Intersectional Invisibility: A Comparison Among Caucasian, African-American, and Latino Men and Women

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INTERSECTIONAL INVISIBILITY: A COMPARISON AMONG CAUCASIAN, AFRICAN-AMERICAN, AND LATINO MEN AND WOMEN

by

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A thesis submitted in partial fulfillment of the requirements for the Honors in the Major Program in Psychology in the College Sciences and in The Burnett Honors College at the University of Central Florida Orlando, Florida

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Thesis Chair: Dr. Matthew Chin
ABSTRACT

The objective of this thesis was to investigate intersectional (categorical/social) invisibility and the extent to which this phenomenon occurs in a comparison of dominant (i.e., Caucasian), and non-dominant (African-American and Latino) social/ethnic groups. It has been found that intersectional invisibility occurs among African-American women with respect to Caucasian men and women, and African American men (Sesko & Biernat, 2010), but little of this research has been done regarding Latinas. Thus, this experiment aims to not only examine whether Latinas are also subject to intersectional invisibility among dominant (i.e., Caucasian) and non-dominant (i.e., African American and/or Latino) groups, but to determine whether the theory can be extended to perceptions between non-dominant groups such as African-Americans and Latinos. Determining whether intersectional invisibility occurs among Latinas, moreover, may provide theoretical and practical insights of what advantages/disadvantages Latinas may particularly endure as members of the rapidly growing Latino population in the U.S.
DEDICATION

For those whose identities and experiences may be overlooked and misunderstood in the sea of prototypes, stereotypes, and norms,

For my family whose love and support has been a reservoir of encouragement, solidarity, and resolve for my personal development and aspirations,

For my wonderful mother, Crystal Kennedy, whose has sacrificed so much of herself so that I could have the opportunity to achieve my greatest potential personally, academically, and professionally. You inspire me and I hope to one day be even half of the woman, wife, and mother that you are,

And especially to that special One who has been with me every step of the way and makes this entire adventure worthwhile.
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CHAPTER ONE: INTERSECTIONAL FRAMEWORK AND VARIATIONS

One look at the world reveals a kaleidoscope of diversity. Whether it is among animals, from the tiniest of insects to the largest of mammals, plants (fruits, vegetables, edible, inedible, land and sea), natural elements (features of the earth, sky, oceans, and atmosphere), or humans, it is clear that the world is overflowing with variation. And, furthermore, this variation produces vastly different experiences. Yet, it is arguable that some of the most intriguing experiences explored via literature, art, philosophy, law, and science are those of people.

Individuals differ from each other in a plethora of ways. Some of these differences are more obvious and static than others. For instance, biologically speaking, people differ by means sex, either being male or female. However, within a social context, variations among people are exponentially numerous. Any one person can differ from another by way of gender, ethnicity, age, socioeconomic status/social class, political ideology, religious orientation, and sexual orientation, to name just a few categories. What is fascinating still, is how membership in several of these categories helps form identities and resulting experiences that contrast from each other in drastic ways. An individual does not possess any single feature of a category at any one given time. A person possesses multiple categorical characteristics simultaneously that collectively contribute to that person’s identity and experience.

With regard to the latter, the term “identity” can relate to the categories of which a person is a member and gleans personal meaning from. Particularly within psychology, “identity” as a concept, can be synonymous or highly related with topics related to the self such as awareness, image, reflection/introspection, and esteem (Shields, 2008, p. 301). And, it is the very hybridity
of identity and its impact on internally and externally applied experience that is the cornerstone of this proposed investigation. With this in mind, it is helpful to provide some illustrations to clarify the context of this topic both abstractly and with regard to humans.

An apple when eaten it has a unique flavor stemming from the qualities of being an apple. Though other fruits, (having similar, but not exact, qualities of an apple), may have flavors similar to the apple’s flavor, they will not possess the same unique flavor of the apple; they will thus, produce different taste experiences when eaten. Similarly, when a banana is eaten, its distinct flavor from its distinct qualities will produce an experience of taste different from that of the apple. When eaten together, each fruit will contribute to the taste experience yet separately as an apple flavor and a banana flavor. However, if both the apple and banana were combined in such a way that their distinct flavors interacted simultaneously with one another, the resulting taste experience would not be that of the apple flavor and the banana flavor, but of a completely new and distinct flavor all together: a “banapple” flavor, and thus, a “banapple” experience.

This same concept occurs with individual human identity and experience constantly. For instance, a person can be female; this person can also be a woman; this woman can also be Jewish. Each of these aspects alone has distinct qualities that contribute to the person’s identity. Yet, these categories do not act independently of each other, nor do they act additively with each other. That is, this person is not merely a female who also happens to associate with the gender construct woman, who then is also Jewish. On the contrary, these aspects work in concert with one another to produce the unique identity of a Jewish woman, who will encounter experiences different from those of others such as a Jewish man, or African-American woman, or Latino
man. Both of the preceding illustrations attempt to clarify the cross-academic concept known as intersectionality, or the intersectional framework.

Intersectionality, is both a concept and a process and has been a topic of study, particularly in women’s studies for decades; however, it has only become a topic of interest in psychology relatively recently (Warner, 2008). As a concept, intersectionality examines how social identities like race, gender, and social class interact to form qualitatively different meanings and experiences (Warner, 2008, p. 454). That is, for example, the meaning and experience of womanhood is different for an immigrant woman and a woman who is a natural-born citizen because each experience is dictated by contrasting immigrant/non-immigrant, ethnic, and other (i.e., class) identities. As a process, intersectionality was coined by feminist and critical race theorists who asserted that it is the means by which analytical methods are used to examine the meaning and implications of multiple categories of social group membership (Cole, 2009, p.170). In fact, Cole (2009) cites Crenshaw for not only creating the term “intersectionality” in 1989, but for also making headway in investigating race and gender in terms of identity, difference, and disadvantage.

Emergence of Intersectionality

The origins of intersectionality can also be found in nineteenth century African-American political analysis, organizing, and feminist theory (Cole, 2009). Many African-American scholars and political activists such as Cooper and DuBois urged the consideration of gender and race, and their associated prejudices and discriminations, in various political organizations. This began to spark people’s interest in studying women, ethnic minorities, and particularly ethnic
minority women who often experience the effects of multiple subordination (Cole, 2009, p. 171). From there, the intersectional framework began to expand its reach beyond the intersections of race and gender, to exploring other interactions of categories such as social class and sexuality. As a result, there presently exists multiple forms of intersectionality such as structural intersectionality within legal research which explores how persons’ legal statuses or social subordinations marginalize them in lieu of their hybrid identity statuses; and, political intersectionality which inspects how the aims and needs of different groups, from which individuals draw their identities, vary and conflict with respect to each other (Shields, 2008, p. 304).

To clarify the aim of the intersectional framework, Cole (2009) specifically cites Crenshaw’s findings that female African-American plaintiffs encounter a form of discrimination based on the combination of their race and gender. This race and gender specific discrimination, consequently, causes female African-American plaintiffs to experience legal proceedings that differ from the legal proceedings of female Caucasian American and male African-American plaintiffs (Cole, 2009, p. 171). That is, the experience of the conglomerated, rather than additive, qualities of being an African-American woman differ from the experience of being African-American and being a woman individually. In addition to this, using Collins’ (cited in Warner 2008)“matrix of domination” to explain intersectionality, Warner elaborates that social group memberships interact in a way that within status and power relations within society, they create moments—depending on an individual’s memberships—of advantage, disadvantage, or both simultaneously (p. 455). For instance, research now shows that for Latino men, being a heterosexual male (a dominant category) is not independent in itself, but completely merged with
being an ethnic minority (a subordinate category), which exposes them to unique experiences of both privilege and disadvantage (Warner, 2008, p. 455).

The unique quality of intersectionality, furthermore, is its conceptualization of identity. It reveals that an individual’s social identities influence his/her beliefs and experiences of other categories, such as gender (Shields, 2008). The intersectional framework respects identity as not only an individual feature, but the result of power relations among groups within the broader identity category; that is to say, social identities that organize social interactions give each other meaning in relation to one another, and maintain each other’s formation as distinct groups, which allows categories to seem distinguished from one another (Shields, 2008, p. 302). Under this understanding, intersectionality explores the dynamics of dominant, “master” categories (i.e., gender, race/ethnicity, class, age) that are generally universally accepted and conglomerate, “emergent” categories (i.e., young, Latino woman) that have different meanings which depend on yet, are distinct from dominant categories (Warner, 2008, 407). Because of the dominant nature of “master” categories, their associated norms are often overgeneralized, or incorrectly assumed to be the same for “emergent” categories, when the dynamics occurring within “emergent” categories do not fit those assumptions, are under-represented, and thus are overlooked.

The intersectional perspective combats this process of misattribution and under-representation by promoting the qualitative nuances between social-categorical intersections, rather than the accumulation of disadvantage relative to each minority membership (Shields, 2008). Overall, whereas many other approaches to identity regard it as a static structure of independent characteristics, intersectionality truly regards it as a fluid, interactive process
influenced by many social spheres (Warner, 2008). Therefore, intersectional research, according to Purdie-Vaughns and Eibach (2008), investigates whether and/or to the extent to which persons of plural subordinate-group identities are more disadvantaged, with respect to them experiencing prejudice and discrimination than persons of single subordinate-group identities (p. 377). And, as the intersectional framework progressed and refined itself over time, so did its approaches to the investigation of the interactions of multiple social categories and their impact on identity and experience.

**Double Jeopardy Hypothesis**

On the forefront of the progression of the intersectional framework over time was the double jeopardy hypothesis (Cole, 2009). The double jeopardy hypothesis is both an additive and interactive model that predicts that multiple subordinate identity individuals will experience more disadvantage (prejudice and discrimination) than single subordinate identity individuals (Purdie-Vaughns & Eibach, 2008, p. 379). Particularly because gender and ethnicity are some of the most vital contributors to status, ethnic minority women experience a unique form of prejudice from their multiple subordinate group membership (Reid & Comas-Diaz, 1990, p. 397, 400). This approach may glean some support from findings that in terms of earnings, career authority, and other socioeconomic factors that ethnic minority women consistently fall behind Caucasian women and ethnic minority men (Purdie-Vaughns & Eibach, 2008, p. 379).

**Ethnic Prominence Theory**

However, another intersectional approach emerged known as the ethnic prominence theory, which asserts that ethnicity, is the prime determining factor of discrimination and
disadvantage; gender and other social factors are not the essential catalysts for being oppressed and discriminated against. For instance, Levin, Sinclair, Veniegas, and Taylor (2002) found that ethnic minority women’s expectation of general discrimination did not differ from that of ethnic minority men, due to the perception of largely ethnicity based discrimination. Their findings contend against the double jeopardy hypothesis, as well as the findings of Kaiser and Pratt-Hyatt (2009) that Caucasian individuals do not cast prejudice equally towards ethnic minorities, expressing more prejudice towards those who had prominent ethnic minority traits than those who did not.

*Subordinate Male Target Hypothesis*

Another intersectional perspective emerged to counter both the double jeopardy hypothesis and the ethnic prominence theory. The subordinate male target hypothesis is founded in social dominance theory, which states that societies consist of group social hierarchies in which dominant groups enjoy more privilege, and subordinate groups experience more oppression (Purdie-Vaughns & Eibach, 2008). Consequently, the subordinate male target hypothesis posits that categorically subordinate men (i.e., ethnic minority men) carry the brunt of oppression, prejudice, and stereotype in comparison to other categorically subordinate people (Purdie-Vaughns & Eibach, 2008). Findings that support this hypothesis are that relative to Caucasian males and females, and African-American females, African-American males have drastically higher incarceration rates (Purdie-Vaughns, 2008, p. 379; Sidanius, 2000, p. 14).

Although each of the previously-mentioned models provide a unique perspective in intersectionality and intersectional research, each approach is problematic in similar ways. For
example, they fail to address how multiple subordinate category oppression is interdependent on single-subordinate category oppression; and specifically, how the oppression of the former is therefore, qualitatively and holistically different from the latter (Purdie-Vaughns & Eibach, 2008, p. 380). The experience and possible associated prejudices of being an ethnic-minority woman is impacted by the prejudices of being an ethnic-minority (subordinate category), a woman (subordinate category), and not Caucasian (dominant category) or male (dominant category) which are inherently different. Therefore, the relatively new intersectional approach known as intersectional invisibility, the theoretical context of this proposed research, becomes very important.
CHAPTER TWO: INTERSECTIOINAL INVISIBILITY—A COMPARISON AMONG CAUCASIAN, AFRICAN-AMERICAN, AND LATINO MEN AND WOMEN

Moving forward, intersectional invisibility is defined as the failure to fully recognize people with intersecting identities and the distortion of intersectional individuals’ characteristics in order to fit them according to prototypes of associated dominant identity groups (Purdie-Vaughns & Eibach, 2008, p. 381). Central to the intersectional invisibility phenomenon is the determination of the benchmark norm of experiences of a dominant group, to which the experiences of other social identities/groups are compared.

**Background**

As stated in Warner (2008), groups that are considered the norm or prototypical are usually those that possess higher status than comparative groups, which in the United States are Caucasians and males (p. 456). This is very important to the tenets of intersectional invisibility because it is based on the non-prototypicality hypothesis, in which objects whose characteristics do not fit the traits of a prototype hinder categorization, become less recognized, and thus invisible (Sesko & Biernat, 2010). Support for this hypothesis and therefore intersectional invisibility comes from research that revealed stereotypes that African-American women experience differ from that of single-subordinate identity groups (i.e., African-American men and Caucasian women) because they are not prototypical of “African-American” or “women” (Sesko & Biernat, 2010, p. 356). In addition to this, Sesko and Biernat (2010) found that
Caucasians categorize African-American women's faces, because of their non-prototypicality, more slowly than the faces of African-American men, and Caucasian men and women.

Therefore, people whose identities come from multiple subordinate group memberships are likely to be intersectionally invisible, (due to their non-prototypical qualities), and experience disadvantages and advantages distinct from those who are more prototypical. With this in mind, the intersectional invisibility approach is more congruent to actual human experience than the other cross-categorical approaches previously mentioned in that, invisibility stemming from non-prototypicality in this respect does not consistently mean disadvantage as it does in the double jeopardy perspective, nor advantage as it does in the social-dominance theory. Although intersectional invisibility rarely means not experiencing advantage or disadvantage, it shows that advantage and/or disadvantage varies depending context, situation, and the effects of simultaneous (rather than additive or multiplicative) multiple subordinate group membership (Warner, 2008, p. 457). This perspective enables the intersectional invisibility model to look past the question of “who is more oppressed/disadvantaged?” (Purdie-Vaughns & Eibach, 2008) and address the various experiences of different categorical groups, test generalizable hypotheses about those groups, and explore implications relative to other intersectional groups (p. 388).

Psychological research on intersectional invisibility, moreover, must be conducted and interpreted with care because the intersectional framework itself crosses many academic boundaries (Warner, 2008). Because of the tendency of psychological experimentation to divide individuals among single social categories, it can thereby ignore the unique meaning and experiences of multiple group membership identity, which is the crux of the intersectional perspective. Thus, although psychologists cannot include all relevant social group identities in a
single research project, Warner (2008) emphasizes that researchers, “… need to carefully choose not only the dimensions/categories of identity on which we [they] want to focus, but also think through which categories we [they] are collapsing across and how this selection may alter our results and subsequent interpretation of those results” (p. 455).

So to confront these issues appropriately, the use of a factorial design (Warner, 2008), and methods of social cognition like the “who said what procedure,” originated by Taylor et al. (1978), and implicit association tests are employed in the present investigation. Factorial designs allow researchers to explore interactions between “master” and “emergent” categories in intersectional research, whereas methods of social cognition enable researchers to investigate the cognitive frameworks of prejudice and stereotypes and fill in the gaps in the literature about multiple social identities. Two primary research experiments pertinent to this proposal exemplify this approach.

**Research and Implications**

Biernat and Sesko (2013) explored intersectional invisibility in mixed-sex work teams of employees, and specifically how team members' ethnicities and genders impacted evaluations they received from study participants. They proposed that because of their non-prototypical features, female African-American team members' intersectional invisibility would be to their advantage; because, it would buffer them from the negative stereotypes (and thus, negative evaluations) in comparison to Caucasian women, who are more prototypical of the category “women” (and therefore, more associated with stereotypes towards women), particularly in the masculine workplace (Biernat & Sesko, 2013, p. 472). Two experiments within the study then
examined the nuances between individual member evaluations in Caucasian pairs (Caucasian men with Caucasian women), African-American pairs (African-American men with African-American women), and mixed pairs (Caucasian women with African-American men; African-American women with Caucasian men). In the first experiment, participants completed individual team member evaluations after being given information about the team, the task completed by the team, that the team completed the task successfully, and pictures depicting team members' ethnicity and gender based on which team-type condition to which the participant was randomly assigned (Biernat & Sesko, 2013).

The results of the first experiment, to continue, showed that Caucasian women were not only evaluated more negatively than African-American women, but that they were also more negatively evaluated when paired with Caucasian men; in mixed teams, Caucasian men were evaluated as more competent than women of any ethnicity (Biernat & Sesko, 2013, p. 473). The results showed that both the genders and ethnicities of team members affected the types of evaluations participants made of individual team members, and that there was no gender bias toward African-American women. All of these findings support the intersectional invisibility hypothesis.

That is, female African-American team members evaded negative judgment because of their non-prototypicality within the social category “women” (Biernat & Sesko, 2013, p. 473). The second experiment was similar to the first and found similar results; however, participants were informed that the teams did poorly on the task. Pro-male bias occurred only in Caucasian pairs; women were evaluated as less competent only in Caucasian pairs; and ethnicity had a multiplicative (evident in combination with other factors) rather than additive (evident in the
mere presence of other factors) effect on competency evaluations of women (Biernat & Sesko, 2013, p. 474). Overall, the conclusion is clear: ethnicity and gender indeed impact the perceptions and judgments of persons with multiple subordinate group identities.

In a different study, Gawronski et al. (2003) used the “who said what procedure” in which participants try to match statements made to the correct individual who made them (Taylor et al., 1978; Klauer & Wegener, 1998) and implicit association tests that measure discrete stereotyping to explore the processes of individuation, categorization, and stereotyping. In the first of two experiments, participants viewed a video containing a short interview of a woman on a non-gender related topic, and in the second experiment participants watched a video consisting of a discussion between three men and three women about a gender-related topic.

Following the video, in each experiment, participants answered questionnaires about their impressions of the content of the discussion of each video, and after completing the initial questionnaire (and the “who said what” task in experiment two), participants completed an implicit associations test\(^1\) (Gawronski et al., 2003). Overall, the results showed that when participants had strong implicit stereotypic associations, they ascribed stereotypical traits to the target(s) based on the target's categorical membership to create individuating information; however, when participants had weak stereotype associations, rather than creating individuating information, stereotype impressions resulted from individuating information (Gawronski et al., 2003).

These results implicate that strong stereotypic associations increase cognitive stereotyping and individuation mechanisms; therefore, social categorization is not necessarily
due to individual differences, but due to stereotypes associated with social categories. That is, a woman may not be automatically perceived or categorized as a woman entirely due to the woman-like individual features she possesses, but by the stereotypes (weak, motherly, homemaker) automatically associated to being a woman.

**Purpose of Present Research**

Between 2000 and 2010, the Latino population grew by 15.2 million to account for over half of the United States’ total increase in population (United States Department of Commerce, 2010, p. 3). According to the U.S. Census Bureau, “‘Hispanic or Latino’” refers to a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race” (United States Department of Commerce, 2010, p. 2). Because all of the aforementioned intersectional approaches (i.e., the double jeopardy hypothesis, ethnic prominence theory, and subordinate male target hypothesis) can be generalized to other multiple subordinate identity social groups, it has become apparent that relatively little research on intersectional invisibility has been done with respect to the growing Latino population.

Not only has there been little research investigating intersectional invisibility among Latinos with multiple subordinate identities in comparison to persons with dominant or single subordinate identities, there are few research studies exploring intersectional invisibility between different ethnic minority groups with multiple subordinate categories. There is great potential to contribute to the intersectional invisibility and social cognition literature (i.e., Taylor et al., 1978; Klauer & Wegener, 1998) in this regard. Therefore, it is appropriate to conduct an experiment
that investigates intersectional invisibility among male and female Caucasians, African-Americans, and Latinos.

**Hypotheses**

Because of Latinas’ multiple subordinate-group membership, it is hypothesized that they too will encounter intersectional invisibility with respect to Caucasians. However, because Latinos are not as prominent as African-Americans as a prototype of an ethnic minority, it is hypothesized that Latino women will experience intersectional invisibility to a greater extent than African-American women. Because of the relationship between stereotyping and intersectional invisibility, it is hypothesized that those more inclined to make stereotypical associations are more likely to perceive someone as intersectionally invisible. In addition, it is important to note that these hypotheses are specific to the population from which I gathered my participants, which was a portion of college students attending a large public university in Florida, who were predominantly young, female, and Caucasian.

**Participants**

Due to the two-part nature of this study, it was anticipated that 400 participants would be needed. Because of the University's demographics (College Profile: University of Central Florida, 2013), it was likely that most of the participants would be between the ages 18 and 25, predominantly Caucasian, and predominantly female.
CHAPTER THREE: PART ONE—DESIGN, MATERIALS AND PROCEDURE, AND RESULTS

Design

Part one was a survey designed to identify participants who scored either high or low on measures of explicit racial and gender biases. It was implemented in order to determine which participants in part one were eligible to participate in part two of the study, and to gather to appropriate information from participants in order to invite them to participate in the second part of the study. For the purposes of this research, the only eligibility criteria for participants to participate in part one was that they be at least 18 years of age. For their voluntary participation, participants were granted .5 in-person SONA credits.

Materials and Procedure

Part one of the experiment utilized a maximum of six standard PC computers with internet capacity, and Qualtrics—an online survey software—through which participants completed a compilation of six surveys. All data was analyzed using Statistical Package for the Social Sciences (SPSS) data/statistical analysis software.

Once a participant arrived for his or her session, the researcher introduced herself/himself to the participant. After thanking the participant for his/her time, the researcher verified that the participant was indeed at least 18 years of age via a form of government issued identification, and was the appropriate participant for the scheduled session via his or her SONA identification
number. The researcher then informed the participant of the nature of the study and what is required of him or her as a participant, and then asked the participant to turn off and deposit all electronic devices for the study’s duration.

For participants that met the age requirement, they proceeded to the online survey and the informed consent page (see Appendix B). Upon reading it they provided their consent by checking a box which indicated their consent. After giving their consent, participants then provided their official school email addresses as well as their SONA identification numbers. In order to proceed to the actual survey participants had provide this information.

Participants then completed a questionnaire on Qualtrics that was a compilation of the Symbolic Racism 2000 Scale (Henry & Sears, 2002), Modern Racism Scale (McConahay, 1986), and Beliefs About Women Scale (BAWS; Belk & Snell, 1986). The Symbolic Racism 2000 Scale and the Modern Racism Scale asked participants of their opinions of minorities in various social contexts. The BAWS measured participants’ beliefs about women relative to men and in different social situations (see Appendix C). It is important to note two-thirds of the questionnaire measured explicit racial biases, while the remaining one-third measured explicit gender biases.

Next, the participants completed the Ten-Item Personality Inventory (Gosling, Rentfrow, & Swann, 2003), the Impostorism Scale (Leary et al., 2000), and the Short Grit Scale (Duckworth & Quinn, 2009). The purpose of these questionnaires was to reduce the influence of demand characteristics in those participants who ended up being eligible to participate in part two, by concealing any indicators why they were invited to participate in part two. The
participants also completed a short demographics survey (see Appendix C). Once participants completed the survey they were thanked for their participation, reminded that they may be invited to participate in another separate study (part two), and directed to the exit. Part one was designed to take no more than 30 minutes for participants to complete.

After data collection for part one was completed, participants were categorized as either High Scorers or Low Scorers. In order to determine which participants scored high or low overall based upon their scores on the Symbolic Racism 2000 Scale (SRS 2000; Henry & Sears, 2002), Modern Racism Scale (MRS; McConahay, 1986), and Beliefs About Women Scale (BAWS; Belk & Snell, 1986), it was necessary to: Calculate each participant’s raw score for each scale, convert each raw score to a z-score, and combine each participant’s z-scores into a total z-score to represent his or her overall score among the three scales. Two-thirds of the total z-score was comprised of the biases related to race/ethnicity, while one-third of the score represented biases related to women. This method of scoring was used because each scale utilized a different scoring method such that a score on one scale represented a quantitatively different proportion of bias than the scores on the other scales; thus, simply totaling a participant’s score on each of the measures would not have yielded an accurate composite score across the three scales. Thereafter, the median of the participants’ total z-scores was calculated in order to perform a median split among the scores. Participants with total z-scores above the median were categorized as High Scorers, while participants with total z-scores below the median were categorized as Low Scorers.

The Symbolic Racism 2000 Scale (Henry & Sears, 2002) employed a 4-point Likert scale on all of its eight items, except item three which used a 3-point Likert scale. Items one, two, four,
and eight were reverse-scored such that: Strongly Agree= 4; Somewhat Agree= 3; Somewhat Disagree= 2; and Strongly Disagree= 1. Item three was reverse-scored such that: Trying to push very much too fast= 3; Going too slowly= 2; and Moving at about the right speed= 1. Lastly, items five, six, and seven were scored regularly: Strongly Agree= 1; Somewhat Agree= 2; Somewhat Disagree= 3; Strongly Disagree= 4. Participants’ scores could have ranged from a minimum of 8 (low symbolic racism) to a maximum of 31 (high symbolic racism).

The Modern Racism Scale (McConahay, 1986) employed a 5-point Likert scale. And, each of its seven items were scored such that: Strongly Disagree= 1; Disagree= 2; Neither Agree nor Disagree= 3; Agree= 4; and Strongly Agree= 5. Participants’ scores on this scale could have ranged from a minimum of 7 (low anti-minorities beliefs/attitudes) to a maximum of 35 (high anti-minorities beliefs/attitudes). Similarly, the Beliefs About Women Scale (BAWS; Belk & Snell, 1986) used a 5-point Likert scale. Of all of its items, 25 were deemed relevant for the purposes of this research and of those items, items 16, 31, 32, 37, and 61 were scored such that: Strongly Disagree= 1; Disagree= 2; Neither Agree nor Disagree= 3; Agree= 4; and Strongly Agree= 5. All of the remaining items were reverse-scored such that: Strongly Disagree= 5; Disagree= 4; Neither Agree nor Disagree= 3; Agree= 2; and Strongly Agree= 1. Participants’ scores could have ranged from a minimum of 25 (low negative biases toward women) to a maximum of 125 (high negative biases toward women).

Results

Data was collected from 170 participants and across the participants’ raw scores they showed moderate symbolic racism (SRS 2000; $M= 16.89$, $SD= 3.37$), moderate anti-minorities
beliefs/attitudes (MRS; $M = 16.11, SD = 3.29$), and moderate negative biases toward women (BAWS; $M = 78.08, SD = 9.02$). High and Low Scorers were determined using a median-split procedure among their total $z$-scores. The median total $z$-score was -.1276 ($M = 0.04, SD = 1.56$), and the fiftieth and fifty-first percentiles of total $z$-scores were -.16 and -.10, respectively. Participants with total $z$-scores at or below -.16 were categorized as Low Scorers, and participants with total $z$-scores at or above -.10 were categorized as High Scorers. As a result, 85 participants were categorized as High Scorers and 85 participants were categorized as Low Scorers.
CHAPTER FOUR: PART TWO--DESIGN, MATERIALS AND PROCEDURE, AND RESULTS

Design

Part two employed a 2 (Subject Variable: High Scorer or Low Scorer) by 2 (Target’s Gender: Male or Female) by 3 (Target’s Ethnicity: Caucasian, African-American, or Latino) factorial design. It was projected that each of the design’s six conditions required approximately 20 participants (10 High Scorers; 10 Low Scorers). The two independent variables were sex with two values (male and female) and ethnicity with three levels (Caucasian, African-American, and Latino). Several dependent variables were operationalized using a 5-point Likert Scale, with 1 being the lowest possible score and 5 being the highest possible score: Relevance of the target’s argument; Agreement with the target’s argument; Level of the target’s influence; Level of the target’s likability; Level of the target’s respectability; Level of the target’s competence; Level of target’s impressionability.

Participants in the experiment were those invited from part one based on their scores on the explicit measures of racial and gender biases. They were randomly assigned to each of this experiment's six conditions and participant perceptions of the target were evaluated based on their responses to questions pertaining to the dependent variables. For their voluntary participation, participants were granted an additional .5 in-person SONA credits. Like part one, this part of the study was designed to take no more than 30 minutes for participants to complete.

Materials and Procedure
Part two of the experiment used four standard PC computers like those used in part one. In addition to video playing software, Qualtrics was used to gather participant responses to an online survey. In order to listen to the audio of the video (described later), participants used 3.5 millimeter jack earphones that had a 20 hertz to 20 kilohertz frequency response, which were set at a (moderately loud) volume of 50 for each session. Like part one, SPSS was used to analyze the data collected.

As already noted, this experiment used a video consisting of a non-gender and non-ethnic based discussion between six individuals posing as college students: a man and woman from each ethnic group. The attractiveness of each individual in the video was measured such that the Male Caucasian ($M = 3.93, SD = 0.88$), Female Caucasian ($M = 3.93, SD = 1.10$), Male African-American ($M = 4.20, SD = 1.32$), Female African-American ($M = 3.53, SD = 1.19$), Latino ($M = 3.67, SD = 1.23$), and Latina ($M = 4.33, SD = 0.90$) did not differ significantly in terms of their attractiveness ($F(1,14) = 0.05, p = .81$).

The content of the discussion was not gender-or-ethnic-specific (i.e., discussing a group project and collaborating on where to go for lunch) in order to prevent unnecessary priming related to the genders and ethnicities of participants, which could have confounded the results and interpretation. In the discussion (see Appendix E), five of the six persons each made six comments that contribute to the general consensus of when and where to go for lunch, while one target individual (who varied by the gender and ethnicity of the condition) made six comments that diverged from the general consensus. The speakers made each of their statements consecutively, so that there were six uninterrupted rounds of statements with each speaker making one statement per round. The length of every statement was constructed such that no one
individual in the video said a significantly greater number of words than another ($M=15.69$, $SD=3.56$; $F(5, 35)=0.21, p=.96$). And, all of the general consensus statements and divergent statements remained constant for each condition; the only variables that changed were the gender and ethnicity of the target dissenter. Each version of the video lasted no more than two and a half minutes.

Participants were informed that they were participating in a study investigating social perceptions of group dynamics, particularly in social situations (see Appendix D). They were also informed that they were going to view a video of a group discussion and complete questionnaires pertaining to the group discussion and social perceptions following the video. Participants were not initially informed about the true nature of this experiment. Slight deception was used because it was imperative that genuine data was gathered; telling participants of the true nature of the study could have prompted them to behave in a manner that was not consistent with their natural thought processes and behaviors. However, each participant was debriefed about the true nature of the study after completing the final questionnaire, but before exiting the lab (see Appendix G).

Once the participant arrived for his or her session, the researcher utilized the same protocol used in part one of the experiment until the point at which the video discussion was administered. The researcher then informed the participant that he or she would then watch a video of a group discussion on the monitor of the computer at which he or she was seated, and would listen to the audio of the group discussion on earphones provided by the researcher. The participant was instructed to observe a group of six college students working on a group project
and making plans for lunch, and that it was his or her task to form an impression of the group as a whole.

After watching the video the participant completed two questionnaires. The first questionnaire contained questions that asked the participant of his/her opinion of the content and dynamics of the group discussion; it also contained questions adapted from the Taylor et al. (1978) version of the “who said what” procedure that was used to gauge participants’ impressions of the target dissenter in the group discussion (p.786) (see Appendix F).

The second questionnaire was a basic demographics questionnaire for participant analysis purposes (see Appendix F).

Once the participant completed the questionnaires, they viewed a debriefing form that provided him/her with additional information about the true nature of the experiment and contact information if he/she believed that his/her rights as a participant were violated. The participant was also given a feedback form to be voluntarily completed and returned to the Department of Psychology at his/her convenience. Following this, the researcher thanked the participant again for his/her time and escorted the participant to the exit.

Results

Data was collected for 55 participants; however, data from two participants were excluded because the data they provided during part one was unreliable; thus, it was not clear as to whether they were High Scorers or Low Scorers. Data from two additional participants were excluded because the participants did not pass manipulation check criteria: they failed to answer
four out of the six manipulation check questions correctly. Thus, analyses were conducted on the
data of the remaining 51 participants (40 females and 11 males), whose ages ranged from 18 to
28. Twenty-six participants identified as Caucasian, eight as African-American, ten as Latino,
two as Asian, and five as Mixed/Other.

Due to an insufficient number of participants, the data could not be stratified by the
participant’s score on ethnic and sex-based bias measures (High or Low), the ethnicity of the
target dissenter in the video (Caucasian, African-American, or Latino), and the sex of the target
dissenter in the video (Male or Female). Rather the independent variables of the target
dissenter’s ethnicity and sex were combined into an overall Male/Female-Ethnicity condition
(Caucasian Male/Female, African-American Male/Female, or Latino Male/Female). The
adjustments resulted in a two (Score: High or Low) by three (Target’s Ethnicity: Caucasian,
African-American, or Latino) between-subjects factorial design. Eighteen participants were
randomly assigned to the Caucasian Male/Female condition (9 High Scorers; 9 Low Scorers); 21
participants were randomly assigned to the African-American Male/Female condition (12 High
Scorers; 9 Low Scorers); and 12 participants were randomly assigned to the Latino Male/Female
condition (4 High Scorers; 8 Low Scorers).

Two-way ANOVAs, using the independent variables Score and Ethnic Condition, were
conducted on the following dependent variables: How relevant the target’s argument was to the
group discussion; How much the participant agreed with the target’s argument; How much the
target influenced the group discussion; How much the target was liked by the other members in
the discussion; How much the target was respected by the other members in the discussion; How
competent the target was in the discussion; And, how much of an impression the participant was able to make of the target in the discussion.

A two-way ANOVA was conducted on the relevance of the target’s argument and it revealed a significant interaction effect between participants’ level of bias and the target’s ethnicity \((F (2, 45) = 4.21, p = .02)\). Low Scorers in the Caucasian Male/Female condition placed a lower rating on the relevance of the target’s argument \((M = 3.67, SD = 1.41)\) than High Scorers \((M = 4.78, SD = 0.44)\). Low Scorers in the Caucasian Male/Female condition also did so to greater extent than Low Scorers in the African-American Male/Female condition \((M = 4.89, SD = 0.33)\) with regard to High Scorers in the same condition \((M = 4.58, SD = 0.90)\). Similarly, Low Scorers in the Caucasian Male/Female condition placed a lower rating on the relevance of the target’s argument than Low Scorers in the Latino Male/Female condition \((M = 4.75, SD = 0.46)\) in comparison to High Scorers in the same condition \((M = 4.50, SD = 0.58); see Figure 1\). [Note: Post-hoc tests for Low Scorers/High Scorers could not be included because SPSS reported that this variable had fewer than three groups.]

None of the other two-way ANOVA procedures yielded significant main or interaction effects for any of the remaining dependent variables (see Tables 1-6). The percentage of Caucasian participants in each of the ethnic conditions for the Low Scorers was tabulated in order to determine if a disproportionate number Caucasians were randomly assigned to any of the ethnic conditions. For Low Scorers in the Caucasian condition, 3.9 percent were Caucasian; in the African-American condition, 7.8 percent of Low Scorers were Caucasian; and, 5.9 percent of Low Scorers were Caucasian in the Latino Condition.
Figure 1: Dependent Variable *Relevance* Two-Way ANOVA Significant Interaction Effect
Table 1: Dependent Variable *Agreement* Two-Way ANOVA Descriptive Statistics and Non-significant Effects

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Table 2: Dependent Variable *Influence* Two-Way ANOVA Descriptive Statistics and Non-significant Effects

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Table 3: Dependent Variable *Likability* Two-Way ANOVA Descriptive Statistics and Non-significant Effects

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Table 4: Dependent Variable *Respectability* Two-Way ANOVA Descriptive Statistics and Non-significant Effects

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Table 5: Dependent Variable *Competence* Two-Way ANOVA Descriptive Statistics and Non-significant Effects

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Table 6: Dependent Variable *Impressionability* Two-Way ANOVA Descriptive Statistics and Non-significant Effects

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CHAPTER FIVE: DISCUSSION AND LIMITATIONS

The results provide several interesting implications. Rationally, it would seem that people with low levels of racial/ethnic and gender biases, more so than people with high levels of such biases, would consider someone’s input in a group discussion to have the same level of relevance, regardless of that person’s ethnicity. Yet, it appears that individuals with low levels of attitudinal bias against ethnic minorities and women are more likely than individuals with high levels of such biases to consider someone’s input in a group discussion as less relevant depending on that person’s ethnicity. In fact, a closer examination of the data for a target’s argument relevance for Low Scorers reveals that whereas the mean rating for the relevance of the target’s argument is virtually the same when the target is African-American or Latino, it drops when the target is Caucasian.

The lower ratings of the Caucasian target when participants were Low Scorers could have been due in-group/out-group bias; however, as previously mentioned, participants who reported that they were Caucasian were not disproportionately concentrated in the Low Scorer condition. Thus, the claim that in-group/out-group bias contributed to the results of Low Scorers across the various ethnic conditions was not supported. Another possible explanation for the decrease in relevance ratings for the Caucasian target is that there is an urge in people with low levels of racial/ethnic and sex biases to not discriminate against African-Americans and Latinos, which causes them to overcompensate their treatment of African-American and Latino targets at the expense of Caucasian targets. That is, fear of discriminating has caused people with low levels of racial/ethnic and sex biases to grant members of non-dominant ethnic groups (African-
Americans and Latinos) higher marks and treatment, and be more critical of or less benevolent toward members of dominant groups (Caucasian males and females).

Moreover, further examination of the data for the target’s relevance among High Scorers revealed patterns predicted by the Non-protypicality Hypothesis (see Figure 2). As expected, High Scorers found the target’s argument to be more relevant when the target was a Caucasian male or female, than when the target was an African-American or Latino male or female. A similar, but smaller, pattern exists between African-American male/female targets, a Latino male/female targets: High Scores found the target’s argument more relevant when the target was an African-American male or female, than when the target was a Latino male or female. Thus, as predicted, Latino males and females, like African-Americans, are disadvantaged with respect to Caucasian males and females. And similarly, Latino males and females lag in comparison to their African-American counterparts. This could be due to a perception that Latinos are not an ethnic-minority group in the same manner that African-Americans are. However, in order for these patterns to be confirmed much more data is needed.
Figure 2: Dependent Variable *Relevance* High Scorers Means
At the end of the questionnaire used in part two, participants answered a question about what they thought the purpose of the study was. Several participants guessed correctly that the purpose was to examine racial/ethnic and gender biases, and several more mentioned race, gender, or individual traits in their answers. There appeared to be connections between a participant’s High/Low categorization, the Ethnic condition to which the participant is then randomly assigned, and the participant’s likelihood of guessing the purpose of the study. That is, it seemed as though the likelihood of a participant being able to guess the nature of the study depended upon the participant’s High/Low categorization and the ethnicity of the target in the video the participant viewed. This pattern might have explained why there was little variation among the ratings of High Scorers. Because race and/or gender were particularly salient to them, they might have been more apt to determine the true nature of the study, and then altered their responses in a manner contrary to their true attitudes/behavior. However, further analysis of rater/inter-rater reliability on the participants’ coded responses, and ANOVA procedures did not find any significant relationship between participants’ low or high scores, ethnic conditions, and their ability to guess the true nature of the study.

On a different note, it is intriguing that the dependent variable measuring how much the target influenced the group discussion did not yield similar results to the dependent variable measuring the relevance of the target’s argument in the discussion (see Figure 3). It could be assumed that relevance and influence have a mutual relationship. More specifically, it could be assumed that the more relevant a person’s argument is to a discussion, the more influence that person has on the group discussion, and vice-versa; however, this is not the case. Greater relevance does not necessarily lead the more influence; neither does more influence necessarily
lead to greater relevance. An individual’s input may be relevant, but the influence of that person’s input may depend on the individual’s ethnicity and/or gender (Sesko & Biernat, 2010; Sidanius & Veniegas, 2000).
Figure 3: Comparison of Dependent Variables *Relevance* and *Influence*
In a different vein, although this study used questions to measure participants’ perceptions of the target’s influence, competence, likability, respectability, and impressionability that were used in the “Who Said What?” procedure (Gawronski et al., 2003; Klauer & Wegener, 1998; Taylor et al., 1978), they did not yield similar results. This incongruence may be due to the different procedure this study utilized. Gawronski et al. (2003) had participants watch a video of a woman being interviewed on a non-gender based topic, followed by a video of three men and three women on a gender-related topic. Afterwards the participants completed a questionnaire in which they matched statements to the appropriate speakers in the group discussion and reported their impression of the individuals in the discussion and the discussion itself. Following the questionnaire, participants took an implicit associations test.

In the present study, participants completed questionnaires measuring explicit biases and were categorized according to the level of their explicit biases prior to watching a group discussion. Moreover, participants only watched one video of a group discussion on a non-ethnic or gender based topic and they did not complete a statement-matching task prior to reporting their impressions of the discussion. Furthermore, the video in this study involved a target dissenter who varied by ethnicity and sex, whereas the target dissenter in the videos in Gawronski et al. (2003) did not.

The present experiment could be improved, moreover, in a plethora of ways. One obvious suggestion is that the study be conducted with a much larger number of participants, particularly for part two. The original objective for part two was to collect data from at least 120 participants so that a minimum of 20 participants (10 High Scorers; 10 Low Scorers) would be in each of the
experiment’s six conditions. One-hundred twenty participants is a minimal aim for purposes of power and generalizability.

In addition, the study could have utilized implicit association tests in part one as a means to measure participants’ levels of racial/ethnic and gender biases without eliciting the demand or social-desirability characteristics that explicit measures may cause. Furthermore, unlike implicit measures that gauge an individual’s attitudes that are outside of his or her awareness, and thus direct control in expression, explicit measures gauge an individual’s attitudes that are directly expressed because they are within his or her awareness. As aforementioned, previous research has used implicit measures to circumvent participants’ ability to alter their expressed attitudes to those that may be more socially acceptable/desirable.

Substantial effort was taken to assess the sex (not gender) and ethnicity of the participants. The preliminary demographics questions in the survey in part one provided that participants report whether they were male or female, and allowed them provide a free-response to report their ethnicities. The analysis of participants’ free responses enabled the researcher to determine the ethnic responses that would be reported in the survey used in part two which were Caucasian, African-American, Latino, Mixed Ethnicity, or Other Ethnicity. In the demographics portion of part two, participants who reported being of a Mixed Ethnicity or Other Ethnicity were then able to provide a free-response to provide further detail their ethnic composition.

However, the sex and ethnicity of the researcher conducting each session of the experiment were not able to be controlled. The researcher was an African-American female in her early twenties and her sex and ethnicity may have primed some participants (particularly
High Scorers) prior to completing the experiment. This may have impacted the responses they provided. Thus, future studies would benefit by controlling the sex and ethnicity of the researcher gathering data from participants. In this study, for example, it may have been better if the data collector was a Caucasian, Asian, or Native American male rather than an African-American female.

The video used in this study could have been longer to give participants a greater opportunity to create an impression of the group’s dynamics and the target. With regard to the target dissenter in the video, the type of dissenter the target portrayed may have impacted the way in which participants responded to the questions measuring the dependent variables. Rather than being a dissenter who attempted to persuade a responsible group to make irresponsible decisions, the target dissented in order to persuade an irresponsible group to do the “right” thing. The target dissenter, therefore, may have been perceived as a “goody two-shoes”. This “goody-two shoes” dynamic may have elicited the non-drastic ratings across most of the dependent variables.

The questionnaire utilized in part two, furthermore, involved terms such as “dissenter,” “competent,” “influenced,” “respected,” and “impression” that participants could have misunderstood, which subsequently could have impacted the responses they provided for the dependent variables. The questionnaire also primarily asked questions pertaining to the target in the video. It very well may be that participants’ perceptions the sex and ethnicity of non-target group members varies depending upon the sex and ethnicity of the target, just as the perception of the target may vary upon the sex and ethnic composition of the group. Being that this study did not account for this possibility, future studies may benefit by including clearly defined
questions that measure participants’ perceptions of non-target members of the group in addition to questions that measure participants’ perceptions of the target.

It must be stressed, moreover, that the findings of this study are limited to the participants who contributed data. As aforementioned the participants were undergraduate students from a large metropolitan state university in Florida, where 54.9 percent of students are male and 45.1 percent are female. In addition, 60.2 percent of students at this university are Caucasian, 9.8 percent of students are African-American, 17.5 percent are Latino, and 5.3 percent are Asian (University of Central Florida, 2015). In comparison, the participants in this study were: 21.6 male and 78.4 percent female; 51.0 percent Caucasian, 15.7 percent African-American, 19.6 percent Latino, and 3.9 percent Asian. The percentages of African-Americans and Latinos were higher than what is seen in the greater university population from which the sample was taken. Therefore, the participants did not create a representative sample of the student population of the university or of the general population at large. Future studies should aim the gather data from a sample of participants that is most representative of the greater population.

In closing, with regard to the limitations and suggested improvements of this study, future studies on intersectional invisibility should aim to stratify the data so that Participant Score, Ethnicity of Target, and Sex of Target are each independent variables. Doing so would allow researchers to examine any differences in data among participants’ responses relative to the target’s ethnicity and sex. More research on the applicability of the intersectional framework between males and females in ethnic-minority groups (e.g., African-American, Latino, and Asian) would be great contributions to the literature on intersectional invisibility. Research using non-ethnic or gender variables (e.g., age, socioeconomic status, party affiliation, and
ideology/religion) would be great contributions as well. A rigorous replication of this experiment has great potential to generate results that have practical insights and applications for Latinas and other potential intersectionally invisible groups in the social, political, and legal spheres. The implications of such results may be particularly salient in regards to *voir dire* (jury selection) and jury bias in legal proceedings. Overall, research pertaining to intersectional invisibility provides much opportunity for the greater understanding of the unique experiences, perspectives, advantages, or disadvantages that stem from an individual’s complex identity.
FOOTNOTES

1 An implicit associations test consists of a series of short word-category/image matching tasks. Overall, this test measures the levels (high/low) and strengths (strong/weak) of implicit stereotypical associations an individual has towards certain categories (e.g., racial minority groups, women/gender, and sexual minority groups).

2 Because the nature of this study involved perceptions of minorities in addition to African-Americans (i.e., Latinos and women), the word “Black(s)” or “African-American(s)” utilized in the Symbolic Racism 2000 Scale (Henry & Sears, 2002) and the Modern Racism Scale (McConahay, 1986) was modified to the word “minorities”. No other adaptations were made to either of the racism scales.

3 The 25 items used to calculate a participant’s raw score on the BAWS were items: 1, 2, 5, 7, 8, 15, 16, 17, 20, 22, 28, 31, 32, 35, 37, 38, 45, 46, 47, 51, 61, 62, 65, 68, and 74. These items were selected because they measured the following biases that were particularly salient to perceptions of women in this experiment: Women are less dominating than men; Women are more passive than men; Women are less intelligent than men; Women are less decisive than men.
APPENDIX A: IRB APPROVAL LETTER
Approval of Human Research

From: UCF Institutional Review Board #1 FWA00000351, IRB00001138

To: Matthew G. Chin and Co-PI: Desiree Reeves

Date: January 26, 2015

Dear Researcher:

On 1/26/2015, the IRB approved the following minor modifications to human participant research until 10/20/2015 inclusive:

Type of Review: IRB Addendum and Modification Request Form
Modification Type: The total number of study participants is being increased from 200 to 400 individuals. The preliminary screening will be online, but part one and part two of the study will be conducted in person. Revised survey documents have been uploaded in iRIS and revised Informed Consent documents for parts one and two, along with a revised Debriefing statement, have been approved for use.

Project Title: An Investigation of Intersectional Invisibility Among Caucasians, African Americans, and Latinos
Investigator: Matthew G Chin
IRB Number: SBE-14-10621
Funding Agency: N/A

The scientific merit of the research was considered during the IRB review. The Continuing Review Application must be submitted 30days prior to the expiration date for studies that were previously expedited, and 60 days prior to the expiration date for
research that was previously reviewed at a convened meeting. Do not make changes to the study (i.e., protocol, methodology, consent form, personnel, site, etc.) before obtaining IRB approval. A Modification Form cannot be used to extend the approval period of a study. All forms may be completed and submitted online at https://iris.research.ucf.edu.

If continuing review approval is not granted before the expiration date of 10/20/2015, approval of this research expires on that date. When you have completed your research, please submit a Study Closure request in iRIS so that IRB records will be accurate.

Use of the approved, stamped consent document(s) is required. The new form supersedes all previous versions, which are now invalid for further use. Only approved investigators (or other approved key study personnel) may solicit consent for research participation. Participants or their representatives must receive a copy of the consent form(s).

All data, including signed consent forms if applicable, must be retained and secured per protocol for a minimum of five years (six if HIPAA applies) past the completion of this research. Any links to the identification of participants should be maintained and secured per protocol. Additional requirements may be imposed by your funding agency, your department, or other entities. Access to data is limited to authorized individuals listed as key study personIn the conduct of this research, you are responsible to follow the requirements of the Investigator Manual. On behalf of Sophia Dziegielewski, Ph.D., L.C.S.W., UCF IRB Chair, this letter is signed by:

Joanne Muratori

Signature applied by Joanne Muratori on 01/26/2015 04:50:47

PM EST IRB Coordinator
APPENDIX B: PART ONE INFORMED CONSENT
A Study of Social Perceptions Informed Consent

Principal Investigator: Matthew Chin, Ph.D., University of Central Florida, Department of Psychology

Co-Investigator: De’Siree N. Reeves, Undergraduate

Student Faculty Supervisor: Matthew Chin, Ph.D.

Investigational Site: University of Central Florida, Department of Psychology

Introduction:
Researchers at the University of Central Florida (UCF) study many topics. To do this we need the help of people who agree to take part in a research study. You are being invited to take part in a research study which will include about 320 to 400 people at UCF. You have been asked to take part in this research study because you are a student in a psychology class. You must be 18 years of age or older to participate in this study. Based upon your results on this study, you may be invited to participate in another separate study.

The person doing this research is De’Siree N. Reeves of the UCF Department of Psychology. Because the researcher is completing an undergraduate thesis, she is being guided by Dr. Matthew Chin, a UCF faculty supervisor in the UCF Department of Psychology.

What you should know about a research study:

- Someone will explain this research study to you.
- A research study is something you volunteer for.
- Whether or not you take part is up to you.
- You should take part in this study only because you want to.
- You can choose not to take part in the research study.
- You can agree to take part now and later change your mind.
• Whatever you decide it will not be held against you.
• Feel free to ask all the questions you want before you decide.
• Your participation is completely voluntary and you may discontinue the experiment at any time without penalty.

Purpose of the research study:

The purpose of this study is to investigate various social perceptions, particularly in social situations. Much research has been done on social perceptions in social situations; however, more research needs to be conducted to investigate specific factors that influence social perceptions. This study, therefore, aims to contribute to literature on the topic of external social perceptions, and explain how personal and perceptual variables affect the construction of external social opinions.

What you will be asked to do in the study:

• You will be asked to complete an online survey.
• The results of the online survey will determine whether you are eligible to participate in another separate study.
  o The online survey will ask you of your opinion of different social perceptions in different social settings.
  o You will be required to provide your knights email and SONA ID number so that the appropriate information may be distributed to you if you are eligible to participate in the other separate study.
• Based upon your results in this study, you may be invited to participate in another different study.

Location:

This study will be conducted in room 207D in the Psychology Building located on the UCF Main Campus.

Time required:

We expect that you will participate in this study for one 30 minute session.

Risks:

There are no reasonably foreseeable risks or discomforts involved in taking part in this study.
APPENDIX C: PART ONE MEASURES
Symbolic Racism 2000 Scale (Henry & Sears, 2002)

The following questions will ask your opinion of certain social perceptions and situations. Please read each question carefully and answer each to the best of your ability. Thank you.

Please circle an answer to the following questions: Note CHANGE IN WORDING OF ANSWER CHOICES

It’s really a matter of some people not trying hard enough; if minorities would only try harder they could be just as well off as whites. (Sym-rac#1)

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Irish, Italian, and Jewish minorities overcame prejudice and worked their way up. Other minorities should do the same. (Sym-rac#2)

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Some say that minority leaders have been trying to push too fast. Others feel that they haven’t pushed fast enough. What do you think? (Sym-rac#3)

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<tr>
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<th>Going too slowly</th>
<th>Moving at about the right speed</th>
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How much of the racial tension that exists in the United States today do you think minorities are responsible for creating? (Sym-rac#4)

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<tr>
<th>All of it</th>
<th>Most</th>
<th>Some</th>
<th>Not much at all</th>
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How much discrimination against minorities do you feel there is in the United States today, limiting their chances to get ahead? (Sym-rac#5)

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<th>A lot</th>
<th>Most</th>
<th>Some</th>
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Generations of slavery and discrimination have created conditions that make it difficult for minorities to work their way out of the lower class. (Sym-rac#6)

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Over the past few years, minorities have gotten less than they deserve.  

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Over the past few years, minorities have gotten more economically than they deserve.

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Modern Racism Scale (McConahay, 1986)

The following questions will ask your opinion of certain social perceptions and situations. Please read each question carefully and answer each to the best of your ability. Thank you.

*Please circle an answer to the following questions:*

**Discrimination against minorities is no longer a problem in the United States.** (Mod-rac#1)

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**It is easy to understand the anger of minority people in America.** (Mod-rac#2)

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**Minorities have more influence upon school desegregation plans than they ought to have.** (Mod-rac#3)

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**Minorities are getting too demanding in their push for equal rights.** (Mod-rac#4)

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**Minorities should not push themselves where they are not wanted.** (Mod-rac#5)

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**Over the past few years, minorities have gotten more economically than they deserve.** (Mod-rac#6)

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Over the past few years, the government and news media have shown more respect to minorities than they deserve. (Mod-rac#7)

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Beliefs About Women Scale (BAWS; Belk & Snell, 1986)

INSTRUCTIONS: The statements listed below describe attitudes toward men and women which different people have. There are no right or wrong answers, only opinions. Indicate how much you agree or disagree with each statement, using the following scale:

A = Strongly Disagree.
B = Slightly Disagree.
C = Neither agree nor disagree.
D = Slightly Agree.
E = Strongly Agree.

1. Women are less dominating than men.
2. Women are more passive than men are.
3. Women are more vulnerable than men are.
4. Women can deal with their emotions better than men can.
5. Women are more interpersonally concerned than men.
6. Women are less career motivated than men.
7. Women are inferior to men in their cognitive ability.
8. Men can make decisions easier than women.
9. Women don't generally like to be active in their sexual relationships.
10. Women are not very responsible during their menstrual cycles.
11. Women are more concerned with their physical appearance than men are.
12. Women like to tease men sexually.
13. Women set the standards for moral behavior.
14. Women are more frivolous than men.
15. Women tend to pout if they don't get their way.
16. Women are more competitive than men.
17. Women comply more often than men do.
18. Men are more excitable in a major crisis than women are.
19. Women are more emotional than men.
20. Men cannot relate to other persons as well as women can.
21. Women care as much as men do about developing a job career.
22. Men are superior to women in intelligence.
23. Women are more self-reliant than men.
24. Most women don't like to express their sexuality.
25. When they are on their periods, women are easily distracted.
26. Men are as conceited about their appearance as women are.
27. Women use seductive behavior to lead men on.
28. Women should be treated with great respect.
29. Women are more likely than men to act in silly ways.
30. Withholding favors is one of the primary ways women obtain their goals.
31. Women are more interested than men in being in control of their lives. (Reverse Score)
32. Men are as submissive as women are.
33. Women's feelings are more easily hurt than men's.
34. Women have more insight into their feelings than men do.
35. Women are usually more aware of other people's feelings than men are.
36. Women are as skillful in business-related activities as men are.
37. Men are not as analytical as women are. (Reverse Score)
38. Men make better leaders than women do.
39. Most women want their partner to take the initiative in their sexual relationships.
40. Women are very emotional during their periods.
41. Women spend more time attending to their physical appearance than men do.
42. Women usually say no (sexually) when they really mean yes.
43. Women are more devout individuals than men are.
44. Women are more childish than men are.
45. Women try to get what they want by being manipulative.
46. Men want power more than women do.
47. Women tend to give up more easily than men do.
48. Women have more need for security than men.
49. Men can express tender emotions better than women can.
50. Men are usually more loyal to their partner/spouse than women are.
51. **Women dislike being in leadership positions more than men do.**
52. Women have greater mechanical aptitude than men.
53. Women are usually less well-organized than men.
54. Women are as interested in sex as men are.
55. When a woman is on her period, she cannot concentrate very well.
56. Women pay more attention to their looks than most men do.
57. Women act in seductive ways just to play around with men.
58. Men are not as sensitive to profanity as women.
59. Men are less sophisticated than women.
60. Women tend to use their emotions to control others.
61. **Women are more aggressive than men are.** *(Reverse Score)*
62. **Women are more easily influenced than men are.**
63. Women are more fearful than men are.
64. Women are more honest in expressing their emotions than men are.
65. **Women are more understanding of people than men are.**
66. Women don't like responsibility as much as men do.
67. Men are better at science and math than women are.
68. **Women are generally not as competent as men are.**
69. Women's sexual desires are less intense than men's.
70. Women's menstrual cycle makes them unfit for major leadership positions.
71. Women gain more status through their physical appearance than men do.
72. Women like to flirt and tantalize men.
73. Women are more spiritual than men.
74. **Women are more innocent-looking than men.**
75. Women usually threaten to cry if they can't have their own way.

The BELIEFS ABOUT WOMEN SCALE (BAWS) consists of fifteen (15) separate subscales.

The items for each of these subscales are listed below:
1. Women are less dominating than men. (Items 1, 16, 31, 46, 61)
2. Women are more passive than men. (Items 2, 17, 32, 47, 62)
3. Women are more vulnerable than men. (Items 3, 18, 33, 48, 63)
4. Women have more emotional insight than men. (Items 4, 19, 34, 49, 64)
5. Women are more interpersonal than men. (Items 5, 20, 35, 50, 65)
6. Women are less career interested than men. (Items 6, 21, 36, 51, 66)
7. Women are less intelligent than men. (Items 7, 22, 37, 52, 67)
8. Women are less decisive than men. (Items 8, 23, 38, 53, 68)
9. Women are less sexual than men. (Items 9, 24, 39, 54, 69)
10. Menstruation debilitates women. (Items 10, 25, 40, 55, 70)
11. Women are more appearance conscious than men. (Items 11, 26, 41, 56, 71)
12. Women are sexual teases. (Items 12, 27, 42, 57, 72)
13. Women are more moral than men. (Items 13, 28, 43, 58, 73)
15. Women use manipulative strategies. (Items 15, 30, 45, 60, 75)
Ten-Item Personality Inventory (Gosling, Rentfrow, & Swann, 2003)

Here are a number of personality traits that may or may not apply to you. Please write a number next to each statement to indicate the extent to which you agree or disagree with that statement. You should rate the extent to which the pair of traits applies to you, even if one characteristic applies more strongly than the other.

<table>
<thead>
<tr>
<th>Disagree Strongly</th>
<th>Disagree Moderately</th>
<th>Disagree a Little</th>
<th>Neither Agree nor Disagree</th>
<th>Agree a Little</th>
<th>Agree Moderately</th>
<th>Agree Strongly</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>

I see myself as:

1. _____ Extraverted, enthusiastic.
2. _____ Critical, quarrelsome.
3. _____ Dependable, self-disciplined.
4. _____ Anxious, easily upset.
5. _____ Open to new experiences, complex.
6. _____ Reserved, quiet.
7. _____ Sympathetic, warm.
8. _____ Disorganized, careless.
9. _____ Calm, emotionally stable.
10. _____ Conventional, uncreative.

______________________________________________________________________________

TIPI scale scoring (“R” denotes reverse-scored items):
Extraversion: 1, 6R; Agreeableness: 2R, 7; Conscientiousness: 3, 8R; Emotional Stability: 4R, 9; Openness to Experiences: 5, 10R.
Impostorism Scale (Leary et al., 2000)

Read each of the following statements carefully and indicate how characteristic it is of you using the following scale:

1 = Not at all characteristic of me.
2 = Slightly characteristic of me.
3 = Moderately characteristic of me.
4 = Very characteristic of me.
5 = Extremely characteristic of me.

_____ 1. Sometimes I am afraid I will be discovered for who I really am.
_____ 2. I tend to feel like a phony.
_____ 3. I'm afraid people important to me may find out that I'm not as capable as they think I am.
_____ 4. In some situations I feel like an imposter.
_____ 5. Sometimes I’m afraid others will discover how much knowledge or ability I really lack.
_____ 6. In some situations I feel like a "great pretender"; that is, I'm not as genuine as others think I am.
_____ 7. In some situations I act like an imposter.
Short Grit Scale (Duckworth & Quinn, 2009)

Directions for taking the Grit Scale: Here are a number of statements that may or may not apply to you. For the most accurate score, when responding, think of how you compare to most people -- not just the people you know well, but most people in the world. There are no right or wrong answers, so just answer honestly!

1. New ideas and projects sometimes distract me from previous ones.*
   _ Very much like me
   _ Mostly like me
   _ Somewhat like me
   _ Not much like me
   _ Not like me at all

2. Setbacks don’t discourage me.
   _ Very much like me
   _ Mostly like me
   _ Somewhat like me
   _ Not much like me
   _ Not like me at all

3. I have been obsessed with a certain idea or project for a short time but later lost interest.*
   _ Very much like me
   _ Mostly like me
   _ Somewhat like me
   _ Not much like me
   _ Not like me at all

4. I am a hard worker.
   _ Very much like me
   _ Mostly like me

60
5. I often set a goal but later choose to pursue a different one.*
   - Very much like me
   - Mostly like me
   - Somewhat like me
   - Not much like me
   - Not like me at all

6. I have difficulty maintaining my focus on projects that take more than a few months to complete.*
   - Very much like me
   - Mostly like me
   - Somewhat like me
   - Not much like me
   - Not like me at all

7. I finish whatever I begin.
   - Very much like me
   - Mostly like me
   - Somewhat like me
   - Not much like me
   - Not like me at all

8. I am diligent.
   - Very much like me
   - Mostly like me
   - Somewhat like me
   - Not much like me
   - Not like me at all
Scoring:

1. For questions 2, 4, 7 and 8 assign the following points:
   5 = Very much like me
   4 = Mostly like me
   3 = Somewhat like me
   2 = Not much like me
   1 = Not like me at all

2. For questions 1, 3, 5 and 6 assign the following points:
   1 = Very much like me
   2 = Mostly like me
   3 = Somewhat like me
   4 = Not much like me
   5 = Not like me at all

Add up all the points and divide by 8. The maximum score on this scale is 5 (extremely gritty), and the lowest score on this scale is 1 (not at all gritty).
Part One Demographics Questions

This final survey contains questions that will ask you about your background. Please answer each question to the best of your ability. When you are done with this survey you will continue to the conclusion of the study.

Please fill in the blank or select an answer for the following questions:

What is your age?  

What is your sex?  
Male _______  Female_______

What is your ethnicity?  

What is your class standing?  
Freshman____  Sophomore____  Junior____  Senior____  Other:____________

What is your major?  

____________________
Social Perceptions of Group Dynamics Informed Consent

Principal Investigator: Matthew Chin, Ph.D., University of Central Florida, Department of Psychology

Co-Investigator: De’Siree N. Reeves, Undergraduate

Student Faculty Supervisor: Matthew Chin, Ph.D.

Investigational Site: University of Central Florida, Department of Psychology

Introduction:
Researchers at the University of Central Florida (UCF) study many topics. To do this we need the help of people who agree to take part in a research study. You are being invited to take part in a research study which will include a minimum of 120 people at UCF. You have been asked to take part in this research study because you are a student in a psychology class. You must be 18 years of age or older to participate in this study. Based upon your results from a different study, you were invited to participate in this separate study.

The person doing this research is De’Siree N. Reeves of the UCF Department of Psychology. Because the researcher is completing an undergraduate thesis, she is being guided by Dr. Matthew Chin, a UCF faculty supervisor in the UCF Department of Psychology.

What you should know about a research study:

- Someone will explain this research study to you.
- A research study is something you volunteer for.
- Whether or not you take part is up to you.
- You should take part in this study only because you want to.
- You can choose not to take part in the research study.
- You can agree to take part now and later change your mind.
• Whatever you decide it will not be held against you.
• Feel free to ask all the questions you want before you decide.
• Your participation is completely voluntary and you may discontinue the experiment at any time without penalty.

Purpose of the research study:

The purpose of this study is to investigate social perceptions of group dynamics, particularly in social situations. Much research has been done on how individuals behave in group activities and perceptions of others in group settings. However, more research needs to be conducted to explain how factors of group dynamics interact with an observer to influence his or her perceptions of the social activity.
This study, therefore, aims to contribute to literature on the topic of external social perceptions, and explain how personal and perceptual variables affect the construction of external social opinions on group dynamics.

What you will be asked to do in the study:

• Based upon your results in another separate study, you were invited to participate in this study.
• During this study, after your informed consent, you will then watch a short video of a social activity among a group of college students and form an impression of the group as a whole.
• Following the video, you will then complete two questionnaires to the best of your ability.
  o The first questionnaire will ask your opinion of the content and dynamics of the social activity among the group of college students in the video.
  o The second questionnaire will be a basic demographics questionnaire.
• At the end of the study you will be informed of any additional information about the study. You will also have an opportunity to give feedback on your experience in the study, after which you may exit.

Location:

This study will be conducted in room 207D in the Psychology Building located on the UCF Main Campus.

Time required:

We expect that you will participate in this portion of the study for one 30 minute session.

Risks:
There are no reasonably foreseeable risks or discomforts involved in taking part in this study. Benefits:
Because there are no benefits that are expected to benefit you directly from participating in this study, possible secondary benefits include gaining knowledge of the research process and improved participation skills.

Compensation or payment:
There is no direct payment for taking part in this study. However, extra credit via SONA Systems may be obtained. After participation in this study is completed, SONA Systems will be notified of your participation, your participation will be verified, and SONA will distribute the appropriate credit to your account. The credit granted for this study is as follows:

- .5 In-person SONA Credits

Confidentiality:
We will limit your personal data collected in this study to people who have a need to review this information. We cannot promise complete secrecy. However, it is assured that your information will be coded, protected in a code secured limited access room, and stored on a password protected computer. Your information will be incorporated in a file that combines the information from other participants, and data will be presented in a congruent aggregate way. Therefore, you will not be individually named or identified in any way.

Study contact for questions about the study or to report a problem:
If you have questions, concerns, or complaints, or think the research has hurt you, contact De’Siree Reeves, Undergraduate Student, Department of Psychology, College of Sciences by email at desiree.reeves_ken@knights.ucf.edu. Or contact Dr. Matthew Chin, Faculty Supervisor, Department of Psychology at (407) 823-2565 or by email at Matthew.Chin@ucf.edu.

IRB contact about your rights in the study or to report a complaint: Research at the University of Central Florida involving human participants is carried out under the oversight of the Institutional Review Board (UCF IRB). This research has been reviewed and approved by the IRB. For information about the rights of people who take part in research, please contact: Institutional Review Board, University of Central Florida, Office of Research & Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 or by telephone at (407) 823-2901. You may also talk to them for any of the following:

- Your questions, concerns, or complaints are not being answered by the research team.
- You cannot reach the research team.
- You want to talk to someone besides the research team.
- You want to get information or provide input about this research.
APPENDIX E: VIDEO SCRIPT
**PersonA**: Wow, I’m glad that we finally met to work on this project together.

**PersonB**: I know, it seemed like we would never get to work on it in person.

**Target**: Sure but, don’t you think we should have met up at least once already?

**PersonC**: I don’t know, this being our first time is perfectly fine with me.

**PersonD**: Me too; for our first group session we’ve gotten a lot done.

**PersonE**: You’re not kidding; we’ve been working on this since this morning.

**PersonA**: You know, since we’ve been working it, this project doesn’t seem as hard as I thought.

**PersonB**: When I read the assignment I was really stressed out, but now I’m not so much.

**Target**: I think we should all be totally stressing over this: it’s 1/3 of our grade.

**PersonC**: I agree with the others; look at all the good work that we’ve done so far.

**PersonD**: I’m not worried at all; by the look of things we’re definitely going to get a good grade.

**PersonE**: Yep, the way we’ve been working doesn’t make that “1/3 of our grade” thing scary at all.

**PersonA**: As a matter of fact, I’m sure we’re going to get at least a B- on this thing.
PersonB_3: Sure, B- is cool: I can see us getting something within the B-ish range.

Target 3: We can’t settle for a B; let’s do all that we can to get an A on this guys.

PersonC_3: I’m just fine with getting a B on this; who says that a B is settling anyways?

PersonD_3: I’m no overachiever, so getting a B on a project like this is cool with me.

PersonE_3: I have to agree because a B is much better than the grades I’ve been getting.

PersonA_4: Well, we’ve been hard at work but I am ready for lunch.

PersonB_4: You know, I was thinking the very same thing.

Target 4: Well, don’t you think we should finish this draft before we go; we’re nearly done.

PersonC_4: Yeah but, I also can definitely go for some lunch right now.

PersonD_4: Sure; you know I’ll never say no to getting some food.

PersonE_4: Lunch sounds good to me right about now too.

PersonA_5: Anyway, we have plenty of time to finish afterward, and I heard that the new place on campus opens today.

PersonB_5: Yeah, time isn’t an issue for us right now, and I hear that the new restaurant serves great quality food.
Target 5: Actually, we’re only on our first draft; and the new place is all the way on the other side of campus.

PersonC_5: We’re definitely ahead of the game; and, the new place’s food is pretty cheap which is always a plus.

PersonD_5: Sure, I’m up to anything right about now; the project can wait and all of that sounds like it’s worth the walk.

PersonE_5: Not only that, but I hear that the restaurant chain serves good-sized portions too; plus, this project isn’t due for a week.

PersonA_6: Anyway, it would be nice to take a break and hangout for a little while.

PersonB_6: Definitely, I couldn’t have said it better myself: food and fun is always a go for me.

Target 6: Come one guys, work comes first; we really can’t afford to take a lunch break right now.

PersonC_6: I’m still up for lunch; haven’t we all heard of “Work hard, play hard”?

PersonD_6: Totally, and it would be nice for us to get to know each other outside of the project.

PersonE_6: Sounds like lunch at the new place it is then; it really is what’s best right now.
APPENDIX F: PART TWO MEASURES
Manipulation Check and Dependent Variable Questions

Following are questions that will ask you of your opinions of the content and dynamics of the group discussion you just viewed in the previous video. When you are done with this survey please notify the researcher so that you may continue the study. Thank you.

Please fill in the blank or circle an answer for the following questions:

How many people were in the group?  

What was the topic of the discussion?

How many people were in agreement with each other?

How many person(s) disagreed with the group consensus?

What was (were) the gender(s) of the dissenters?

How relevant to the discussion was the dissenter(s)’ reason for disagreeing?

- Not at all
- Very much

How much do you agree with the dissenter(s)’ line of reasoning?

- Not at all
- Very much

How much did the dissenter(s) influence the conversation? (Who said#1)

- Not at all
- Very much

How much was (were) the dissenter(s) liked by the other members of the group? (Who said#2)

- Not at all
- Very much

How much was (were) the dissenter(s) respected by the other group members? (Who said#3)

- Not at all
- Very much
How much was (were) the dissenter(s) competent about the topic of discussion? (Who-said#4)

<table>
<thead>
<tr>
<th>Not at all</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Very much</th>
<th>5</th>
</tr>
</thead>
</table>

How much of a clear impression did you make of the dissenter(s)? (Who-said#5)

<table>
<thead>
<tr>
<th>Not at all clear</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>Very clear</th>
<th>5</th>
</tr>
</thead>
</table>
Part Two Demographics and Purpose of Experiment Questions

This final survey contains questions that will ask you about your background. Please answer each question to the best of your ability. When you are done with this survey please notify the researcher so that you may continue to the conclusion of the study. Thank you.

*Please fill in the blank or select an answer for the following questions:*

**What is your age?**

**What is your sex?**  
Male _______  Female_______

**What is your ethnicity?**

**What is your class standing?**  
Freshman____  Sophomore____  Junior____  Senior____  Other:___________

**What is your college?**

**What is your major?**

**What is your political party affiliation?**

**What is your philosophical/religious orientation?**

In your opinion, what was the purpose of this experiment?
APPENDIX G: PART TWO DEBRIEFING STATEMENT
Debriefing Statement

For the study entitled:
“Social Perceptions of Group Dynamics”

Dear Participant;

During this study, you completed an online survey and watched a short video of a social activity among a group of college students. You then complete two questionnaires related to the video and various social perceptions to the best of your ability. You were told that the purpose of the study was to investigate social perceptions, particularly in social situations and to explain how factors of group dynamics interact with an observer to influence his or her perceptions of social activity.

The actual purpose of the study was to determine whether people fail to recognize and acknowledge the actions and contributions of less dominant social groups, such as Latinas, with respect to other non-dominant and dominant social groups, such as African American and Caucasian men and women, respectively. The study also sought to determine whether individuals who are more inclined to make stereotypes are therefore, more likely not to recognize and acknowledge the contributions of an individual in a social setting because of the individual’s combined gender and ethnicity.

We did not tell you everything about the purpose of the study because we wanted to gather genuine data, and telling you of the true nature of the study may have prompted you to behave in a manner that is not consistent with your natural thought processes and behaviors.

You are reminded that your original consent document included the following information: Your participation is completely voluntary and that you may discontinue the experiment at any time without penalty. If you have any concerns about your participation or the data you provided in light of this disclosure, please discuss this with us. We will be happy to provide any information we can to help answer questions you have about this study.

The responses in this study are de-identified and cannot be linked to you.
**Study contact for questions about the study or to report a problem:** If you have questions, concerns, or complaints or think the research has hurt you please contact De’Siree Reeves, Undergraduate Student, Department of Psychology, College of Sciences by email at desiree.reeves_ken@knights.ucf.edu. Or contact Dr. Matthew Chin, Faculty Supervisor, Department of Psychology at (407) 823-2565 or by email at Matthew.Chin@ucf.edu.

**IRB contact about your rights in the study or to report a complaint:** Research at the University of Central Florida involving human participants is carried out under the oversight of the Institutional Review Board (UCF IRB). This research has been reviewed and approved by the IRB. For information about the rights of people who take part in research, please contact: Institutional Review Board, University of Central Florida, Office of Research & Commercialization, 12201 Research Parkway, Suite 501, Orlando, FL 32826-3246 or by telephone at (407) 823-2901.

If you have experienced distress as a result of your participation in this study, you are more than welcome to seek the services of the university’s Counseling and Psychological Services by contacting them by phone at 407-823-2811, by email at counctr@ucf.edu, or visiting their location: Counseling Center 101. (Please remember that any cost in seeking medical assistance is at your own expense.)

Please again accept our appreciation for your participation in this study.
REFERENCES


University of Central Florida (2015). State University.com. Retrieved April 17, 2015, from the StateUniversity.com Website:
