables as a function of education categories.
**Income.** Levels of income were categorized into two groups. One group was created for the 59.4% of the participants who reported an income between zero and $49,999 per year and one group was created for the remaining 40.6% of participants who earned $50,000 a year or more. ANOVA results indicated no significant differences by income level in reports of Deaf identity (F (1, 160) = 2.39, p>.12), perceptions of group discrimination (F (1, 158) = 0.003, p>.96), affective RD (F (1, 162) = 0.10, p>.76) and action taken to empower D/deaf people as a group (F (1, 158) = 2.78, p>.10).

**Race.** Race was categorized into two groups. One group was created for the 84.6% of Caucasian participants and a second group was created for the 15.4% of participants of color. ANOVAs revealed no significant differences by race in reports of Deaf identity (F (1, 158) = 2.11, p>.15), perceptions of group discrimination (F (1, 156) = .90, p>.34), affective RD (F (1, 161) = 0.003, p>.99) and action taken to empower D/deaf people as a group (F (1, 157) = .79, p>.38).
Preliminary Analysis

The convergent and discriminant validity of the measures used in the present study was examined through testing theoretically predicted associations between various types of identity, as well as expected relationships between discrimination and action taken to empower the Deaf community. A table of correlations between total scores on measures of identity, discrimination, affective RD and empowerment can be found in Appendix C.

Identity. Correlations among the Deaf Identity Development Scale-Revised (DIDS) and the modified Deaf Acculturation Scale (DAS-M) hearing and Deaf subscales are found in Table 3. In terms of D/deaf identity, it was expected that the DAS-M Hearing subscale measuring hearing identity would be positively correlated with the DIDS measure of hearing identity, as these subscales are designed to measure the same construct. Since Deaf and hearing identities are thought to be largely distinct, it was anticipated that the DAS-M Hearing subscale would be negatively correlated with the DAS-M Deaf subscale and the DIDS Immersion subscale since these later subscales were designed to measure Deaf identity. It was expected that the DAS-M Deaf subscale would be positively correlated with the DIDS Immersion and DIDS Bicultural subscales since all three subscales were designed to measure Deaf identity. As seen in Table 3, all of these expectations were supported by correlational data in the present study.

The DIDS Marginal subscale is designed to measure the identity of participants that do not feel they belong in either the Deaf or hearing world. Conversely, the DIDS Bicultural subscale was designed to measure the identity of those who feel a part of both worlds. Therefore, it was theoretically predicted that the DIDS Marginal subscale would be negatively
correlated with the DIDS Bicultural subscale. As seen in Table 3, all of these expectations were supported by correlational data in the present study.

**Discrimination and empowerment.** Correlations between the measures of the Deaf Perceived Group Discrimination Scale, the Everyday Discrimination Scale and the Deaf Affective Group Relative Deprivation scale are found in Table 4. It was expected that perceived discrimination, affective RD and action to empower the group would be positively correlated. Specifically, it was expected that perceiving discrimination against oneself or one’s group would increase one’s general sensitivity to discrimination such that these two measures would be positively correlated. It was also expected that perceiving individual and group discrimination would be positively related to experiencing affective RD. Furthermore, it was expected that the correlation between perceiving group discrimination and affective RD would be stronger than between perceiving individual discrimination and affective RD since the items on the affective RD measure focus on deaf people as a group. Finally, since studies have found that compared with members who do not experience affective group relative deprivation, those group members who do are increasingly likely to engage in collective action to better their group’s situation (Grant & Brown, 1995; Major, 1994; Smith & Ortiz, 2002), it was expected that affective RD would be positively correlated with having taken action to empower the group.

As seen in Table 4, the data support all of these predictions. Relationships between the measured variables were moderate. However, the Deaf Perceived Group Discrimination Scale was highly correlated with the Deaf Affective Group Relative Deprivation scale ($r = .72, p < .001$). In addition, both the Everyday Discrimination Scale and the Deaf Perceived Group Discrimination Scale were positively correlated with the Action Scale for Community
Empowerment. This suggests that experiencing discrimination against one’s self may be highly related to taking action to better one’s group.
Testing a Mediational Model

**Hypothesis 1.** H1: Participants’ reports of Deaf identity are positively associated with their reports of action for community empowerment.

Deaf identity (DAS-M Deaf subscale) scores were significantly positively correlated to scores on the Action Scale for Community Empowerment \(r = .54, p < .001\), while hearing identity (DAS-M Hearing subscale) was significantly negatively correlated to scores on the Action Scale for Community Empowerment \(r = -.34, p < .001\).

**Hypothesis 2.** H2: Participants’ reports of Deaf identity are positively associated with reports of perceiving deaf group discrimination.

Correlations indicated that Deaf identity scores (DAS-M Deaf subscale) were significantly positively associated with scores on the Deaf Perceived Group Discrimination Scale \(r = .39, p < .001\). Conversely, hearing identity scores (DAS-M Hearing subscale) were significantly negatively associated with perceiving discrimination against deaf people as a group as measured by the Deaf Perceived Group Discrimination Scale \(r = -.48, p < .001\).

**Hypothesis 3.** H3: Participants’ reports of perceiving deaf group discrimination mediate the relationship between Deaf identity and affective group relative deprivation.

First the association between the predictor variable of Deaf group identity (DAS-M Deaf subscale) and the outcome variable affective group RD (as measured by the Deaf Affective Group Relative Deprivation scale) was examined and found to be weak but significant \(r = .29, p < .001\). When this relationship was analyzed through hierarchical regression, controlling for perceived group discrimination (Deaf Perceived Group Discrimination Scale), the correlation between Deaf group identity and affective RD was no longer significant. This finding suggests
that the perception of group discrimination fully mediates the association between Deaf identity (DAS-M Deaf subscale) and affective RD (Deaf Affective Group Relative Deprivation scale). Examining the variance accounted for in this mediational model reveals that Deaf identity explained eight percent, while perceiving group discrimination explained 52% of the variance in affective RD.

**Hypothesis 4.** H4: Participants’ reports of affective group relative deprivation mediate the relationship between perceived group discrimination and action for community empowerment.

Due to a high degree of correlation between the variables of perceived group discrimination (Deaf Perceived Group Discrimination Scale) and affective group RD (Deaf Affective Group Relative Deprivation scale) \((r = .72, p< .001)\), they should not be viewed as separate variables. Therefore, perceived group discrimination and affective RD were treated as equivalent variables, such that one variable could be used to replicate the finding of the other.

**Group discrimination as a mediator.** First, hierarchical regression was conducted utilizing scores on Deaf identity (DAS-M Deaf) in the first step and scores on group discrimination (Deaf Perceived Group Discrimination Scale) in the second step. This model explained 34% of the variance in action taken to empower deaf people as a group (as measured by the Action Scale for Community Empowerment). As seen in Table 5, when perceived group discrimination was entered into the model, the strength of the association between Deaf group identity and action to empower the group decreased but remained a significant predictor (from \(\beta = .54, p< .001\) to \(\beta = .45, p< .001\)). A Sobel test confirmed that perceived group discrimination partially mediates the association between Deaf identity and community empowerment (Sobel \(z\) value = 2.68, \(p< .01\)).
Affective relative deprivation as a mediator. Second, perceived group discrimination was replaced by affective RD as the second step of the regression. Thus, hierarchical regression was conducted utilizing Deaf identity in the first step and affective relative deprivation (as measured by the Deaf Affective Group Relative Deprivation scale) in the second step. This model also explained 34% of the variance in action taken to empower deaf people as a group. Results of this analysis can be seen in Table 5. When affective relative deprivation was entered into the model, the strength of the association between Deaf group identity and action to empower the group decreased but remained a significant predictor (from $\beta = .54, p< .001$ to $\beta = .47, p< .001$). A Sobel test confirmed that affective RD partially mediates the association between Deaf identity and community empowerment (Sobel $z$ value = 2.54, $p< .01$). The findings on the contribution of affective RD to Deaf identity in predicting action to empower the group are essentially identical to, and thus replicate, the findings related to the contribution of perceived group discrimination on action to empower the group.

Summary of model hypotheses. Hypotheses 1-4, which addressed the study’s model of how identity relates to taking action to empower a group, were tested. The results of the present study indicate that we can accept Hypothesis 1, that identifying as Deaf is positively related to having taken action to empower deaf people as a group. Additionally, we can accept Hypothesis 2 that Deaf group identity is positively associated with perceiving discrimination against deaf people as a group.

The data also support Hypothesis 3 that perceiving deaf group discrimination mediates the relationship between Deaf identity and affective group relative deprivation. Indeed results indicate that perceiving discrimination against deaf people as a group fully mediates the relationship between Deaf identity and affective RD. However, it is unclear how much of this
mediation is attributable to the high correlation found between the measures of perceived group discrimination and affective RD, which suggest that these measures should not be viewed as separate, but rather as equivalent, variables in the model.

The data also support the full model, as tested in Hypothesis 4, that perceiving group discrimination and reporting affective RD mediate the relationship between Deaf group identity and taking action to empower the group. Although these variables were found to partially mediate the relationship between Deaf identity and action for community empowerment, it is notable that the correlation between Deaf identity and action to empower deaf people as a group is stronger \( (r = .54, p< .001) \) than the correlation between perceiving group discrimination and action to empower the group \( (r = .40, p< .001) \) and the correlation between affective RD and action to empower the group \( (r = .38, p< .001) \). This suggests that although perceiving discrimination and experiencing affective RD further contribute to taking empowering action, there is something particularly powerful about group identification that contributes to individuals’ decisions to take action to empower their group.

**Group identity’s impact on empowerment.** Due to it being a powerful independent predictor variable, the concept of group identity was explored in a more nuanced way by examining the direct and mediated relationships between four different types of identity on action for empowerment. Specifically, the identities that the DIDS is designed to measure, bicultural, Deaf immersion, hearing and marginal (not identified with Deaf or hearing communities), were analyzed in relation to community empowerment. For these analyses, the variables of perceived group discrimination and affective relative deprivation were combined because they should not be viewed as separate variables and because it was not necessary to replicate findings by running two hierarchical regression analyses on each identity group.
**Bicultural identity.** Bicultural identity was found to be significantly positively correlated with action to improve the situation of deaf people ($r = .40, p< .001$). A hierarchical multiple regression was run using the following steps to predict action taken for community empowerment. Step 1, Bicultural identity (DIDS-Bicultural); Step 2, combined scores on perceived group discrimination and affective relative deprivation. When the combined score was entered, the strength of the association between bicultural identity and action to empower the group decreased slightly but remained significant (from $\beta = .40, p< .001$ to $\beta = .36, p< .001$). These results can be seen in Table 5. A Sobel test confirmed that for individuals identifying as bicultural, perceiving discrimination and experiencing affective RD do not significantly mediate the association between identity and taking action to empower D/deaf people as a group.

**Immersion identity.** The immersion identity was found to be the only identity type that was significantly positively correlated with group discrimination ($r = .44, p< .001$), individual discrimination ($r = .43, p< .001$), affective RD ($r = .35, p< .001$) and action for community empowerment ($r = .48, p< .001$). A hierarchical multiple regression was run using the following steps to predict action taken for community empowerment. Step 1, Immersion identity (DIDS-Immersion); Step 2, combined score on perceived group discrimination and affective relative deprivation. When the combined score was entered, the strength of the association between immersion identity and action to empower the group decreased slightly but remained significant (from $\beta = .48, p< .001$ to $\beta = .40, p< .001$). These results can be seen in Table 5. A Sobel test ($z = 2.37, p < .05$) confirmed that, contrary to bicultural identity, for individuals who identify as immersed in Deaf culture, perceiving group discrimination and experiencing affective RD does
partially mediate the relationship between one’s identity and action for community empowerment.

**Hearing identity.** As was found with the DAS-M Hearing scale, the DIDS measure of hearing identity was significantly negatively correlated with the action for community empowerment ($r = -.56, p < .001$) as well as perceived individual ($r = -.37, p < .001$) and group discrimination ($r = -.40, p < .001$) and affective RD ($r = -.30, p < .001$). Since hearing identity, as assessed by both measures, was negatively related to both the outcome and potential mediators, tests of partial mediation were not conducted.

**Marginal identity.** Similarly, the DIDS marginal identity was significantly negatively correlated with community empowerment ($r = -.37, p < .001$) and perceived group discrimination ($r = -.22, p < .005$) and was not significantly correlated with individual discrimination nor affective RD. Therefore these relationships were not explored for mediating variables.
Table 1. *General demographics*

<table>
<thead>
<tr>
<th>Category</th>
<th>Group</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>Female</td>
<td>120</td>
<td>68.5%</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>53</td>
<td>30.3%</td>
</tr>
<tr>
<td></td>
<td>Unanswered</td>
<td>2</td>
<td>1.1%</td>
</tr>
<tr>
<td>Race</td>
<td>Caucasian</td>
<td>148</td>
<td>84.6%</td>
</tr>
<tr>
<td></td>
<td>Black/African American</td>
<td>6</td>
<td>3.4%</td>
</tr>
<tr>
<td></td>
<td>Hispanic</td>
<td>6</td>
<td>3.4%</td>
</tr>
<tr>
<td></td>
<td>Decline to respond</td>
<td>5</td>
<td>2.9%</td>
</tr>
<tr>
<td></td>
<td>Other/multiracial</td>
<td>5</td>
<td>2.9%</td>
</tr>
<tr>
<td></td>
<td>Asian/Pacific Islander</td>
<td>3</td>
<td>1.7%</td>
</tr>
<tr>
<td></td>
<td>Unanswered</td>
<td>2</td>
<td>1.1%</td>
</tr>
<tr>
<td>Age</td>
<td>18-24</td>
<td>30</td>
<td>17.1%</td>
</tr>
<tr>
<td></td>
<td>25-34</td>
<td>35</td>
<td>20.0%</td>
</tr>
<tr>
<td></td>
<td>35-44</td>
<td>31</td>
<td>17.7%</td>
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<tr>
<td></td>
<td>45-54</td>
<td>38</td>
<td>21.7%</td>
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<tr>
<td></td>
<td>55-64</td>
<td>29</td>
<td>16.6%</td>
</tr>
<tr>
<td></td>
<td>65+</td>
<td>10</td>
<td>5.7%</td>
</tr>
<tr>
<td></td>
<td>Unanswered</td>
<td>2</td>
<td>1.1%</td>
</tr>
<tr>
<td>Education</td>
<td>12$^{th}$ grade or less</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td></td>
<td>Graduated High School</td>
<td>3</td>
<td>1.7%</td>
</tr>
<tr>
<td></td>
<td>Some college</td>
<td>21</td>
<td>12.0%</td>
</tr>
<tr>
<td></td>
<td>Associate degree</td>
<td>11</td>
<td>6.3%</td>
</tr>
<tr>
<td>Degree Type</td>
<td>Count</td>
<td>Percentage</td>
<td></td>
</tr>
<tr>
<td>-------------------------</td>
<td>-------</td>
<td>------------</td>
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<tr>
<td>Bachelor’s degree</td>
<td>46</td>
<td>26.3%</td>
<td></td>
</tr>
<tr>
<td>Post-graduate degree</td>
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<td>52.6%</td>
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</tr>
<tr>
<td>Unanswered</td>
<td>2</td>
<td>1.1%</td>
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</table>
### Table 2. *Deaf demographics.*

<table>
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<tr>
<th>Category</th>
<th>Group</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age of onset</strong></td>
<td>Born with hearing loss</td>
<td>102</td>
<td>58.3%</td>
</tr>
<tr>
<td></td>
<td>1 year old or younger</td>
<td>20</td>
<td>11.4%</td>
</tr>
<tr>
<td></td>
<td>2 years old</td>
<td>9</td>
<td>5.1%</td>
</tr>
<tr>
<td></td>
<td>3 years old</td>
<td>6</td>
<td>3.4%</td>
</tr>
<tr>
<td></td>
<td>4-14 years old</td>
<td>23</td>
<td>13.1%</td>
</tr>
<tr>
<td></td>
<td>15-34 years old</td>
<td>8</td>
<td>4.6%</td>
</tr>
<tr>
<td></td>
<td>35-54 years old</td>
<td>3</td>
<td>1.7%</td>
</tr>
<tr>
<td><strong>Hearing with aid or CI</strong></td>
<td>Profound hearing loss</td>
<td>34</td>
<td>19.4%</td>
</tr>
<tr>
<td></td>
<td>Severe hearing loss</td>
<td>49</td>
<td>28.0%</td>
</tr>
<tr>
<td></td>
<td>Moderate or mild loss</td>
<td>75</td>
<td>42.9%</td>
</tr>
<tr>
<td></td>
<td>Normal hearing</td>
<td>10</td>
<td>5.7%</td>
</tr>
<tr>
<td></td>
<td>Unanswered</td>
<td>7</td>
<td>4.0%</td>
</tr>
<tr>
<td><strong>Parents’ hearing status</strong></td>
<td>Both hearing</td>
<td>136</td>
<td>77.7%</td>
</tr>
<tr>
<td></td>
<td>Both D/deaf</td>
<td>32</td>
<td>18.3%</td>
</tr>
<tr>
<td></td>
<td>One D/deaf</td>
<td>5</td>
<td>2.9%</td>
</tr>
<tr>
<td></td>
<td>Unanswered</td>
<td>2</td>
<td>1.1%</td>
</tr>
<tr>
<td><strong>Identity category</strong></td>
<td>Deaf</td>
<td>101</td>
<td>57.7%</td>
</tr>
<tr>
<td></td>
<td>Hard of Hearing</td>
<td>39</td>
<td>22.3%</td>
</tr>
<tr>
<td></td>
<td>deaf</td>
<td>24</td>
<td>13.7%</td>
</tr>
<tr>
<td></td>
<td>Hearing impaired</td>
<td>9</td>
<td>5.1%</td>
</tr>
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</table>
Table 3. Correlations among DAS-M and DIDS measures

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. DAS-M</td>
<td></td>
<td>-.63**</td>
<td>.53**</td>
<td>-.50**</td>
<td>.54**</td>
<td>-.56**</td>
</tr>
<tr>
<td>Deaf</td>
<td></td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. DAS-M</td>
<td></td>
<td>-.07</td>
<td>.35**</td>
<td>-.62**</td>
<td>.52**</td>
<td></td>
</tr>
<tr>
<td>Hearing</td>
<td></td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. DIDS</td>
<td></td>
<td>-.24**</td>
<td>.16*</td>
<td></td>
<td></td>
<td>-.38**</td>
</tr>
<tr>
<td>Bicultural</td>
<td></td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. DIDS</td>
<td></td>
<td>-.23**</td>
<td>.61**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marginal</td>
<td></td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. DIDS</td>
<td></td>
<td>-.39**</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immersion</td>
<td></td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. DIDS</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hearing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-</td>
</tr>
</tbody>
</table>

*p<0.05 level; ** p<0.01 level
Table 4. **Correlations among discrimination variables and empowerment**

<table>
<thead>
<tr>
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<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Group Discrimination</td>
<td>-</td>
<td>.50**</td>
<td>.72**</td>
<td>.40**</td>
</tr>
<tr>
<td>2. Individual Discrimination</td>
<td>-</td>
<td>.41**</td>
<td>.42**</td>
<td></td>
</tr>
<tr>
<td>3. Affective RD</td>
<td>-</td>
<td>-</td>
<td>.38**</td>
<td></td>
</tr>
<tr>
<td>4. Community Empowerment</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

**p< .001 level**
Table 5. *Impact of discrimination, affective RD, bicultural and immersion identities on action for community empowerment*

<table>
<thead>
<tr>
<th>Identity</th>
<th>Group Discrimination</th>
<th>Affective RD</th>
<th>Bicultural Identity</th>
<th>Immersion Identity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( \beta )</td>
<td>( \Delta R^2 )</td>
<td>( R^2 )</td>
<td>( \beta )</td>
</tr>
<tr>
<td>1. DAS-M Deaf Identity</td>
<td>.57***</td>
<td>.29</td>
<td>.29***</td>
<td>.45***</td>
</tr>
<tr>
<td>2. DAS-M Deaf Identity</td>
<td>.45***</td>
<td>.05</td>
<td>.34***</td>
<td>.47***</td>
</tr>
<tr>
<td>Perceived Group Discrimination</td>
<td></td>
<td>.23***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Affective RD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. DAS-M Deaf Identity</td>
<td>.54***</td>
<td>.29</td>
<td>.29***</td>
<td>.47***</td>
</tr>
<tr>
<td>2. DAS-M Deaf Identity</td>
<td>.47***</td>
<td>.05</td>
<td>.34***</td>
<td>.47***</td>
</tr>
<tr>
<td>Affective RD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bicultural Identity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. DIDS Bicultural Identity</td>
<td>.40***</td>
<td>.16</td>
<td>.16***</td>
<td>.36***</td>
</tr>
<tr>
<td>2. DIDS Bicultural Identity</td>
<td>.36***</td>
<td>.09</td>
<td>.23***</td>
<td>.30***</td>
</tr>
<tr>
<td>Group Discrimination &amp; Affective RD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Immersion Identity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. DIDS Immersion Identity</td>
<td>.48***</td>
<td>.23</td>
<td>.23***</td>
<td>.40***</td>
</tr>
<tr>
<td>2. DIDS Immersion Identity</td>
<td>.40***</td>
<td>.04</td>
<td>.27**</td>
<td>.40***</td>
</tr>
<tr>
<td>Group Discrimination &amp; Affective RD</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**p< .01, ***p< .001.**
DISCUSSION

Using a sample of 175 D/deaf and hard of hearing individuals in the United States, the present study examined relationships between participants’ reports of group identity, perceptions of discrimination, and affective reactions to discrimination in describing self-reported empowered action they have taken for D/deaf people as an oppressed minority. Participants endorsed different identity types to varying degrees. The present study found evidence that Deaf people perceive discrimination against themselves and other deaf people and experience affective group relative deprivation as a result of what is seen as unjust treatment. Results indicate that individuals’ Deaf group identity as either fully immersed or partially immersed (bicultural) in the Deaf community was significantly positively related to self-reports of taking action to improve the social standing of deaf people. Research findings support the proposed mediational model that fully culturally Deaf individuals’ reports of group discrimination and their affective reactions to discrimination make modest contributions in predicting self-reported action towards community level empowerment beyond that of Deaf group identity. Additionally, although the present study revealed that this model held for those identifying as immersed, it did not hold for those identifying as bicultural.
**Group Identity**

It appears that, on average, the present sample has overcome barriers to identifying with the Deaf community and gained a sense of belonging in both the Deaf and hearing worlds. This may be in part a reflection of the age of the participants. With 63% of the participants being over the age of 34, this mostly adult sample had time to discover and become a part of the Deaf community. However, had the sample been predominantly younger deaf individuals, or predominantly older deaf individuals, the findings may be different. That is, younger deaf people, especially those under 18 years of age, are more likely to have not yet developed their Deaf identity (Bat-Chava, 2000; Trybus, 1980). And, a predominantly older sample would increase the percentage of people who lost their hearing through the aging process and thus would be more likely to identify with the hearing world in which they lived for 60 or so years.

Overall, participants identified more with the Deaf community (as measured by the DAS-M) but did endorse hearing cultural items and therefore, understandably, were most likely to identify as bicultural (as measured by the DIDS). However, participants were unlikely to score highly on the hearing subscale of the DIDS. Participants on average responded to the DAS-M Hearing subscale using the *unsure* variable, whereas they responded on average to the DIDS Hearing subscale using the *disagree* variable. The differences in scores found between the Hearing subscales of the DAS-M and DIDS may be attributable in part to the type of items used on each measure. Whereas the DAS’s hearing items tend to be positively and inclusively framed (e.g. *I enjoy socializing with hearing people*, or, *I often wish I could hear better or become hearing*), the DIDS’s hearing items tend to be negatively and exclusively framed (e.g. *I only socialize with hearing people*, or, *I feel sorry for deaf people who depend on sign*).
Therefore, the DAS hearing items were likely more applicable to participants who identify as bicultural than the DIDS hearing items, which aim to discriminate between bicultural and hearing identity types.
Discrimination

Discrimination against deaf people has been identified in previous research in the areas of housing, employment and education (U.S. Department of Housing and Urban Development, 2005; Cornell Employment and Disability Institute, 2008). Findings suggest that a sizable majority D/deaf individuals in the present study believed that deaf people currently face discrimination (75%) and that they themselves experience discrimination because of their hearing status (70%). This is especially notable since previous studies find that discrimination is underreported (Krieger & Sidney, 1996; Krieger, et al., 2010).

Interestingly, the present sample reported perceiving discrimination in general and specifically in education, but not in the workplace. This finding is notable for two reasons. One, over 78% of the sample reported having achieved a bachelorette or post-graduate degree. It appears that despite their perceptions of educational discrimination against D/deaf people, participants themselves accessed higher education. Two, data suggest that deaf people are significantly more likely to face unemployment (Cornell Employment and Disability Institute, 2008), wage disparities and over-qualification for jobs (Welsh & MacLeod-Gallinger, 1992) than hearing people, yet the presents study’s sample did not on average perceive discrimination in relation to employment.

There are several possible explanations for the discrepancy between perceptions of discrimination in educational versus work settings. It may be that people (correctly or not) perceive more protections in the workplace, or that they are more able to advocate for themselves once they are established in their career. As has been found in past studies, it is also possible that since the majority of the sample was likely in an employment rather than education
setting at the time of this study, their report of discrimination in education may be motivated by
the tendency to identify discrimination faced by others (current students) more readily than
discrimination faced by oneself (employees) (Crosby, 1982).

Findings suggest that Deaf group identity was related to perceived individual and group
discrimination. Specifically, results show that the significance of identifying with the Deaf
community is positively associated with the amount of discrimination participants indicated
having experienced. This finding, that higher levels of group identification are associated with
greater perceptions of discrimination against that group, supports previous research done on
groups that are marginalized on the basis of race (Sue, Bucceri, Lin, Nadal, & Torino, 2007),
immigrant status (Grant, 2008), and physical appearance (Jetten, Branscombe, Schmitt, &
Spears, 2001). In particular, this finding supports Sellers and Shelton’s (2003) research on
various African American identity types. As in the present study, Sellers and Shelton found that
group members who perceive their group as separate and unique from other groups (nationalist
ideology) are more sensitized to discrimination than group members who focus on the
commonalities between their group and other groups (humanist ideology). It is likely that those
who identify as bicultural are more likely to focus on commonalities between Deaf and hearing
people than Deaf immersion identifiers, who were found to be most sensitive to perceiving
discrimination.

In the present study, it is not possible to determine a causal path between group identity
and perceptions of discrimination. Previous research on immigrants, perceptions of subtle
prejudice toward ethnic minorities, and a longitudinal study on African Americans’ everyday
experiences of discrimination suggest that group identity increases individuals’ sensitivity to
and therefore perception of discrimination against their marginalized group (Grant, 2008;
Operario & Fiske, 2001; Sellers & Shelton, 2003). However, other studies on African Americans and on individuals with body piercings have shown that experiencing discrimination motivates minorities to identify strongly with their group (Branscombe, Schmitt & Harvey, 1999; Jetten, Branscombe, Schmitt & Spears, 2001).

The present research adds an extra variable for consideration to the debate of causation, degree of hearing loss. Findings show that reports of greater hearing loss were positively associated with identifying as culturally Deaf and with reporting more severe discrimination. It is unlikely that stronger identity would motivate participants to endorse more severe hearing loss; therefore it is reasonable to conclude that greater hearing loss would be a factor predicting group identity. Furthermore, it is possible that people with severe to profound hearing loss may objectively face more discrimination due to their greater hearing loss, just as Black and Latino individuals face more discrimination the darker their skin color is (Hochschild, 2007; Hersch, 2008).

It is possible that experiencing discrimination due to hearing loss prompts greater identification with the Deaf community out of a desire to feel a sense of acceptance and belonging. This pattern of discrimination motivating group identification may be unique to minority groups that are unlikely to be born into their minority community, as is the case for the vast majority of D/deaf people. As research continues to examine the topic of discrimination, increasing complexity can be gained in understanding the interactions of personal and situational variables. The question of causation is likely best explained by a complex interplay of social treatment and identity.
Group Affective Relative Deprivation

Findings suggest that the majority of participants in the present study experience affective group relative deprivation in regard to the treatment of deaf people. That is, they believe that deaf people deserve to be treated equally to hearing people (95%) and want equal treatment (99%) and yet participants reported feeling frustrated (78%), sad (64%) and resentful (55%) about how deaf people are treated as compared to hearing people. Additionally, as has been found in prior studies (Kelly & Breinlinger, 1995), the present study found significant positive correlations between identifying with one’s minority group and experiencing affective group RD. Understandably, if one does not identify with a group, one is unlikely to feel deeply upset by unjust treatment toward the group (de la Sablonnière & Tougas, 2008).

The present study sheds light on discrepant findings of previous research. Some past studies have concluded that affective group RD is significantly positively associated with engaging in collective action for the betterment of one’s group (Grant & Brown, 1995; Major, 1994; Smith & Ortiz, 2002) or is even necessary for this engagement (Tougas & Veilleux, 1988), while other research has concluded that affective group RD is not significantly related to social action (Grant, 2008). The current findings suggest that the relationship between affective group RD and social action is complex such that affective group RD is a significant factor in taking social action for some people and not for others.

Specifically, the present research findings suggest that for people who identify fully with the Deaf community (immersed identity), affective group RD contributes a moderate but significant degree to taking action to better one’s group. However, this is not the case for participants who scored highly on the bicultural subscale. Since correlations between social
action and biculturally identified individuals were significant but correlations between affective RD and biculturally identified individuals were non–significant, affective RD clearly cannot be a significant factor contributing to the social action that has been taken by these less uniquely identified individuals. This finding is in line with research by Kelly and Breinlinger (1995) who found affective group RD to be a significant predictor of social action only for those strongly (and uniquely) identified with their group.

Present study findings do not support those of a meta-analysis conducted by Smith and colleagues (1994, paper presentation as cited by Smith & Ortiz, 2002) in which group affective RD strongly predicted collective action ($d^+ = .63$, $r = .31$), while individual disadvantage did not. In the current study, group affective RD and perceived individual and group discrimination were equivalent predictors of taking action for community empowerment among participants identifying as immersed in their Deaf identity. Thus, for people immersed in the Deaf community, stand-alone experiences of perceiving discrimination against one’s self, one’s group, or experiencing affective group RD each appear to be sufficient to take action to better the group. However, for biculturally identified individuals, simply identifying with the Deaf community is sufficient for social action and perceptions of discrimination or affective group RD do not significantly contribute to taking action.

This finding may be due to biculturally identified individuals experiencing less discrimination and affective group RD as these variables were not significantly associated with scores on the bicultural subscale. Furthermore, biculturally identified individuals may have a very different experience of hearing-based discrimination since they identify as members of the hearing world. Thus, they may not perceive hearing people as an “out-group” where immersion identified individuals may. Group discrimination and RD both involve an out-group unfairly
treatment one’s in-group. If one identifies both Deaf and hearing groups as in-groups, it is likely very difficult to perceive group discrimination and group RD.
Empowerment and Group Identity

The present study’s finding that group identity is associated with action to empower the group supports prior research findings that as the relevance of one’s group identity increases, one becomes more likely to engage in action to address a disadvantage faced by one’s group (Kelly & Breinlinger, 1995; Klandermans, 1997; Stürmer & Simon, 2004; Van Zomeren, Postmes, & Spears, 2008; Van Zomeren, Spears, & Leach, 2008). Indeed, the current study’s findings support the strength of group identity over the contribution of both affective RD and perceiving group discrimination, in predicting taking action toward community empowerment.

Present study participants who identified as culturally Deaf (immersion or bicultural) were more likely than those who did not score highly on this identity type to have taken action to influence community issues in the past year. This finding may lend support to Grant’s (2008) research indicating that individuals with strong group identity are motivated to support action to improve the group both for the improvement itself and to demonstrate group loyalty. The most common types of actions participants took were to talk with and work with others on deaf issues. This finding is in line with previous qualitative research on Deaf identity and empowerment (Hamill & Stein, 2011), which found the most common social action among Deaf individuals to be informing members of problems and discussing possible approaches to these problems.

Differences in factors contributing to social action were found among types of culturally Deaf identities. The data suggest that people who identify strongly and uniquely with the Deaf world (immersion identity) are even more motivated to take action to better their group when they perceive discrimination or affective RD than when these variables are not present.
Conversely, the findings of the current study suggest that identifying as bicultural is not significantly related to perceiving discrimination or affective RD and that these variables do not contribute significantly to taking empowering action.

Perhaps the most interesting finding of the current study is this significant positive relationship between bicultural identity and taking action to improve D/deaf people’s situation as a group, without a relationship to perceiving discrimination or affective RD. Whereas previous research (Grant, 2008; Koomen & Fränkel, 1992; Tougas & Veilleux, 1988) has found that perceiving discrimination and affective RD motivate taking action for community empowerment, those identifying as bicultural appear to have different motivations. It may be that biculturally identified individuals feel the drive Grant (2008) identified to demonstrate belonging or loyalty to a group by taking action to improve it. It must also be noted that individuals with high scores on the bicultural subscale are indicating their sense of in-group status with both Deaf and hearing groups. As a person in this situation of identifying with both the minority and majority group, it may be difficult to acknowledge that one’s own group is discriminating against one, let alone to base empowering action on this acknowledgement.

In summary, for people who experience group discrimination and affective group RD, it appears that these experiences contribute significantly to the likelihood of taking social action. However, as is evidenced by individuals endorsing a bicultural identity, strong experiences of discrimination or affective group RD are not necessary for taking action to empower one’s group. Rather, simply identifying with one’s minority group is sufficient to engage in social action for its betterment.
Study Limitations

The present study provides an important first step in understanding the relative contribution of group identity, perceived discrimination and affective group relative deprivation in accounting for variation in reports of action to better the standing of D/deaf people as a group. Although findings of the present study are intriguing, they are limited in a number of respects. First, although Deaf and hard of hearing people of widely varying ages from across the United States participated in this study, their experiences may not be reflective of the larger population. Despite efforts to include people of varying ethnic backgrounds, this predominantly Caucasian sample is not representative of Deaf and hard of hearing individuals of other ethnic backgrounds.

The method of this study may have systematically excluded certain groups of people, ethnic and otherwise. Individuals may have decided not to participate in the present study because of the level of vocabulary and comprehension required. Since many Deaf people use American Sign Language (ASL) as their primary language, and since ASL is grammatically different from English, the language barrier may have been a deterrent to greater participation. Although this questionnaire was designed for use with signing and non-signing adults, psychometric issues of linguistic equivalence made it impractical to create two versions of the questionnaire (Colangelo-Fisher & Jeffries-McWhirter, 2001).

Additionally, the measures used in the present study only allow for closed-ended responses, limiting the ability to richly capture the very complex experiences of identity, discrimination and empowerment. Qualitative data gathered from semi-structured interviews or focus groups would add substantially to the understanding of these experiences. Despite this,
results from the present study are an important contribution to the paucity of literature regarding experiences of identity, discrimination and empowerment among Deaf and Hard of Hearing individuals.

Another limitation is that the present study is not longitudinal and findings can only be interpreted as correlation, not causation. Due to this limitation, several research questions cannot be addressed in the present study. Perhaps most notably, the issue of whether perceiving discrimination increases group identity, or group identity sensitizes one to perceiving discrimination cannot be fully tested in the present study. In general, a longitudinal study would allow for more clarity about the process of identity development and its potentially interactive relationship to experiencing discrimination.

A potential limitation of the present study is the high level of correlation between group discrimination and affective RD. Since group discrimination and affective RD were too closely related in the present study to be analyzed as separate variables, the present research could not assess whether affective group RD increases the likelihood of taking action to address inequalities faced by one’s group beyond the influence of perceived discrimination (Koomen & Fränkel, 1992). However, it is informative to discover that within this population, experiences of group discrimination and the affective reactions to that perceived discrimination may be more closely related than in other populations.
Implications for Research and Action

Although the present study contributes to the understanding of what motivates individuals who endorse a Deaf immersion identity to take action to better the group, further research is needed to increase understanding of D/deaf people’s experiences of unjust treatment and what motivates non-immersed individuals to take social action. Specifically, further research is needed to better understand what motivates individuals who identify with both the hearing and Deaf worlds to take action to improve the social standing of D/deaf people. The positive association found between scores on the bicultural subscale and action to empower the group, in the absence of perceived individual or group discrimination or affective RD, suggests that it is group identity and unmeasured variables that motivate action to empower the group.

The differences found between the four identities assessed in the present study merit further investigation. The present study reveals that relationships between identity, discrimination, affective reaction to discrimination and action to empower one’s group are nuanced. The substantial between group differences highlight the importance of assessing group identity beyond labels of “Deaf” and “hearing”. Future studies may contribute to understanding of the nuanced impact of identity by continuing to utilize the DIDS and also by examining the meaning being D/deaf has to participants’ self-conceptualization as race-based discrimination researchers have done (Sellars & Shelton, 2003). For example, some D/deaf individuals may identify more with the disability community or with the culturally Deaf community, with the hearing world or with the Hard of Hearing community.

Additionally, greater clarification is needed regarding the contextual nature of D/deaf people’s experiences of discrimination. Little is yet known about the various life domains in
which D/deaf people may perceive discrimination, why certain domains, such as school rather than work, are perceived as more unjust, and whether this finding is generalizable or due to sample characteristics. Greater attention, perhaps through qualitative research including focus groups, could be given to individuals’ experiences in school and work settings. Similarly, measures could be designed or interviews or focus groups conducted to assess participants’ experiences with access to media (e.g. closed captioning on television and in movie theaters), medical and mental health care (e.g. experiences with interpreters and reactions of practitioners to the person’s deafness), transportation (e.g. screen displays of train, bus and plane information) and telecommunication (e.g. experiences using relay operators and adaptive telecommunication equipment).

Research on Deaf and Hard of Hearing individuals and their perspectives can increase general awareness about these groups. This study suggests that the Deaf community of the United States perceives discrimination and that those who identify as Deaf are actively involved in improving their group’s status and working toward social justice for the Deaf community. Furthermore, it provides evidence in support of previous research that the community is engaging in empowerment work, in large part by informing members of problems and discussing possible solutions to those problems. Findings suggest that interventions designed to connect people to the Deaf community may increase group identity and thereby directly, or through individual’s experiences of unjust treatment, increase action for community empowerment. The present study provides researchers, clinicians, community advocates and others interested in working with the Deaf community, and other minority groups, insight into the importance of identity in relation to empowerment. As social psychologists Drury and Reicher conclude, the present research supports that, “social identity is the fulcrum of social
change precisely because it is through the collective empowerment of those with otherwise subordinated identities that broader social relations can change”. Hopefully, the present research will contribute to an ongoing dialogue about issues of identity, discrimination and empowerment among individuals who are often overlooked by both society and social science.
REFERENCES


Major, B. (1994). From social inequality to personal entitlement: The role of social comparisons, legitimacy appraisals, and group membership. In M. Zanna (Ed.),


APPENDIX A: MEASURES USED IN DISSERTATION RESEARCH

Deaf Acculturation Scale-Modified

These questions will ask you about parts of your identity. Please mark the response that best describes how much you agree with the following statements.

1. My deaf identity is an important part of who I am.
   Strongly Disagree Unsure Agree Strongly
   Disagree          Agree

2. I often wish I could hear better or become hearing.
   Strongly Disagree Unsure Agree Strongly
   Disagree          Agree

3. Being involved in the deaf world is an important part of my life.
   Strongly Disagree Unsure Agree Strongly
   Disagree          Agree

4. I would rather belong to the hearing world than the Deaf community.
   Strongly Disagree Unsure Agree Strongly
   Disagree          Agree
5. I feel that I am a part of the Deaf community.

Strongly Disagree Unsure Agree Strongly
Disagree Agree

6. I call myself hearing-impaired or hard of hearing.

Strongly Disagree Unsure Agree Strongly
Disagree Agree

7. I enjoy attending professional workshops in the hearing world.

Strongly Disagree Unsure Agree Strongly
Disagree Agree

8. I enjoy socializing with hearing people.

Strongly Disagree Unsure Agree Strongly
Disagree Agree

9. I find it pleasant to be a member of the Deaf community.

Strongly Disagree Unsure Agree Strongly
Disagree Agree
10. I am comfortable being around hearing people.

Strongly Disagree Unsure Agree Strongly
Disagree Agree

11. In general I believe I have more in common with members of the Deaf community than with any other groups.

Strongly Disagree Unsure Agree Strongly
Disagree Agree

12. I feel that I am part of the hearing world.

Strongly Disagree Unsure Agree Strongly
Disagree Agree

13. I am comfortable being around deaf people.

Strongly Disagree Unsure Agree Strongly
Disagree Agree

14. I enjoy participating in political activities in the hearing world.

Strongly Disagree Unsure Agree Strongly
Disagree Agree
15. I believe that members of the Deaf community have a lot in common.

Strongly    Disagree    Unsure    Agree    Strongly
Disagree    Agree

16. Being involved in the hearing world is an important part of my life.

Strongly    Disagree    Unsure    Agree    Strongly
Disagree    Agree

17. Relationships with other deaf people are important to me.

Strongly    Disagree    Unsure    Agree    Strongly
Disagree    Agree

18. I enjoy attending hearing gatherings/events/parties.

Strongly    Disagree    Unsure    Agree    Strongly
Disagree    Agree

19. I am a proud member of the Deaf community.

Strongly    Disagree    Unsure    Agree    Strongly
Disagree    Agree
Deaf Identity Development Scale - Revised

Next you will be presented with 47 statements about opinions and experiences with deaf and hearing people. For each statement, please mark the response that reflects how strongly you agree or disagree with the statement. There are no right or wrong answers to these statements, just your opinion.

1. I enjoy both deaf and hearing cultures.

Strongly Disagree Unsure Agree Strongly
Disagree Agree

2. I don’t know how I feel about deaf people.

Strongly Disagree Unsure Agree Strongly
Disagree Agree

3. Deaf people should only use ASL.

Strongly Disagree Unsure Agree Strongly
Disagree Agree

4. I support deaf culture while respecting hearing people.

Strongly Disagree Unsure Agree Strongly
Disagree Agree
5. Deaf people do not need hearing aids.

Strongly Disagree Unsure Agree Strongly
Disagree Agree

6. I feel sorry for deaf people who depend on sign language.

Strongly Disagree Unsure Agree Strongly
Disagree Agree

7. It’s hard for me to make friends.

Strongly Disagree Unsure Agree Strongly
Disagree Agree

8. American Sign Language and English are different languages of equal value.

Strongly Disagree Unsure Agree Strongly
Disagree Agree

9. There is no place for hearing people in the deaf world.

Strongly Disagree Unsure Agree Strongly
Disagree Agree
10. I don’t like it when deaf people use sign language.

Strongly Disagree Unsure Agree Strongly
Disagree Agree

11. I want to help hearing people understand and respect deaf culture.

Strongly Disagree Unsure Agree Strongly
Disagree Agree

12. I don’t know whether to call myself “hearing-impaired” or “deaf”.

Strongly Disagree Unsure Agree Strongly
Disagree Agree

13. Only deaf people should teach deaf children.

Strongly Disagree Unsure Agree Strongly
Disagree Agree

14. Deaf people should not marry other deaf people.

Strongly Disagree Unsure Agree Strongly
Disagree Agree
15. When I see deaf people use sign language, I walk away.

Strongly  Disagree  Unsure  Agree  Strongly
Disagree  Agree

16. I can change between ASL and Sign English.

Strongly  Disagree  Unsure  Agree  Strongly
Disagree  Agree

17. Neither deaf nor hearing people accept me.

Strongly  Disagree  Unsure  Agree  Strongly
Disagree  Agree

18. Deaf people are satisfied with what the deaf world has to offer.

Strongly  Disagree  Unsure  Agree  Strongly
Disagree  Agree

19. I am always alone.

Strongly  Disagree  Unsure  Agree  Strongly
Disagree  Agree
20. I don’t understand why deaf people have their own culture.

Strongly Disagree Unsure Agree Strongly
Disagree Agree

21. I have both deaf and hearing friends.

Strongly Disagree Unsure Agree Strongly
Disagree Agree

22. When I am with hearing people, I remember my pride as a deaf person.

Strongly Disagree Unsure Agree Strongly
Disagree Agree

23. The focus of deaf education should be teaching deaf children to speak and lipread.

Strongly Disagree Unsure Agree Strongly
Disagree Agree

24. I don’t know whether to think of my deafness as something good or something bad.

Strongly Disagree Unsure Agree Strongly
Disagree Agree
25. I feel comfortable with my child being either deaf or hearing.

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26. It is best for deaf people to communicate with speech and lipreading.

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27. Teaching deaf children to speak is a waste of time.

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28. I don’t know whether to respect or resent hearing people.

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29. I only socialize with hearing people.

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30. It is wrong to speak with signing.

Strongly Disagree Unsure Agree Strongly
Disagree Agree

31. I have thought a lot about what it means to be a proud, strong deaf person.

Strongly Disagree Unsure Agree Strongly
Disagree Agree

32. I try to communication well in both English and ASL.

Strongly Disagree Unsure Agree Strongly
Disagree Agree

33. Hearing counselors, teachers, and doctors who specialize in treating deaf people can give me the best advice.

Strongly Disagree Unsure Agree Strongly
Disagree Agree

34. I feel comfortable with both deaf and hearing people.

Strongly Disagree Unsure Agree Strongly
Disagree Agree
35. Only deaf people should run deaf schools.

Strongly Disagree Unsure Agree Strongly
Disagree Agree

36. I feel good about being deaf, but I involve myself with hearing people also.

Strongly Disagree Unsure Agree Strongly
Disagree Agree

37. I can’t trust hearing people.

Strongly Disagree Unsure Agree Strongly
Disagree Agree

38. I call myself “hearing-impaired”.

Strongly Disagree Unsure Agree Strongly
Disagree Agree

39. Learning to lipread is a waste of time.

Strongly Disagree Unsure Agree Strongly
Disagree Agree
40. I don’t know what is the best way to communicate.

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41. Deaf people should only socialize with other deaf people.

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42. I do not fit in with either hearing or deaf people.

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43. My hearing friends will fight for deaf rights.

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44. Sometimes I’m happy to be deaf, but most of the time I wish I could hear.

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45. If an operation could make me hearing, I would not accept it.

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46. I don’t know whether I’d rather be with deaf or hearing people.

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47. Sometimes I wish I were more part of the Deaf community.

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Deaf Perceived Group Discrimination Scale

These questions ask about how you are treated BECAUSE OF YOUR HEARING STATUS. How often do the following things happen to you?

1. I am treated with less courtesy than hearing people.
   
   Never  Rarely  Sometimes  Often

2. I am treated with the same respect as hearing people.
   
   Never  Rarely  Sometimes  Often

3. Hearing people act as if they think I am not smart.
   
   Never  Rarely  Sometimes  Often

4. Hearing people act as if they are afraid of me.
   
   Never  Rarely  Sometimes  Often

5. Hearing people act as if they think I am dishonest.
   
   Never  Rarely  Sometimes  Often
6. I receive the same service as hearing people at restaurants or stores.

Never  Rarely Sometimes  Often

7. Hearing people act as if they are better than me.

Never  Rarely Sometimes  Often

8. I am called names or insulted.

Never  Rarely Sometimes  Often

9. I am threatened or harassed.

Never  Rarely Sometimes  Often
Deaf Perceived Group Discrimination scale

These items ask about how you perceive that deaf people in general are treated. Please mark how much you agree with the statements:

1. Deaf people are likely to be discriminated against by members of the general public.

   Strongly disagree   Disagree   Unsure   Agree   Strongly agree

2. Deaf people as a group are victimized by society.

   Strongly disagree   Disagree   Unsure   Agree   Strongly agree

3. Historically, deaf people have been discriminated against.

   Strongly disagree   Disagree   Unsure   Agree   Strongly agree

4. Deaf and hearing people are treated equally.

   Strongly disagree   Disagree   Unsure   Agree   Strongly agree

5. Deaf and hearing people are treated equally in the workplace (for example they are as likely to get hired, promoted, have the same salary as hearing people).

   Strongly disagree   Disagree   Unsure   Agree   Strongly agree
6. Deaf and hearing people are treated equally in education.

Strongly disagree  Disagree  Unsure  Agree  Strongly agree

7. Deaf and hearing people are treated equally in housing (for example they are as likely to rent or buy a home).

Strongly disagree  Disagree  Unsure  Agree  Strongly agree

8. Deaf people have a lower status in society than hearing people.

Strongly disagree  Disagree  Unsure  Agree  Strongly agree

9. In general, the social status of deaf people is fair.

Strongly disagree  Disagree  Unsure  Agree  Strongly agree
Deaf Affective Group Relative Deprivation scale

These questions ask what you FEEL about the way that deaf people are treated. Please mark how much to you agree with the statements:

1. Deaf people deserve to be treated equal to hearing people.
   
   Strongly disagree     Disagree     Unsure     Agree     Strongly agree

2. I am happy about how deaf people are treated as compared to hearing people.
   
   Strongly disagree     Disagree     Unsure     Agree     Strongly agree

3. I am angry about how deaf people are treated as compared to hearing people.
   
   Strongly disagree     Disagree     Unsure     Agree     Strongly agree

4. I want deaf people to be treated equally to hearing people.
   
   Strongly disagree     Disagree     Unsure     Agree     Strongly agree

5. I am frustrated about how deaf people are treated as compared to hearing people.
   
   Strongly disagree     Disagree     Unsure     Agree     Strongly agree
6. I am resentful about how deaf people are treated as compared to hearing people.

Strongly disagree    Disagree    Unsure    Agree    Strongly agree

7. I am sad about how deaf people are treated as compared to hearing people.

Strongly disagree    Disagree    Unsure    Agree    Strongly agree

8. I am pleased with how deaf people are treated in the world.

Strongly disagree    Disagree    Unsure    Agree    Strongly agree
Action Scale for Community Empowerment

The following questions ask you about actions you’ve taken to help deaf people or the Deaf community. For example, you may have written to businesses or politicians to increase communication access. Please mark ‘Yes’ or ‘No’ to say if you have done these things.

1. Have you ever gone to a public meeting/rally/protest about a deaf issue?

   Yes    No

2. Have you ever shared your views about a deaf issue with a public official or person of influence?

   Yes    No

3. Have you ever worked with others to do something about a deaf issue?

   Yes    No

4. In the past year or so, did you go to any meetings about a deaf issue or problem?

   Yes    No
5. In the past year or so did you talk about deaf issues with your family or friends?

   Yes    No

6. In the past year or so did you work for a political party, a candidate, or a group or organization to help a deaf issue or problem?

   Yes    No

7. In the past year or so did you give money to a candidate, political party, or a group concerned with a deaf issue or problem?

   Yes    No

8. In the past year or so were you in a rally or protest about a deaf issue or problem?

   Yes    No

9. In the past year or so did you boycott a business or corporation because of a deaf issue or problem?

   Yes    No
10. In the past year or so did you do anything else, alone or with others in your community for a deaf issue or problem?

Yes    No
APPENDIX B: MEASURES NOT USED IN DISSERTATION RESEARCH

Mastery and Acceptance Ryff Scales of Psychological Well-Being

The following set of statements deals with how you might feel about yourself and your life. Please remember that there are neither right nor wrong answers. Mark the answer that best describes the degree to which you agree or disagree with each statement.

1. In general, I feel I am in charge of the situation in which I live.

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2. In general, I feel confident and positive about myself.

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3. The demands of everyday life often get me down.

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</tbody>
</table>
4. I feel like many of the people I know have gotten more out of life than I have.

<table>
<thead>
<tr>
<th>Strongly</th>
<th>Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Agree</th>
<th>Strongly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disagree</td>
<td>Slightly</td>
<td>Slightly</td>
<td>Agree</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. I like most aspects of my personality.

<table>
<thead>
<tr>
<th>Strongly</th>
<th>Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Agree</th>
<th>Strongly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disagree</td>
<td>Slightly</td>
<td>Slightly</td>
<td>Agree</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6. I made some mistakes in the past, but I feel that all in all everything has worked out for the best.

<table>
<thead>
<tr>
<th>Strongly</th>
<th>Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Agree</th>
<th>Strongly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disagree</td>
<td>Slightly</td>
<td>Slightly</td>
<td>Agree</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. In many ways, I feel disappointed about my achievements in my life.

<table>
<thead>
<tr>
<th>Strongly</th>
<th>Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Agree</th>
<th>Strongly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disagree</td>
<td>Slightly</td>
<td>Slightly</td>
<td>Agree</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
8. I do not fit very well with the people in the community around me.

Strongly Disagree Disagree Agree Agree Strongly Disagree Slightly Slightly Agree

9. I am quite good at managing the many responsibilities of my daily life.

Strongly Disagree Disagree Agree Agree Strongly Disagree Slightly Slightly Agree

10. I often feel overwhelmed by my responsibilities.

Strongly Disagree Disagree Agree Agree Strongly Disagree Slightly Slightly Agree

11. I generally do a good job of taking care of my personal finances and affairs.

Strongly Disagree Disagree Agree Agree Strongly Disagree Slightly Slightly Agree
12. I have been able to build a home and a lifestyle for myself that is much to my liking.

<table>
<thead>
<tr>
<th>Strongly</th>
<th>Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Agree</th>
<th>Strongly Disagree</th>
<th>Slightly</th>
<th>Slightly</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disagree</td>
<td>Slightly</td>
<td>Slightly</td>
<td>Agree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

13. My attitude about myself is probably not as positive as most people feel about themselves.

<table>
<thead>
<tr>
<th>Strongly</th>
<th>Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Agree</th>
<th>Strongly Disagree</th>
<th>Slightly</th>
<th>Slightly</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disagree</td>
<td>Slightly</td>
<td>Slightly</td>
<td>Agree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

14. When I look at the story of my life, I am pleased with how things have turned out.

<table>
<thead>
<tr>
<th>Strongly</th>
<th>Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Agree</th>
<th>Strongly Disagree</th>
<th>Slightly</th>
<th>Slightly</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disagree</td>
<td>Slightly</td>
<td>Slightly</td>
<td>Agree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

15. I am good at juggling my time so that I can fit everything in that needs to be done.

<table>
<thead>
<tr>
<th>Strongly</th>
<th>Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Agree</th>
<th>Strongly Disagree</th>
<th>Slightly</th>
<th>Slightly</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disagree</td>
<td>Slightly</td>
<td>Slightly</td>
<td>Agree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

16. I have difficulty arranging my life in a way that is satisfying to me.

<table>
<thead>
<tr>
<th>Strongly</th>
<th>Disagree</th>
<th>Disagree</th>
<th>Agree</th>
<th>Agree</th>
<th>Strongly Disagree</th>
<th>Slightly</th>
<th>Slightly</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disagree</td>
<td>Slightly</td>
<td>Slightly</td>
<td>Agree</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
17. The past had its ups and downs, but in general, I wouldn't want to change it.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Slightly</th>
<th>Slightly</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disagree</td>
<td>Slightly</td>
<td>Slightly</td>
<td>Agree</td>
<td></td>
</tr>
</tbody>
</table>

18. When I compare myself to friends and acquaintances, it makes me feel good about who I am.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Slightly</th>
<th>Slightly</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disagree</td>
<td>Slightly</td>
<td>Slightly</td>
<td>Agree</td>
<td></td>
</tr>
</tbody>
</table>
Center for Epidemiologic Studies-Depression scale

Below is a list of the ways you might have felt or behaved. Please tell me how often you have felt this way DURING THE PAST WEEK.

1. I was bothered by things that usually don’t bother me.
   - Rarely (less than 1 day)
   - Some of the time (1-2 days)
   - Occasionally (3-4 days)
   - Most or all of the time (5-7 days)

2. I did not feel like eating; my appetite was poor.
   - Rarely (less than 1 day)
   - Some of the time (1-2 days)
   - Occasionally (3-4 days)
   - Most or all of the time (5-7 days)

3. I felt that I could not shake off the blues even with help from my family or friends.
   - Rarely (less than 1 day)
   - Some of the time (1-2 days)
   - Occasionally (3-4 days)
   - Most or all of the time (5-7 days)

4. I felt I was just as good as other people.
   - Rarely (less than 1 day)
   - Some of the time (1-2 days)
   - Occasionally (3-4 days)
   - Most or all of the time (5-7 days)
5. I had trouble keeping my mind on what I was doing.

Rarely Some of the time Occasionally Most or all of the time
(less than 1 day) (1-2 days) (3-4 days) (5-7 days)

6. I felt depressed.

Rarely Some of the time Occasionally Most or all of the time
(less than 1 day) (1-2 days) (3-4 days) (5-7 days)

7. I felt that everything I did was an effort.

Rarely Some of the time Occasionally Most or all of the time
(less than 1 day) (1-2 days) (3-4 days) (5-7 days)

8. I felt hopeful about the future.

Rarely Some of the time Occasionally Most or all of the time
(less than 1 day) (1-2 days) (3-4 days) (5-7 days)
9. I thought my life had been a failure.

<table>
<thead>
<tr>
<th>Rarely</th>
<th>Some of the time</th>
<th>Occasionally</th>
<th>Most or all of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>(less than 1 day)</td>
<td>(1-2 days)</td>
<td>(3-4 days)</td>
<td>(5-7 days)</td>
</tr>
</tbody>
</table>

10. I felt tearful.

<table>
<thead>
<tr>
<th>Rarely</th>
<th>Some of the time</th>
<th>Occasionally</th>
<th>Most or all of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>(less than 1 day)</td>
<td>(1-2 days)</td>
<td>(3-4 days)</td>
<td>(5-7 days)</td>
</tr>
</tbody>
</table>

11. My sleep was restless.

<table>
<thead>
<tr>
<th>Rarely</th>
<th>Some of the time</th>
<th>Occasionally</th>
<th>Most or all of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>(less than 1 day)</td>
<td>(1-2 days)</td>
<td>(3-4 days)</td>
<td>(5-7 days)</td>
</tr>
</tbody>
</table>

12. I was happy.

<table>
<thead>
<tr>
<th>Rarely</th>
<th>Some of the time</th>
<th>Occasionally</th>
<th>Most or all of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>(less than 1 day)</td>
<td>(1-2 days)</td>
<td>(3-4 days)</td>
<td>(5-7 days)</td>
</tr>
</tbody>
</table>
13. I talked less than usual.

<table>
<thead>
<tr>
<th>Rarely</th>
<th>Some of the time</th>
<th>Occasionally</th>
<th>Most or all of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>(less than 1 day)</td>
<td>(1-2 days)</td>
<td>(3-4 days)</td>
<td>(5-7 days)</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Rarely</th>
<th>Some of the time</th>
<th>Occasionally</th>
<th>Most or all of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>(less than 1 day)</td>
<td>(1-2 days)</td>
<td>(3-4 days)</td>
<td>(5-7 days)</td>
</tr>
</tbody>
</table>

15. People were unfriendly.

<table>
<thead>
<tr>
<th>Rarely</th>
<th>Some of the time</th>
<th>Occasionally</th>
<th>Most or all of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>(less than 1 day)</td>
<td>(1-2 days)</td>
<td>(3-4 days)</td>
<td>(5-7 days)</td>
</tr>
</tbody>
</table>

16. I enjoyed life.

<table>
<thead>
<tr>
<th>Rarely</th>
<th>Some of the time</th>
<th>Occasionally</th>
<th>Most or all of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>(less than 1 day)</td>
<td>(1-2 days)</td>
<td>(3-4 days)</td>
<td>(5-7 days)</td>
</tr>
</tbody>
</table>
17. I had crying spells.

<table>
<thead>
<tr>
<th>Rarely</th>
<th>Some of the time</th>
<th>Occasionally</th>
<th>Most or all of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>(less than 1 day)</td>
<td>(1-2 days)</td>
<td>(3-4 days)</td>
<td>(5-7 days)</td>
</tr>
</tbody>
</table>

18. I felt sad.

<table>
<thead>
<tr>
<th>Rarely</th>
<th>Some of the time</th>
<th>Occasionally</th>
<th>Most or all of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>(less than 1 day)</td>
<td>(1-2 days)</td>
<td>(3-4 days)</td>
<td>(5-7 days)</td>
</tr>
</tbody>
</table>

19. I felt that people dislike me.

<table>
<thead>
<tr>
<th>Rarely</th>
<th>Some of the time</th>
<th>Occasionally</th>
<th>Most or all of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>(less than 1 day)</td>
<td>(1-2 days)</td>
<td>(3-4 days)</td>
<td>(5-7 days)</td>
</tr>
</tbody>
</table>

20. I could not get “going”.

<table>
<thead>
<tr>
<th>Rarely</th>
<th>Some of the time</th>
<th>Occasionally</th>
<th>Most or all of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>(less than 1 day)</td>
<td>(1-2 days)</td>
<td>(3-4 days)</td>
<td>(5-7 days)</td>
</tr>
</tbody>
</table>
### APPENDIX C: CORRELATION TABLE OF MAIN STUDY VARIABLES

**Table 6. Correlations of main study variables**

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. DAS-M Deaf</td>
<td></td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. DAS-M Hearing</td>
<td>-.63**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. DIDS Immersion</td>
<td>.54**</td>
<td>-.62**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. DIDS Bicultural</td>
<td>.53**</td>
<td>-.07</td>
<td>.16*</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. DIDS Hearing</td>
<td>-.56**</td>
<td>.52**</td>
<td>-.39**</td>
<td>-.38**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. DIDS Marginal</td>
<td>-.50**</td>
<td>.35**</td>
<td>-.23**</td>
<td>-.24**</td>
<td>.61**</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discrimination</td>
<td>.39**</td>
<td>-.48**</td>
<td>.44**</td>
<td>.16</td>
<td>-.40**</td>
<td>-.23**</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Affective RD</td>
<td>.29**</td>
<td>-.40**</td>
<td>.35**</td>
<td>.11</td>
<td>-.30**</td>
<td>-.14</td>
<td>.72**</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>9. Community</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empowerment</td>
<td>.54**</td>
<td>-.34**</td>
<td>.48**</td>
<td>.40**</td>
<td>-.56**</td>
<td>-.37**</td>
<td>.40**</td>
<td>.38**</td>
<td>-</td>
</tr>
</tbody>
</table>

*p < .05; **p < .01 level
APPENDIX D: INFORMED CONSENT
July 8, 2011

TO: Alexis Hamill
   Psychology

FROM: Hillary Harms, Ph.D.
      HSRB Administrator

RE: HSRB Project No.: H11D277GFB

TITLE: From Discrimination to Action for Empowerment: The Impact of Group Identification

You have met the conditions for approval for your project involving human subjects. **As of June 28, 2011, your project has been granted final approval by the Human Subjects Review Board (HSRB). This approval expires on June 7, 2012.** You may proceed with subject recruitment and data collection.

The final approved version of the consent document(s) is attached. Consistent with federal OHRP guidance to IRBs, **the consent document(s) bearing the HSRB approval/expiration date stamp is the only valid version and you must use copies of the date-stamped document(s) in obtaining consent from research subjects.**

You are responsible to conduct the study as approved by the HSRB and to use only approved forms. If you seek to make any changes in your project activities or procedures, send a request for modifications to the HSRB via this office. Those changes must be approved by the HSRB prior to their implementation.

**You have been approved to enroll 250 participants.** If you want to enroll additional participants you must seek approval from the HSRB.

Good luck with your work. Let me know if this office or the HSRB can be of assistance as your project proceeds.

Comments/ Modifications:
Please add the text equivalent of BGSU letterhead and the HSRB approval stamp to the online consent document.

c: Dr. Catherine Stein

Research Category: FULL BOARD REVIEW
Hello, my name is Alexis Hamill. I am a graduate student at Bowling Green State University studying community psychology. My advisor Dr. Catherine Stein and I are studying people who are Deaf and hard of hearing in terms of their identity and experiences in a primarily hearing society. Your participation is greatly valued, we want to know your experience and opinions!

As a participant in this research, you will benefit by having the opportunity to reflect on your experiences and contribute to knowledge that can help other Deaf and hard of hearing people. We very much value your time and for your participation you can be entered into a lottery to win one of twelve $50 gift cards for Amazon.com. You will have a one in twenty-one chance of winning or better. You can enter this lottery by providing contact information at the end of the survey. Your information will only be used to contact you if you win a gift card and your information will not be associated with your responses to the survey.

Your participation in this research is completely voluntary. You are free to withdraw at any time. If you are taking this survey in association with an institution your participation will not impact your grade, class standing, or relationship to the institution.

Your responses will be confidential and protected. Your responses to the survey will not be associated with your name, and will only be viewed by me. Data from this project will be kept for seven years and then destroyed.

This survey does not put you at any risk.

If you have any questions about this research or your participation, please feel free to contact me at 419-378-0698 or alexiss@bgsu.edu, or my advisor Dr. Catherine Stein at 419-372-2278 or cstein@bgsu.edu. If you have any questions about your rights as a participant in this research, you may also contact the Human Subjects Review Board at 419-372-7716 or hrsb@bgsu.edu.

To participate, please complete the attached survey and return it and your lottery contact information in the stamped self-addressed envelop provided. The survey will take about 25 minutes to complete. Thank you again very much for your time. I greatly appreciate your participation in this research!

By returning your completed survey you are agreeing that you have been informed of the purposes, procedures, risks and benefits of this study, have had the opportunity to have all your questions answered, and have been informed that your participation is completely voluntary. By completing and returning this survey you AGREE to participate in this research.
INFORMED CONSENT

Hello, my name is Alexis Hamill. I am a graduate student at Bowling Green State University studying community psychology. My advisor Dr. Catherine Stein and I are studying people who are Deaf and hard of hearing in terms of their identity and experiences in a primarily hearing society. Your participation is greatly valued, we want to know your experience and opinions!

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Your responses will be confidential and protected. Your responses to the survey will be stored on a secure server, will not be associated with your name, and only viewed by me. Data from this project will be kept for seven years and then destroyed. Some employers may use tracking software so you may want to complete this survey on a personal computer. To protect your privacy, do not leave the survey open if you are using a public computer.

This survey does not put you at any risk.

If you have any questions about this research or your participation, please feel free to contact me at 419-378-0688 or alexiss@bgsu.edu, or my advisor Dr. Catherine Stein at 419-372-2278 or cstein@bgsu.edu. If you have any questions about your rights as a participant in this research, you may also contact the Human Subjects Review Board at 419-372-7716 or hsrb@bgsu.edu.

To participate, please click the round button below indicating that you have been informed about the purposes, procedures, risks and benefits of this study; then click 'Next'. You will then be directed to an online survey that will take about 25 minutes to complete. Thank you again very much for your time. I greatly appreciate your participation in this research!

* RADIO BUTTON I have been informed of the purposes, procedures, risks and benefits of this study. I have had the opportunity to have all my questions answered.
and I have been informed that my participation is completely voluntary. I AGREE to participate in this research.