COMEDIANS ARE LEADERS: COMEDIANS' USE OF HUMOR MAKES US FEEL LIKE WE MATTER

By

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Abstract

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This research examines funny functions of shared group membership – how content that clearly demarcates ingroup membership may be at the root of humor. Participants in this study listened to a recording of a stand-up comedian who was defined as being either a fellow college/university student (ingroup) or a non-college student (outgroup). Additionally, the audio either contained audience laughter or no audience laughter. Upon finishing the recordings, participants were asked to answer survey questions about their experience with the comedian, rate their overall sense of shared group identity with the comedian, their level of positive affect, distinctiveness from an outgroup, and the strength of their identification as a college student. I predicted that an ingroup comedian would create a greater shared identity for participants (with college), increase group identification with "college", and increase positive affect in comparison to an ou-group comedian. Moreover, this work sought to conceptualize comedians as identity-based leaders, thus I predicted that participants exposed to an ingroup comedian would view the comedian as a more effective "identity leader" (see Steffens et al., 2014) than those exposed to an outgroup comedian. To test this, 253 participants were recruited through Amazon CloudResearch. The primary hypotheses were somewhat supported, such that participants displayed higher levels of distinctiveness from an outgroup when listening to an ingroup comedian as well as rated a "funny" comedian as making their identity as a college student matter to them (see Results section). The results of this study suggest that

humor plays a role in how we perceive an ingroup member to play the part of a leader when we find them funny.

Acknowledgements

To begin this paper, I would like to express my immense thanks to my advisor, mentor, and committee chair, Dr. Amber Gaffney, for her unwavering support and interest in this research. Dr. Gaffney's critiques, interest, and pressure for quality research helped me build and develop this thesis, and she has truly inspired me to become a better researcher and a better contributor to the scientific world. I would like to thank my other committee members, Dr. Amanda Hahn and Dr. Christopher Walmsley, for their comments, questions, and concerns about this study that helped better shape this study to what it has become. I want to thank my parents, Dr. Gregory Burt and Melanie Burt-Schipke, for their unyielding love, support, and tough talks that have allowed me to flourish and grow as a person. I would like to thank the entirety of the Social Identity Lab here at Cal Poly Humboldt for making me part of their family and helping me every step of the way on my academic journey. I would like to thank my bosses, Matthew Richter and Kyle McEdward, for allowing me to work for them for the past several years on campus and helping me to finance this project. Finally, I would like to thank the entire department of psychology at Cal Poly Humboldt for an incredible five years of research and of fun on my undergraduate and post-bachelor journey. This university has allowed me to thrive and prosper in ways I never thought possible, and I will never forget the time I spent here.

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Introduction

What did one ocean say to the other ocean? Nothing, they just waved. Current humor research focuses on the persuasive power of humor (Cline et al., 2003; Cline & Kellaris, 2007; Conway & Dubé, 2002; Goswami et al., 2016; Greatbatch & Clark, 2003; Laurent et al., 2018; Madden & Weinberger, 1984; Roze, 2010; Shabbir & Thwaites, 2007; Tremblay, 2017) and what makes something "funny" (Warren et al., 2020). However, humor creates a positive behavior (laughter) through a shared experience between the person providing the mirth and the person reaping the benefits of the humor (the person laughing). On one hand, there is an interpersonal component (the specific relationship between the person telling the joke and the person who is laughing); however, people often laugh at comedians' jokes whom they do not actually know. This relationship is one grounded in shared experiences and likely forms a relational identity (Shapiro, 2010), similar to a follower-leader relationship. When a comedian shares a specific group membership with the audience, that shared social identity should become psychologically salient and activate self- and social-categorization processes (see Turner et al., 1987). Moreover, laughter may also be a product of what the laugher has in common with the person making them laugh and what sets them apart and makes them special from those who either do not get the joke or who are the butt of the joke (that is, humor has a unique ability to capitalize on group membership).

Why didn't the skeleton cross the road? They didn't have the guts. Humor and responses to humor (laughter) are inherently social, thus the scientific study of humor should be led by social psychologists. Prior research on humor has investigated the varying uses of humor, such as responses to trauma and tragedy, with researchers arguing that the varying types of humor that exist in the world (e.g., inside jokes, dark humor, playful jokes) are important to study (McGraw

et al., 2014). Warren et al. (2021) outline more than 20 different and distinct models, split into three categories (superiority, incongruity, and relief) that attempt to explain humor appreciation. There are additional varying constructs that attempt to define humor, such as sense of humor (i.e., comedy production), and humor appreciation (i.e., the psychological response characterized by amusement and laughter). Humor appreciation often comes from an element of surprise (i.e., when the target perceives something as different than what they expected to receive given their knowledge of the topic). Each category of humor is unique in their own right and each should be explored more in the literature to help provide new information into the uses and study of humor.

In this study, I seek to reframe conceptions of comedians or even funny members of a group, as leaders. Like leaders, comedians and funny group members capture people's attention because of their specific skills (e.g., Jon Stewart or Trevor Noah making sense of politics for liberals). Because of their ability to capture the attention of other group members, comedians and funny people likely hold a disproportionate amount of influence in their groups-a key attribute that leaders hold through their embodiment of their group's identity (Hogg, 2004). Group leaders can influence what a group believes to be the truth or believes is correct, and they can reduce uncertainty by creating and facilitating shared identity (Hogg, 2001; Reid & Hogg, 2005; Reicher et al., 2005). Leaders are influential in their groups because other members look to them to understand group normative attitudes and behavior (Hogg, 2001). Moreover, people are attracted to other group members who have characteristics that make them representative of the group identity – that is, group members are attracted to other group members who can tell them what is normative for the group (Hogg, 2003). The norms of the ingroup are only apparent and recognized in juxtaposition to an outgroup (e.g., Turner et al., 1987), thus those members who point out commonalities with the ingroup and how these shared features make the ingroup

special and different from the outgroup (see Tajfel & Turner, 1985) capture the attention of their ingroup members and thus provide such members with a significant amount of influence in the group (see Hogg, 2003). The current work provides an analysis of how a funny person, conceptualized as a leader, can creative positive distinctiveness (defined as a group striving to achieve and maintain a positive social identity that is different from a relevant outgroup) and a shared identity amongst a group through the use of humor that binds the group together.

Leaders that use humor either in the workplace or in a group setting promote factors such as empowerment, engagement, and the overall voice of their employees (Arendt, 2009; Avolio et al., 1999; Gkorezis et al., 2011; Goswami et a., 2016; Huang & Kuo, 2011; Liu et al., 2019; Mesmer-Magnus et al., 2018; Vecchio et al., 2009) Additionally, leaders who appropriately use humor are able to shed themselves in a favorable light to their ingroup and promote a variety of positive outcomes for their members, which further affirms their place as the leader within the group. Leaders who affirm and build on social identities gain the support of their followers (Haslam & Platow, 2001). There is a need for leaders to tailor specific types of humor to specific audiences, such as employees or peers. Sobral et al. found that the effect of humor (affiliative, meaning something that everyone can find funny vs. aggressive) when coupled with different leadership styles (transformational, meaning working beyond their own self interests vs. laissez-faire) had significant impact on interns' attitude and behavioral responses to their leader and their style of leading, such that participants would compare the type of humor being used by the leaders' to their leadership styles and would more often rate the humor as "abusive" and overall inconsistent with how they were leading (Sobral et al., 2019). Should a leader use humor that may be seen as inappropriate or irrelevant by the target group, the group may not find the joke funny, or the comedian may create a situation in which the audience feels "othered", particularly

if the comedy pokes fun at the ingroup, and they thus feel attacked by the comedian, creating an intergroup sensitivity effect (reactive response to an outgroup critic) (Hornsey, 2005; Hornsey & Imani, 2004; Hornsey et al., 2002).

Context and identity are tantamount in humor. A dirty joke about your mother is contextually inappropriate (usually). What happens when your mom, an ingroup member in the family, makes the joke about herself? It might then be contextually appropriate. As a liberal academic, do you want to hear Mitch McConnell riff on bleeding heart liberals? How about Tucker Carlson or Tim Allen? The answer is most likely "no." How about Chris Rock or Jon Stewart? A verifiable outgroup member's joke about one's ingroup promotes intergroup threat and is likely seen as disparaging, hence the result is an intergroup sensitivity effect (Hornsey & Imani, 2004). An ingroup member making the same joke should get leeway, particularly if they hold a position in the group that is akin to leadership (see Abrams et al., 2013 for related work on leader transgression credit). A sense of shared identity with the comedian is important – otherwise, it looks as if they are making fun of you to bring you and your group down, rather than pointing out the things that *we* have in common. In this study, I will use a social identity framework to outline how shared identity paves the path for humor.

Literary Review

Social Identity and Leadership

Traditionally, social and organizational leadership has examined leadership from a "great leader" perspective, focusing on individual leader qualities that "make" a great leader. However, current leadership work examines the reciprocal flow of influence from leader to follow and from group to leader. This work positions a leader as the representative of a group identity (Hogg & van Knippenberg, 2003). As a result, this approach defines leadership as a fundamental group

process, grounded in social identities. Social identity includes the knowledge of the self-derived from membership in an important group and the attachment an individual has to the group (Tajfel & Turner, 1979). People cognitively represent groups as prototypes, which clarify and define the group identity through communalities with ingroup members and the distinction of the ingroup to an outgroup (Hogg, 2006). A prototype is the cognitive expression of a particular group and includes desired qualities that uniquely define the ingroup in comparison to an outgroup. Rosch's work on categorization and humans' ability to naturally categorize people into groups shows that people distinguish who is and who is not prototypical of a group (Rosch, 1973; 1978). To be prototypical means to represent the essential features of a group or category. You, as a college or university student and or a graduate from a university or college, are most prototypical of other students at your college or university because you help to represent the best that your group has to offer. Prototypes develop through comparison to an outgroup via a meta-contrast ration, which is the perceived within group similarity to intergroup differentiation – people seek minimal intragroup differences and maximum differentiation between groups when the presence of an outgroup is salient (Turner et al., 1987). Prototypes contain valued attributes and markers of group identity (e.g., slang, clothing, jokes, attitudes, hobbies), thus features that encapsulate intragroup similarity ("things we get") and also highlight intergroup differences ("things we get, but they don't – our jokes") may be important for establishing distinctiveness between categories. Leaders within a group can take advantage of this process by creating ingroup norms that only ingroupers get or understand, while outgroupers cannot or do not understand. Group specific jokes that only "we get" may satisfy this function and increase inter-group differences while pointing out intragroup similarities. Relatedly, people seek to feel both included within groups, but also to feel unique. These two needs are often contradictory, but

group identification fulfills both needs by creating intragroup affiliation and inclusion while simultaneously highlighting intergroup differences (Brewer, 1991; Leonardelli et al., 2010). Research on optimal distinctiveness theory (Way et al., 2021) demonstrates that participants who were involved in decision-making tasks and had a higher positive perception of their team reported feeling more optimally distinct from others in terms of their personality. This suggests that individuals want to feel included in a group where only they and others like them "get" a piece of humor, while outgroup, "them," the outgroup, cannot because they are not us. This again can be taken advantage of by a group leader to impose the idea that their own group, the ingroup, understands something that the outgroup cannot possibly get or understand. That is, a group leader and a comedian share and often point out the features of the ingroup that make *us* different from and more special than *them*.

Leaders have the ability to define and mold what is prototypical in a group, meaning they shape and define the norms for the group (Reid & Hogg, 2005). A group is comprised of individuals who see themselves collectively as people with similar qualities (Tajfel & Turner, 1979). Leadership is a vessel for the representation of a group identity because leaders are group members who best approximate the prototype (see Gaffney et al., 2018, Haslam et al., 2022). This representation has significant influence over social identity based collective agency, wherein followers buy into and maintain the leader's perspectives not because they *have to* but because they have the ability to act creatively on behalf of the leader (Reicher et al., 2005). That is, identity based leadership does not command – it empowers followers to act on behalf of the important social identity (see Haslam et al., 2022). Furthermore, leaders who act and make decisions that affirm an overall shared identity with a group are viewed as fairer than those who make decisions that do not affirm the shared identity overall, and support for these leaders is

increased by the ingroup (Haslam & Platow, 2001). As such, a leader who affirms the shared identity of a group tends to be seen as more effective in their position than those who do not.

Followers who perceive a leader as funny rate their leaders as effective leaders. Gkorezis et al. (2016) found that when new employees' to a company witnessed a supervisor using positive humor (e.g. humor that is designed to facilitate a positive relationship), they demonstrated increased relational identification with the supervisor, which in turn predicted trust and support for that leader Avolio et al. in their 1999 study of humor as a moderator of leadership style showed that leaders who used humor create an environment within a group that allows members to feel as if they are a secure unit, even if members are overall not satisfied with their leader (Avolio et al., 1999). Studies have also shown a positive correlation between leaders who use humor and their group's willingness to accept change, which suggests that humor may be a vessel to allow for significant changes in a group's identity if humor is used effectively. (Meliones, 2000). Humor, however, needs to be broken down scientifically and operationalized before it can be effective for any sort of "change".

Social Psychological Conceptualizations of Humor

According to Warren et al. (2020), there are at least three constructs that surround humor: (a) an individual difference in the tendency to laugh or to amuse others, called a sense of humor, (b) a stimulus that makes people laugh (i.e., jokes), and (c) humor appreciation, a psychological state in which people respond to humor or a joke with laughter and or amusement. Comedy can come from a variety of sources: cartoons, books, comedians, family, friends, and more. Three distinct categories emerge from models that seek to operationalize humor and comedy: superiority, incongruity, and relief (Gulas & Weinberger, 2006; Lynch, 2002, Monro, 1988, Morreall, 2009). Whereas these models are not fully complete, they at the very least offer insight

into how and why people laugh and appreciate different types of humor at different levels. Groups and their norms help to define what humor is, thus making humor context specific. Humor in specific contexts also has the ability to allow for influence and persuasion in the right hands.

Research shows that humor is important in persuasion, influence, and memory (Cline et al., 2003; Cline & Kellaris, 2007; Conway & Dube, 2002; Cooper, 2005; Greatbatch & Clark, 2003; Laurent et al., 2018; Madden & Weinberger, 1984; Shabbir & Thwaites, 2007). The type of humor that most people recognize (e.g. satire, word play) is called "standard humor." This type of humor is non-offensive and is inclusive of a broad audience. Whereas the audience may be broad and can encompass many groups, the groups that do not understand the satire or who are not of the same group that the satire is targeting may feel a sense of exclusion in not understanding the humor or joke. They may feel as though they can't or won't be able to understand the joke as they are not an ingroup member. This is also true of different types of humor, including non-standard humor. Non-standard humor can include both dark or offensive humor, which are defined as making light of a subject or topic often considered taboo or are considered serious. Popular topics for dark humor include death, crime, and many other uncomfortable topics. Prior research on dark or offensive humor suggests that participants who were exposed to dark or offensive humor felt more inclusive in their group compared to a group who was exposed to positive humor (Tremblay, 2017). While there is research that suggests that aggressive, rude humor in a work setting can lead to a decrease in employee voice and overall identification with their workplace identity (Liu et a., 2019), the overall goal of the current research is to point out that people who find certain jokes funny are the ones who are able to separate their own group from an outgroup through shared identity with the comedian. I seek to

analyze and examine how, using humor, audience members may express greater distinctiveness from a similar outgroup and create an ingroup in which only certain members of a group laugh at or find this type of humor funny, thus creating a sense of exclusion for members who do not laugh or find the humor funny. This work examines how someone who is perceived as funny can use relevant ingroup humor to relate to a relevant ingroup and, using humor, be perceived as an effective leader of their social identity as well as a representative of their group.

Research Overview

The purpose of this research is to examine how comedians (funny people) may be perceived as leaders of a group, using their humor to create an exclusive group identity. Essentially, a comedian can create positive distinctiveness to a relevant outgroup (or even create an outgroup to produce a collective identity with the audience). The experiment was designed such that participants were exposed to a comedian who presented jokes that were accompanied with audience laughter or without it. Additionally, the identity of the comedian was manipulated to either be that of a relevant ingroup (college/university student) or a relevant outgroup (non-college/university student). In this study, I measured participants feelings of group identity, distinctiveness from an outgroup, positive and negative affect, and perceived leadership qualities of the comedian.

Hypotheses

Hypothesis 1

Participants who listen to an ingroup comedian will experience a greater sense of overlap with the ingroup identity (college/university students) than participants who listen to an outgroup comedian, particularly if the comedian is presented with audience laughter.

Hypothesis 2

Participants who listen to an ingroup comedian will view the comedian as holding more identity leadership qualities than participants who listen to an outgroup comedian, particularly when the comedian is accompanied with audience laughter.

Hypothesis 3

An ingroup comedian accompanied with audience laughter will elicit a greater sense of distinctiveness from a relevant outgroup (noncollege/university students) than participants who listen to an outgroup comedian.

Hypothesis 4

Participants who listen to an ingroup comedian accompanied with audience laughter will report higher levels of positive affect than participants who listen to an outgroup comedian.

Hypothesis 5

Participants who listen to an outgroup comedian accompanied with laughter will experience greater negative affect than those who listen to an ingroup comedian.

Method

Participants and design

Sample. A sample of 253 current and former college/university students were recruited through Amazon's CloudResearch. Participants were asked to indicate their race (White = 190, Black or African American = 27, Asian = 16, Native Hawaiian or Pacific Islander = 1, Hispanic/Latino = 12, Biracial = 4, Other = 3), current grade level (Freshperson = 3, Sophomore = 11, Junior = 19, Senior = 15, Post-Bachelor = 111, Graduate = 94), political party affiliation (Republican = 72, Democrat = 115, Independent = 57, Other = 3, No Preference = 6), current major/emphasis, and any student debt ($5,000 - $10,000 = 14, $10,000 - $15,000 = 12, $15,000 - $20,000 = 13, $25,000 - $30,000 = 23, $35,000 - $40,000 = 22, $45,000 - $50,000 = 17,

$50,000+ = 21, No debt = 131) and age (*M* = 40.03, *SD* =15.07). The age of participants ranged from 19 to 74 years old. Participants were compensated 0.75 cents for their responses to the survey. Based on prior research into similar uses of humor (Sobral et al., 2019), a sample of 250 participants seemed adequate. A power analysis was conducted to measure the effect size of the primary hypothesis of overlap with ingroup using RStudio and the 'pwr' package. The reported effect size was .04, a small effect size.

Survey. Qualtrics, an online data collection software, was used to store the data collected from this experiment. SPSS and RStudio, both online data analysis software, were used to analyze the data collected.

Design. A 2 (comedian: ingroup vs outgroup) x 2 (audience response: laughter vs no laughter) between-subjects design randomly assigned participants into the four conditions. The dependent variables were overlap with ingroup, distinctiveness from outgroup, affect, and perceived group leadership.

Procedure

Informed consent and comedian profile. All participants were provided with an informed consent page that stated their consent to participating in an experiment that would require them to listen to an audio presentation containing crude language. Before beginning the survey, participants were asked a student identification check question, "*Please answer the following question about your current educational standing: I am a current or graduated student from an American College or University."* Participants who answered "no" to this question were not included in the final analysis. Prior to hearing the recordings, participants were presented with a brief profile to describe the stand-up comedian they are about to listen to, as well as an image showing what the "comedian" looks like. The image was of actor Jaboukie Young-White.

The comedian was described in one of two different ways, which identified their group membership. In group one, participants were introduced to "Jack," a stand-up comedian from a well-established college in the United States (ingroup). In group two, participants were introduced to "Jack," a stand-up comedian who graduated from high school and is not seeking higher education at a college/university (outgroup). Additionally, the recording of the stand-up routine was manipulated in one of two ways to measure the second independent variable, audience response. In one condition, following each set of jokes, participants heard laughter from "audience members" in the background (laughter). In the other condition, participants did not hear any audience response (no laughter). The audience members consisted of students and faculty assisting with this project.

Measured Variables

Overlap with ingroup. Participants were asked to indicate their closeness to their identity as a college student on an inclusion of other in self (IOS) scale question. The question asked, adopted from Aron et als. 1992 work was, "*Please imagine that one circle represents you and the other circle represents your identity as a college student. Which pair of circles best represents how you see the relationship between the two?"* (Aron et al., 1992)

Distinctiveness from outgroup. Participants responded to a series of inclusion of other in self (IOS) scale questions to measure their relationship with the comedian, their relationship with their identity as a college student, and their relationship with individuals who did not or have no plans to attend college/university (Aron et al., 1992). I created a modified version of a meta-contrast ratio, which is defined as the perceived differences between individuals of one category and another to the perceived difference of individuals within a category (Turner et al., 1987). I examined the ratio of each participant's overlap to their own group to the perceived

overlap of the ingroup and outgroup. The higher scores mean more distinction from the outgroup and more intragroup overlap. The first question that was used asked, "*Please imagine that one circle represents you and the other circle represents your identity as a college student. Which pair of circles best represents how you see the relationship between the two?"* The second question that was used asked "*Please imagine that one circle represents you and the other circle represents someone who has not or will not attend college. Which pair of circles best represents how you see the relationship between the two?"* Responses to these questions were taken and computed using SPSS to create the modified meta-contrast ratio to examine how distinct participants felt from a perceived outgroup.

Affect. Participants were evaluated on their overall levels of affect after the presentation of humor. Positive affect is defined as one's emotions or feelings that they display, such as cheerfulness and joy. Negative affect is defined as one's emotions or feelings that they display, such as emotional distress or worry. A PANAS scale, adopted from Watson et als. 1988 article was used to measure participants positive ($\alpha = .92$) and negative affect ($\alpha = .92$). An example of a positive item includes *"Interested,"* and an example of a negative item includes, "*Distressed"* (Watson et al., 1988).

Perceived leadership. To establish a relationship between comedians and leadership, I used the Identity Leadership Inventory (ILI) scale from Steffens et al's. 2014 work on leadership, using 5 subscales all on a 1 (strongly disagree) to 7 (strongly agree) Likert scale to measure how the participants view the comedian as a leader. The first subscale measured representativeness: "*how well the individual represents the group"* ($\alpha = .95$). The second subscale measured advancement: "*is this person promoting our shared interests for us"* ($\alpha = .96$). The third subscale measured entrepreneurship: "*crafting a sense of us"* ($\alpha = .89$). The fourth scale measured

impresarioship: "*making us as a group matter"* (α = .96). The final scale used was a shorter version of the ILI combined scales (one item from each subscale), analyzing if the comedian was a model member of college/university students and how well they brought them together (α = .95) (Steffens et al., 2014).

Demographics. The following information about participants' demographics was collected: age, ethnic identity, political party affiliation, current college major/emphasis, and any student debt they may have (see Table 1).

Table 1

Descriptive statistics, Cronbach's alpha, and correlations among variables

	Mean	*SD*	α	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Age	40.03	15.07														
2. Group***	1.51	0.50		0.01												
3. Humor***	1.52	0.50		-0.151*	0.09											
4. IOSComedian	2.00	1.28		-0.289**	0.05	0.09										
5.PosAff	3.62	1.29	0.92	-.136*	0.04	0.03	0.499**									
6.NegAff	2.32	1.14	0.92	-0.08	0.07	0.04	0.181**	0.136*								
7.IDDV	4.56	1.29	0.93	-0.01	0.06	0.03	0.164**	0.277**	0.10							
8. ILIProtoDV	3.30	1.60	0.95	-0.308**	-0.31**	-0.04	0.433**	0.434**	0.173**	0.08						
9.ILIadvDV	3.36	1.68	0.96	-0.235**	-0.302**	-0.08	0.427**	0.396**	0.186**	0.08	0.785**					
10.ILIentDV	3.56	1.51	0.89	-0.266**	-0.23**	-0.03	0.458**	0.489**	0.141*	0.195**	0.771**	0.824**				
11.ILIimp	3.08	1.65	0.96	-0.234**	-0.236**	-0.12	0.409**	0.471**	0.181**	0.128*	0.732**	0.765**	0.762**			
12.ILIDV	3.17	1.66	0.95	-0.246**	-0.27**	-0.09	0.453**	0.44**	0.172**	0.12	0.795**	0.864**	0.835**	0.904*		
13.Cont1	1.63	1.27		0.02	0.06	-0.04	0.04	0.13*	-0.09	0.405**	0.01	0.05	0.11	0.06	0.07	
14.ILITot	3.29	1.49	0.95	-0.281**	-0.3**	-0.09	0.482**	0.487**	0.169**	0.12	0.887**	0.924**	0.91**	0.908**	0.96**	0.07

Note. ***: manipulated variables. Group***:1 = Ingroup, 2 = Outgroup. Audience Response***:

1 = Laughter, 2 = No Laughter. N=253.*p < .05;**p < .01

Results

Data Screening

An initial sample of 298 participants responded to the CloudResearch survey. After removing participants who failed the student identification check question and checking for indication of re-consent, 253 participants' data were analyzed. Age correlated significantly with the dependent variables and when entered as dependent variable into the 2x2 ANOVA, both main effects and the interactions were significant. This created a confound with the 2 x 2 design of this study and as a result, age is a covariate for all analyzes.

Manipulation check. An independent samples t-test was conducted to examine the effectiveness of the comedian identity (ingroup vs outgroup) manipulation with the identity of "Jack" for the primary hypothesis of overlap with ingroup. Results indicated that the comedian identity manipulation was ineffective, $t(251) = -2.03$, $p = .524$, $95\%CI[-.74, -.01]$, $d = -.26$. Participants in the ingroup condition ($M = 2.903$, $SD = 1.437$) did not view the comedian as overlapping more with the ingroup that those in the outgroup condition ($M = 3.268$, $SD = 1.515$).

Data Assumption for normality

Positive affect. A visual inspection of the histogram for the positive affect measure appeared to show a roughly normally distributed graph. Further analysis of the data showed a slight positive skew of .327 ($SE = .135$) (See Figure 1).

Negative affect. A visual inspection of the histogram for negative affect showed a positively skewed graph (See Figure 2). Further analysis of the data showed a positive skew of 1.209 ($SE = .153$). Based on research by Hair et al., data is considered normal if the skew is between -2 and +2. Because of this, the data was not transformed and it met our assumption of normality (Hair et al., 2010).

Overlap with ingroup. A visual inspection of the histogram for the overlap with ingroup measure shows a relatively normally distributed graph (See Figure 3). Further analysis of the data showed a slight positive skew of .399 (SE = .153).

Distinctiveness from outgroup. A visual inspection of the histogram for distinctiveness from outgroup showed a positively skewed graph (See Figure 4). Further analysis of the data showed a positive skew of 1.760 (*SE* = .153). Similar to the negative affect data, because the skew was between -2 and +2, the data did not violate our assumption of normality (Hair et al., 2010).

Leadership Prototypicality. A visual inspection of the histogram for prototypicality, which was the responses to all questions from the Inventory Leadership Index subscales, showed a positively skewed graph (See Figure 5). Further analysis of the data showed a positive skew of .231 (*SE* = .154).

Figure 1

Histogram of Positive Affect

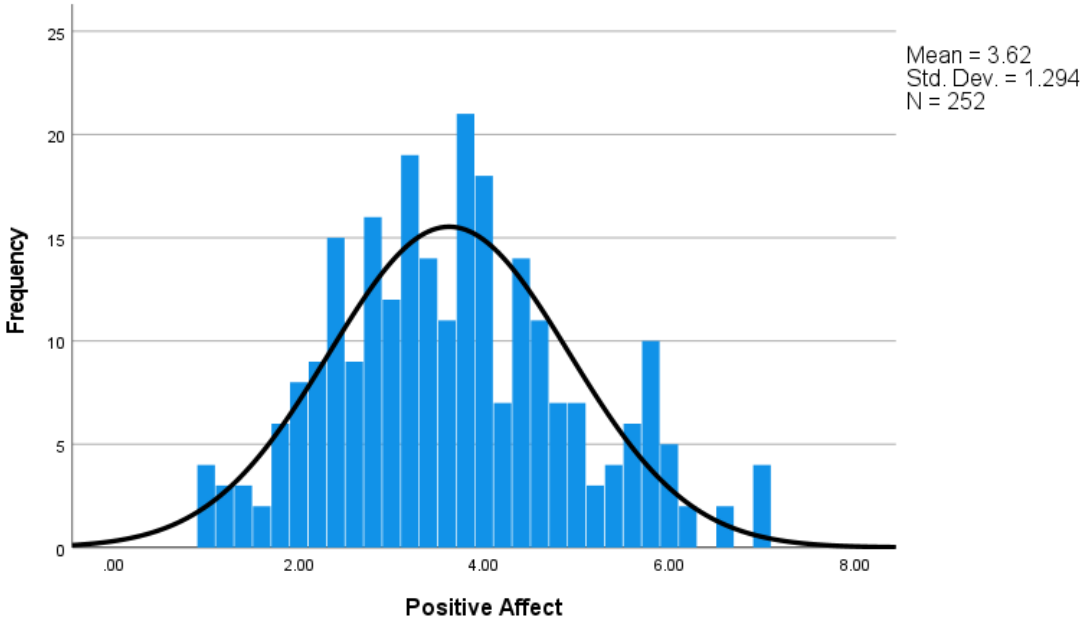


Figure 2

Histogram of Negative Affect

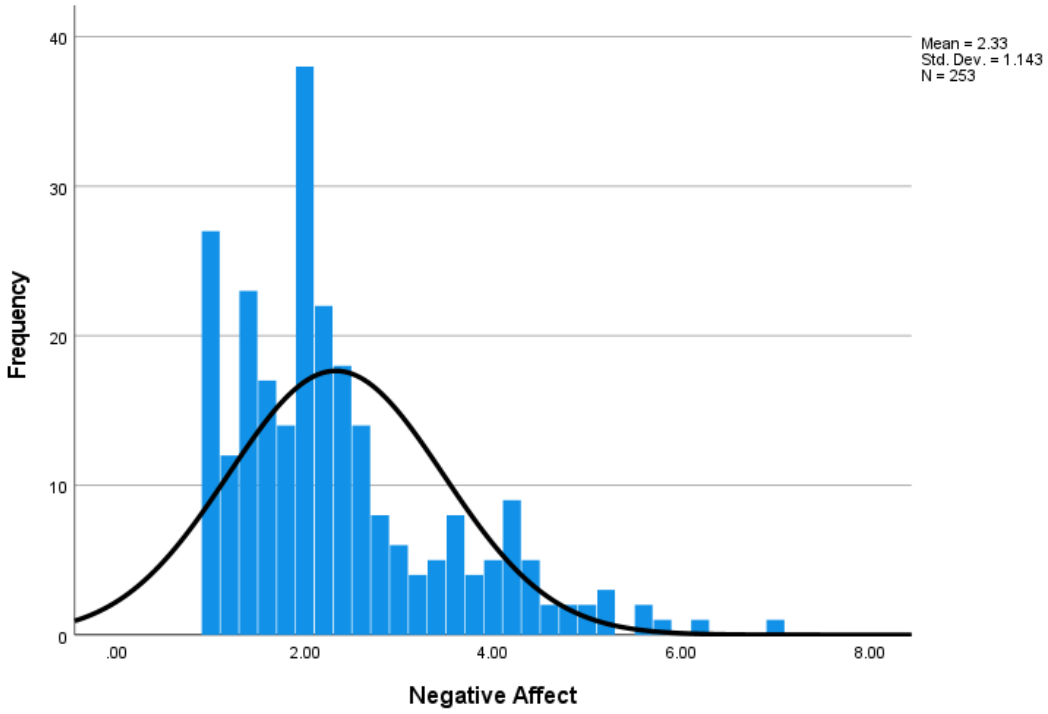


Figure 3

Histogram of Overlap with Ingroup

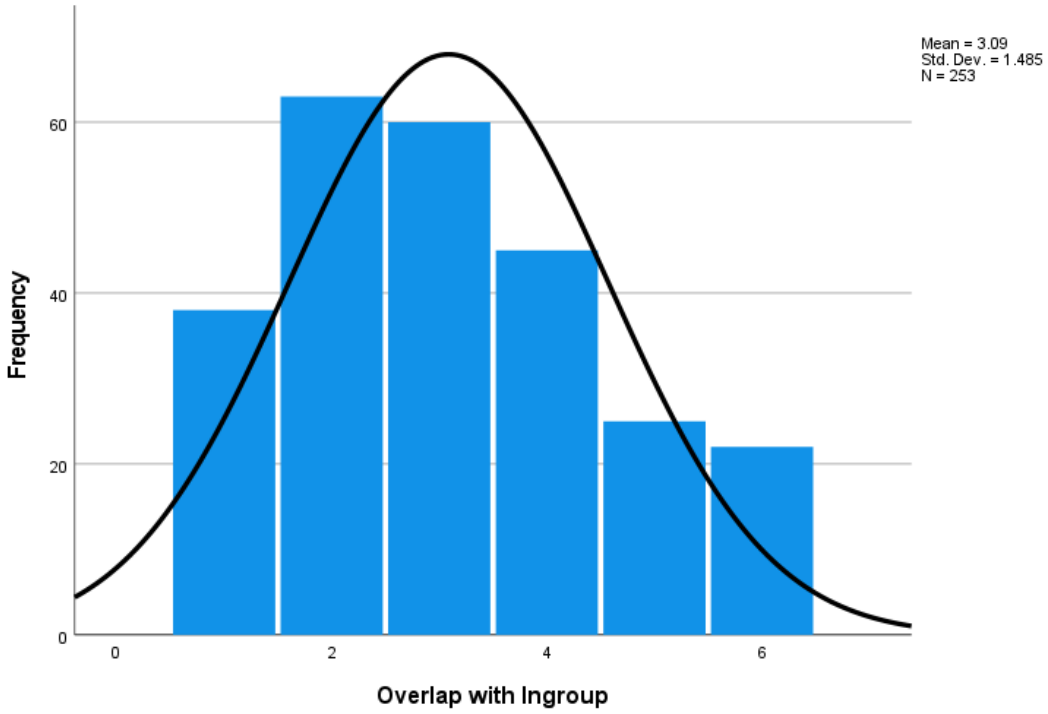


Figure 4

Histogram of Distinctiveness from Outgroup

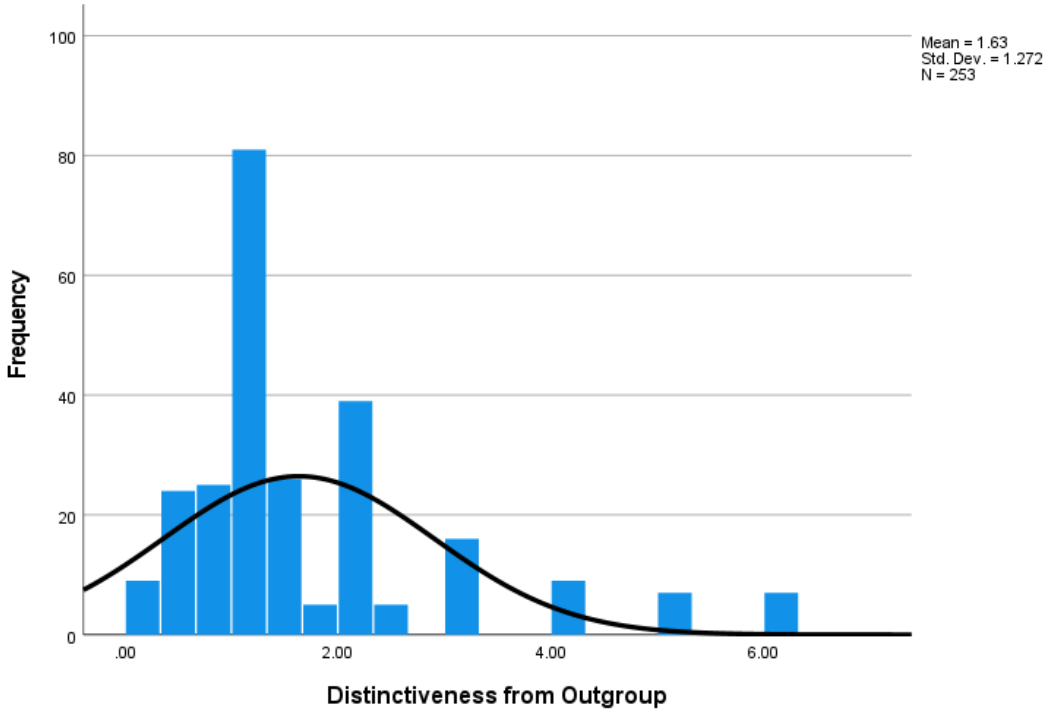
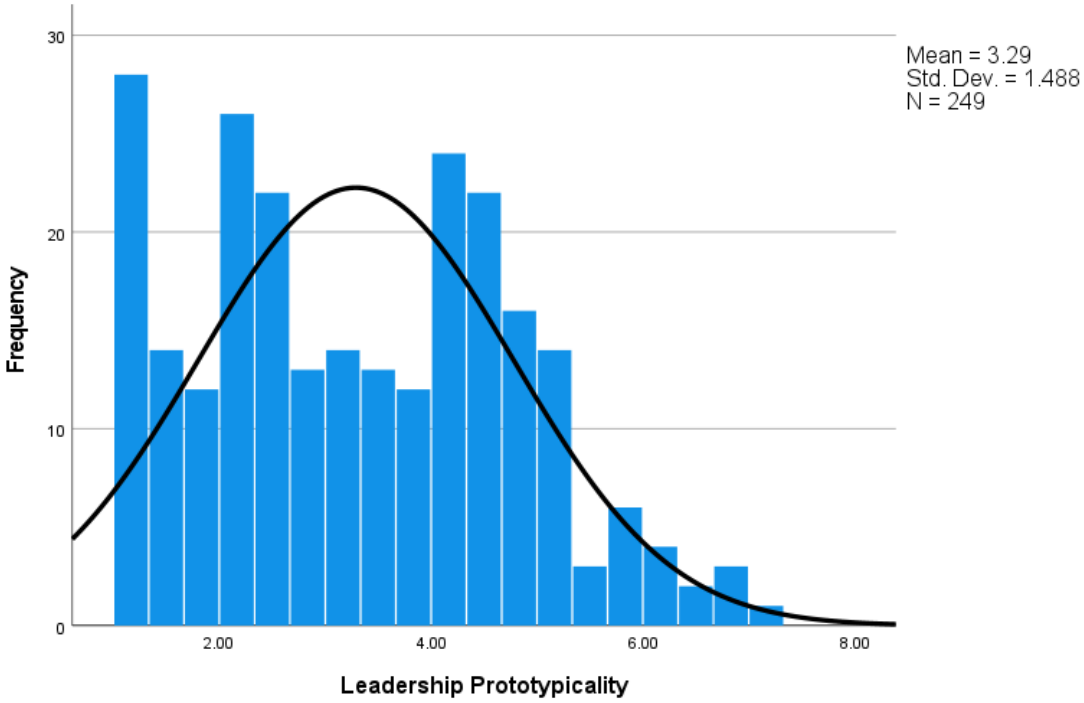


Figure 5

Histogram of Leadership Prototypicality

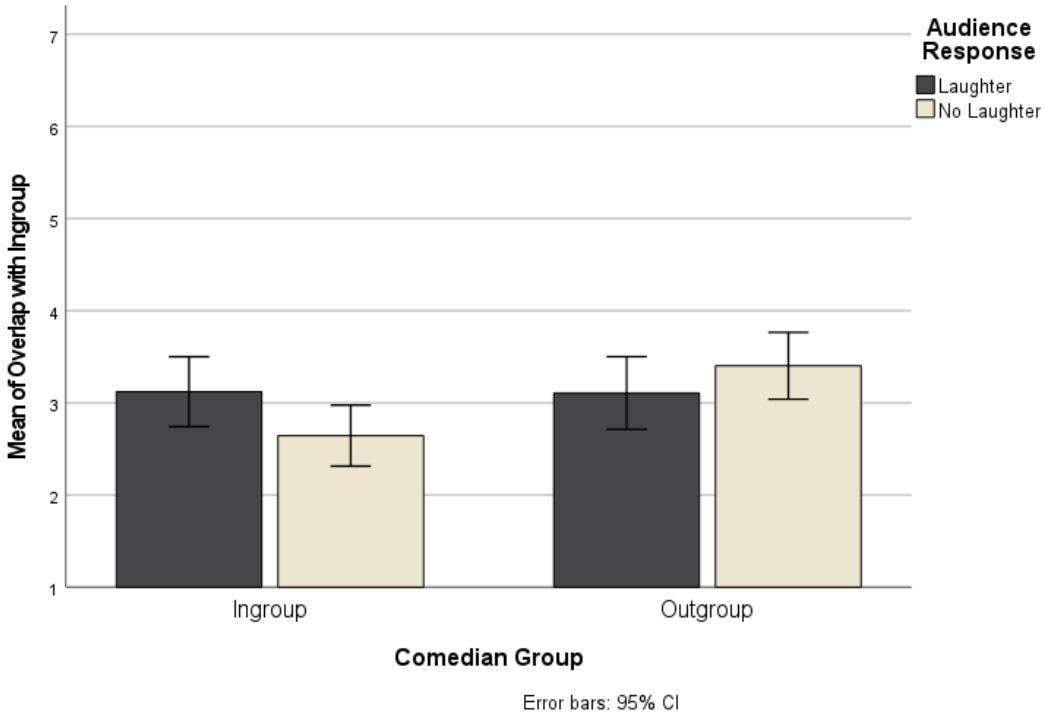


Primary Hypotheses

Overlap with ingroup. A factorial 2 x 2 ANOVA compared the main effects of overlap with ingroup when listening to an ingroup or outgroup comedian accompanied by either audience response or no audience response, measured through responses on the inclusion of others in self-scale question. There was a main effect for group, $F(1, 248) = 3.890$, $p = .050$, $\eta_p^2 = .015$, and no main effect for audience response, $F(1, 248) = .094$, $p = .759$, $\eta_p^2 < .001$. The effect for group was qualified by a statistically significant interaction between group and audience response, $F(1, 248) = 4.540$, $p = .034$, $\eta_p^2 = .034$, such that participants who heard no laughter from an outgroup comedian reported greater overlap with their ingroup than participants who heard no laughter from an ingroup comedian $F(1, 248) = 8.73$, $p = .003$ (see Figure 6). There was no effect in the laughter condition, $F(1, 248) = .012$, $p = .912$. Additional analysis into this result showed that participants in the outgroup comedian condition produced more negative affect than participants in the ingroup comedian condition, somewhat supporting the primary hypothesis of overlap with their ingroup (see Discussion section).

Figure 6

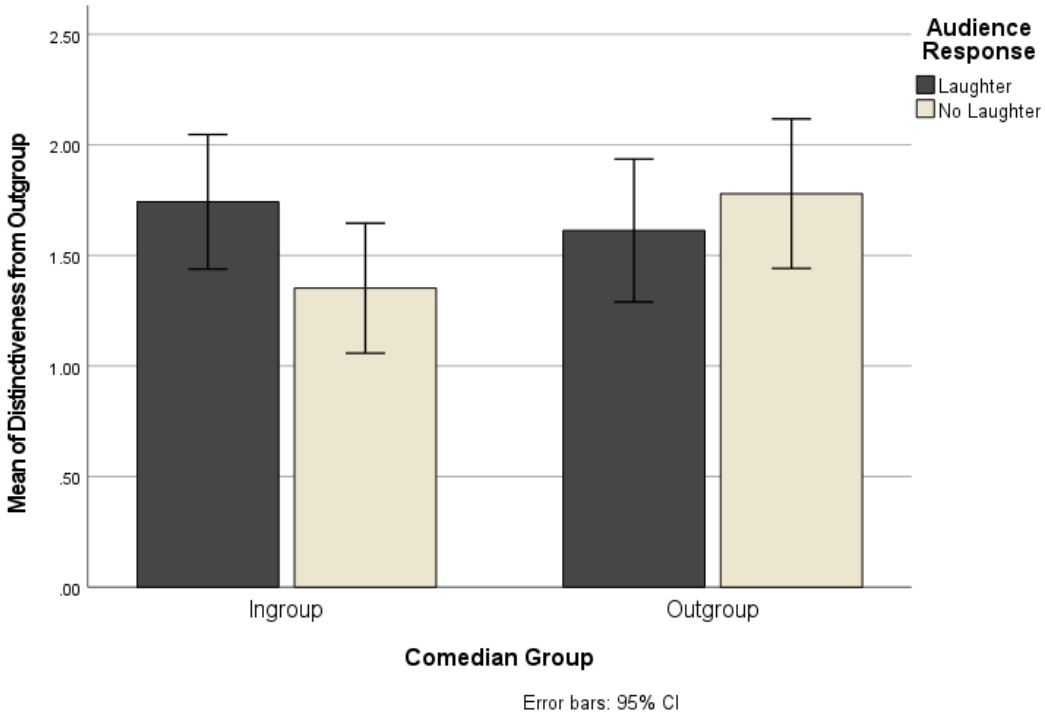
Bar Graph of Overlap with Ingroup



Distinctiveness from Outgroup. A factorial ANOVA examined the modified meta-contrast ratio created to examine the ratio of perceived overlap with the ingroup to the ingroup's distinctiveness from a perceived outgroup, thus higher scores should reflect a clearer prototype highlighted by more intragroup similarity and intergroup distinction. There was a no main effect for group, $F(1, 248) = .847$, $p = .358$, $\eta_p^2 = .003$ or audience response, $F(1, 248) = .426$, $p = .515$, $\eta_p^2 = .002$. There was a marginal interaction between group and audience response, $F(1, 248) = 3.042$, $p = .08$, $\eta_p^2 = .012$, such that participants who listened to an ingroup comedian expressed a more distinct prototype when exposed to audience laughter, $F(1, 248) = 2.861$, $p = .092$, and although non-significant, the effect was reversed for participants who listened to an outgroup comedian. For participants who listened to an outgroup comedian, audience response was not significant, $F(1, 248) = .581$, $p = .447$ (See Figure 7).

Figure 7

Bar Graph of Distinctiveness from Outgroup



Perceived group leadership. A factorial ANOVA compared the main effects of ingroup vs outgroup identity and audience response and the interaction of the two variables on perceived group leadership.

Prototypicality

There was a main effect for group $F(1, 248) = 27.350$, $p < .001$, $\eta_p^2 = .099$, and no main effect for audience response, $F(1, 248) = 1.079$, $p = .300$, $\eta_p^2 = .004$ on the subscale measuring prototypicality. The interaction was not statistically significant, $F(1, 248) = .055$, $p = .814$, $\eta_p^2 < .001$. Participants who listened to an ingroup comedian ($M = 3.804$, $SD = 1.471$) expressed that the comedian was more prototypical of college/university students than participants who listened to an outgroup comedian ($M = 2.812$, $SD = 1.574$), showing marginal support for the main hypothesis of perceived leadership. Participants who heard audience laughter ($M = 3.368$, $SD = 1.584$) expressed similar levels of perceived leadership from the comedian to participants who did not hear audience laughter ($M = 3.241$, $SD = 1.619$) (See Figure 8)

Advancement

There was a main effect for group, $F(1, 245) = 24.284$, $p < .001$, $\eta_p^2 = .090$ and no main effect for audience response, $F(1, 245) = 2.215$, $p = .138$, $\eta_p^2 = .009$ on the subscale of advancement. The interaction was not statistically significant, $F(1, 245) = .003$, $p = .960$, $\eta_p^2 < .001$. Participants who listened to an ingroup comedian ($M = 3.874$, $SD = 1.586$) expressed greater perception of the leader's ability to advance the ingroup goals than participants who listened to an outgroup comedian ($M = 2.862$, $SD = 1.616$), showing mild support for the main hypothesis of perceived leadership. Participants who heard audience laughter ($M = 3.496$, $SD = 1.666$) expressed similar perceptions of the leader's ability to advance the ingroup goals participants who did not hear audience laughter ($M = 3.233$, $SD = 1.683$) (See Figure 9).

Entrepreneurship

There was a main effect for group, $F(1, 248) = 13.704$, $p < .001$, $\eta_p^2 = .052$, and no main effect for audience response $F(1, 248) = .695$, $p = .405$, $\eta_p^2 = .003$, on the subscale of entrepreneurship. The interaction was not statistically significant, $F(1, 248) = .004$, $p = .947$, $\eta_p^2 < .001$. Participants who listened to an ingroup comedian ($M = 3.916$, $SD = 1.514$) expressed a greater sense that the comedian was acting as an entrepreneur of the ingroup than participants who listened to an outgroup comedian ($M = 3.220$, $SD = 1.444$), showing mild support for the main hypothesis of perceived leadership. Participants who heard audience laughter ($M = 3.611$, $SD = 1.589$) expressed a similar sense that the comedian was acting as an entrepreneur of the ingroup to participants who heard no audience laughter ($M = 3.521$, $SD = 1.449$) (See Figure 10).

Impresarioship

There was a main effect for audience response, $F(1, 248) = 4.894$, $p = .028$, $\eta_p^2 = .019$ and group, $F(1, 248) = 13.504$, $p < .001$, $\eta_p^2 = .052$ on the ILI subscale for impresarioship. There was no significant interaction between the predictors on the strength of perceived group leadership, $F(1, 248) = .208$, $p = .649$, $\eta_p^2 < .001$. Participants in the laughter condition ($M = 3.273$, $SD = 1.643$) expressed a greater sense that the comedian was making the group matter than participants in the no laughter condition ($M = 2.893$, $SD = 1.641$). Participants who heard audience laughter and who shared an identity with the comedian lead to higher ratings of perceived leadership from the comedian, $F(1, 248) = 5.002$, $p = .026$. This was shared with participants who did not hear audience laughter, $F(1, 248) = 8.839$, $p = .003$.

Combined ILI scale

There was a main effect for group, $F(1, 247) = 18.730$, $p < .001$, $\eta_p^2 = .070$ and the main effect of audience response approached statistical significance, $F(1, 247) = 3.084$, $p = .080$, $\eta_p^2 =$

.012, for the combined scales. The interaction was not statistically significant, $F(1, 247) = .128$, $p = .721$, $\eta_p^2 < .001$. Participants who listened to an ingroup comedian ($M = 3.621$, $SD = 1.654$) viewed the comedian as higher in identity leadership than participants who listened to an outgroup comedian ($M = 2.724$, $SD = 1.555$). Similarly, participants who heard audience laughter ($M = 3.321$, $SD = 1.653$) reported slightly higher support for the comedian as a leader than participants who heard no audience laughter ($M = 3.019$, $SD = 1.665$) (See Figure 12).

Figure 8

Bar Graph of Prototypicality

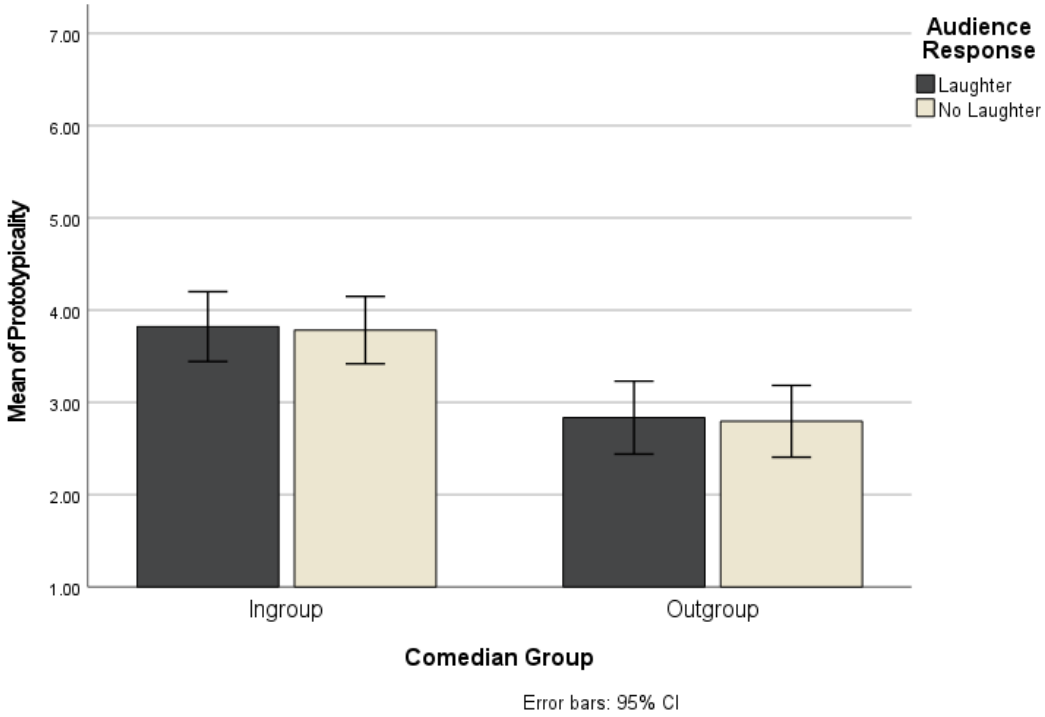


Figure 9

Bar Graph of Advancement

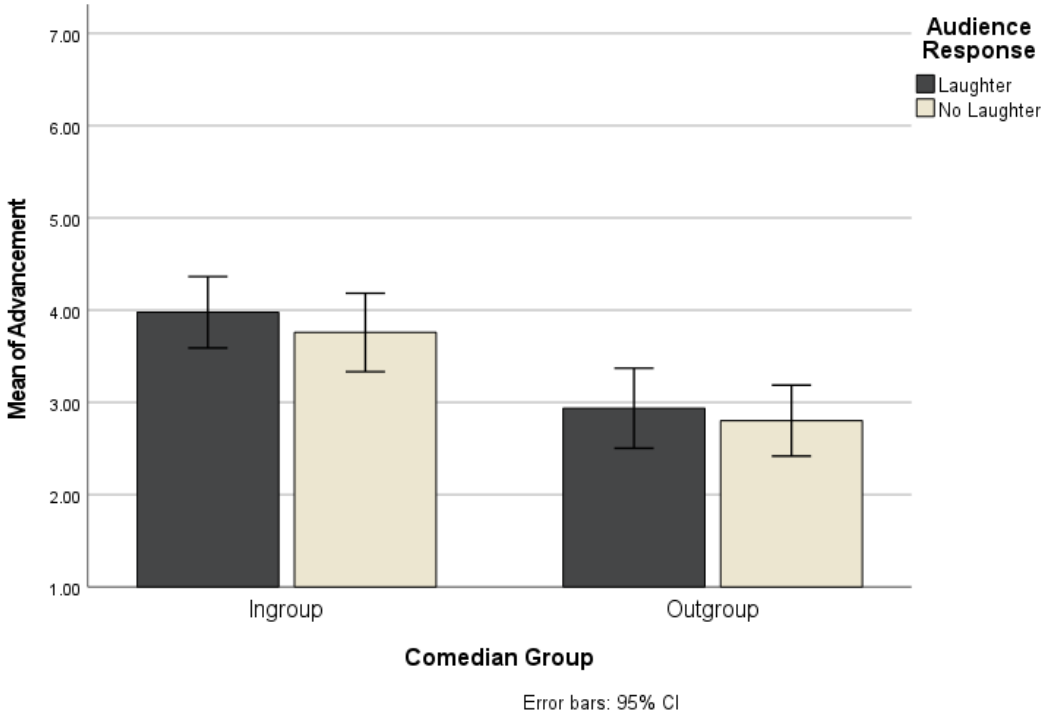


Figure 10

Bar Graph of Entrepreneurship

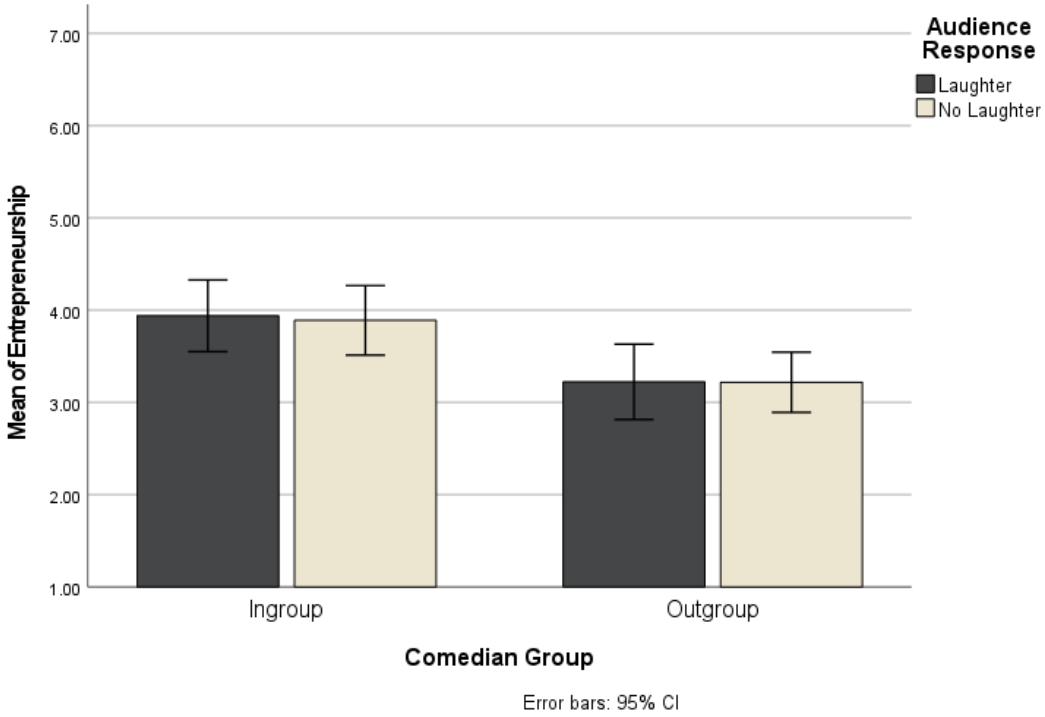


Figure 11

Bar Graph of Impresarioship

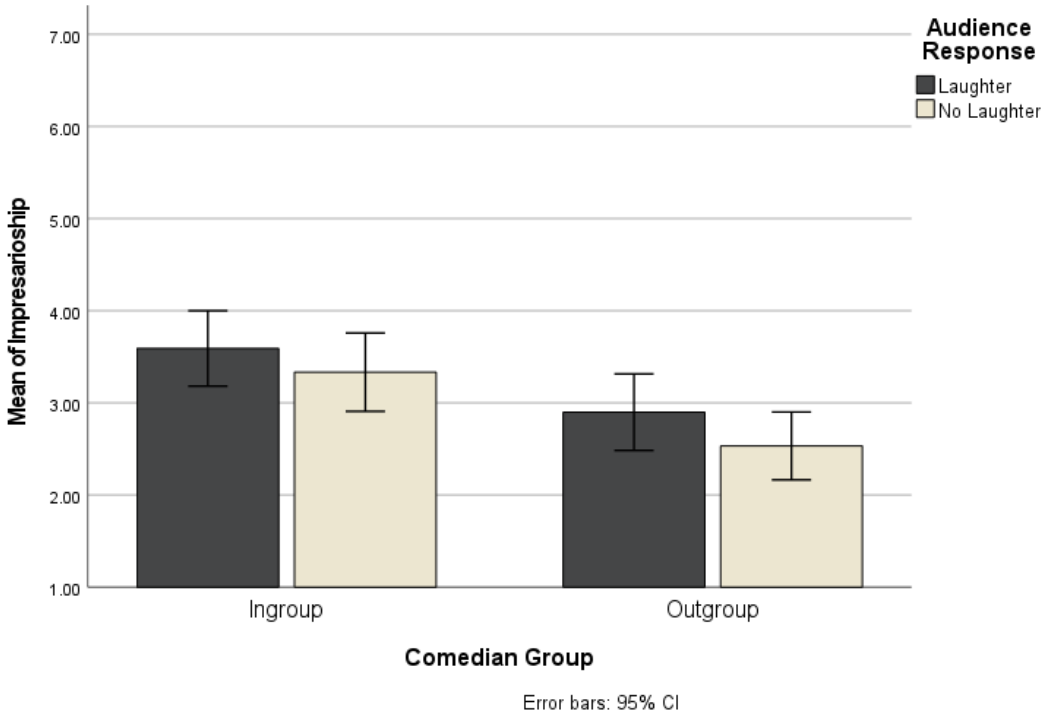
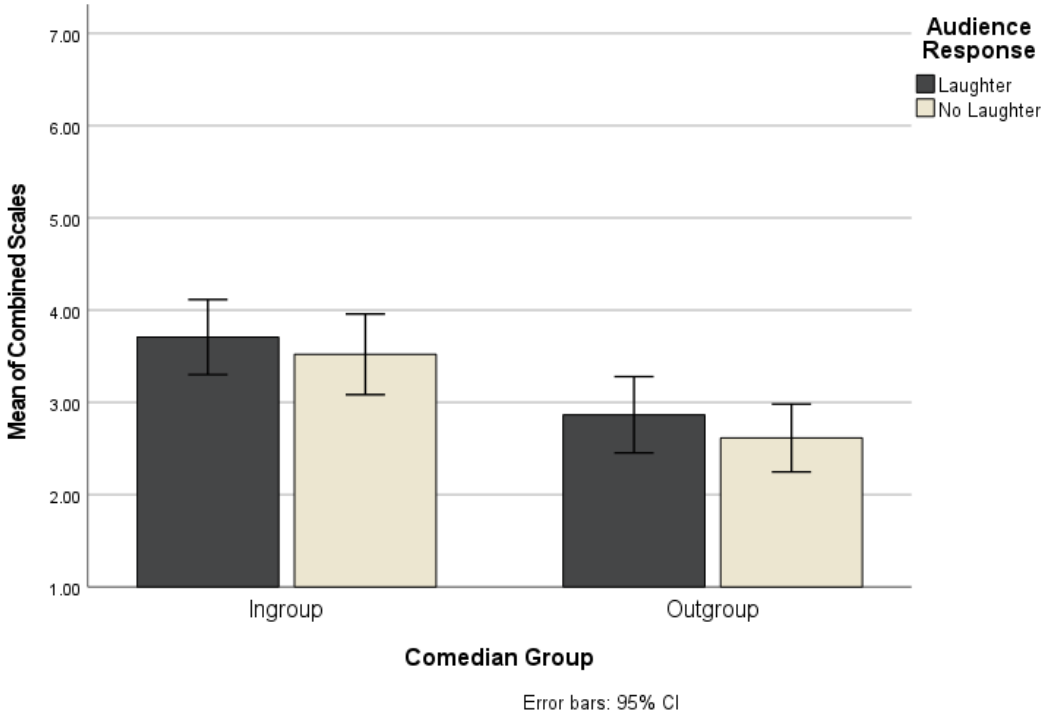


Figure 12

Bar Graph of Combined Scales



Affect

Positive Affect. A factorial ANOVA compared the main effects of group and audience response and the interactions of the variables on positive affect. There were no main effects for group, $F(1, 249) = .354$, $p = .552$, $\eta_p^2 < .001$ or audience response, $F(1, 247) = .010$, $p = .921$, $\eta_p^2 < .001$ and no interaction $F(1, 247) = .016$, $p = .899$, $\eta_p^2 < .001$ such that participants in the ingroup condition ($M = 3.576$, $SD = 1.403$) felt roughly the same as participants in the outgroup condition ($M = 3.669$, $SD = 1.181$) The same is true of participants who heard audience laughter ($M = 3.587$, $SD = 1.257$) and those who did not ($M = 3.657$, $SD = 1.324$), overall not supporting the primary hypothesis for positive affect (See Figure 13).

Negative Affect. A factorial ANOVA compared the main effects of group and audience response and the interactions of the variables on negative affect. There was no main effect for group, $F(1, 248) = 1.301$, $p = .255$, $\eta_p^2 = .005$, or audience response, $F(1, 248) = .145$, $p = .704$, $\eta_p^2 < .001$, however the interaction approached statistical significance, $F(1, 248) = 2.963$, $p = .086$, $\eta_p^2 = .012$. Participants who listened to an ingroup comedian and who heard audience laughter ($M = 2.097$, $SD = 1.007$) reported slightly less negative affect than participants who did not hear audience laughter ($M = 2.420$, $SD = 1.201$). Additionally, participants who listened to an outgroup comedian with audience laughter reported feeling slightly lower levels of negative affect ($M = 2.496$, $SD = 1.283$) than those who heard no laughter ($M = 2.338$, $SD = 1.085$) (See Figure 14), suggesting that listening to an outgroup comedian joke about the ingroup while people laugh impacts our levels of negative affect (See Discussion section). For participants who listened to an outgroup comedian, there was more negative affect when hearing laughter, $F(,1 248) = 3.957$, $p = .048$, than when not hearing laughter form the audience, $F(1, 248) = .175$, $p = .676$.

Figure 13

Bar Graph of Positive Affect

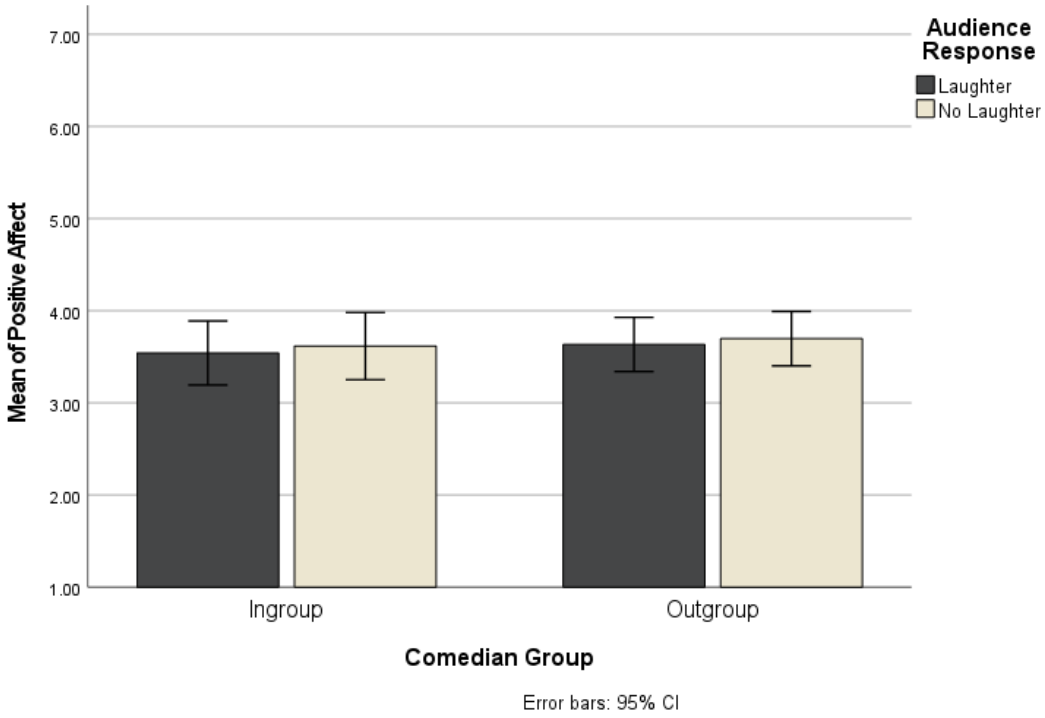
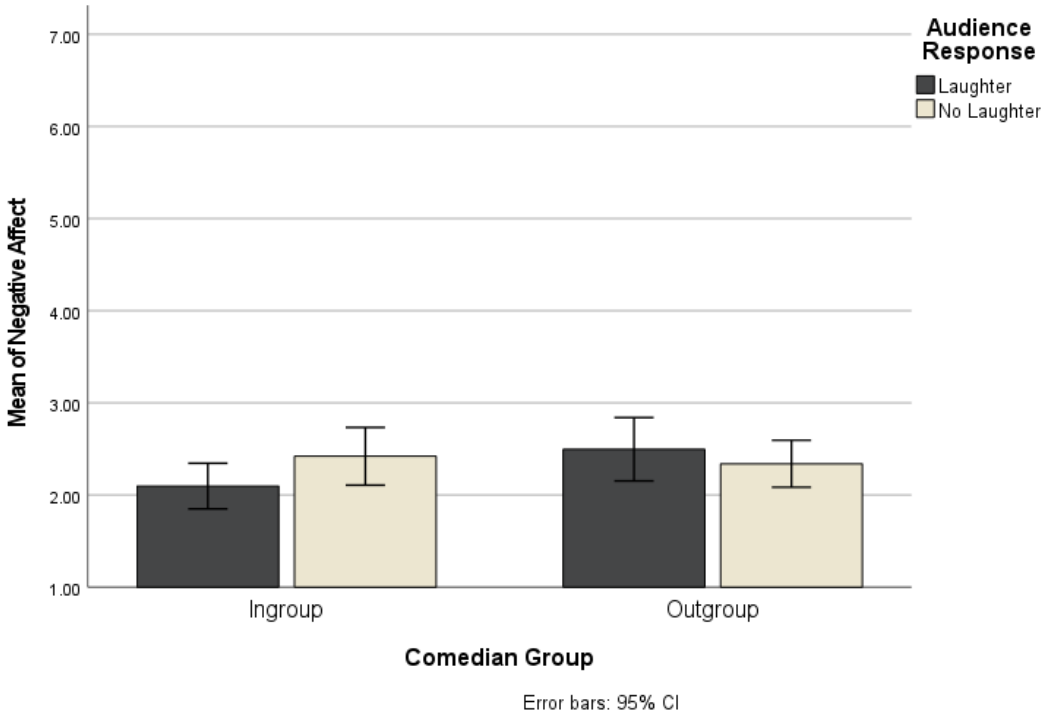


Figure 14

Bar Graph of Negative Affect



Discussion

The primary hypotheses for this study were somewhat supported by the data. Participants who listened to an outgroup comedian produced more negative affect and, as a result, identified more strongly with their ingroup than participants who listened to an ingroup comedian. These results are in line with the current research into intergroup sensitivity, which shows that individuals who are outside of a person's group criticize the ingroup, the criticism is perceived more negatively than if the criticism was from an ingroup member (Hornsey & Imani, 2004). The data showed slight support for the hypothesis regarding distinctiveness from a relevant outgroup, such that participants who listened to a funny ingroup comedian felt overall more distinct from a relevant outgroup than participants who listened to an unfunny comedian. The hypotheses regarding perceived group leadership were also somewhat supported by the data, showing that participants who listened to a ingroup comedian overall felt as though they (the comedian) made them as a group matter (Steffens et al., 2014). We also saw from the subscale of impresarioship that humor influenced a participants view of the comedian as a leader, further supporting the hypothesis. The hypothesis regarding positive affect was not supported by the data, while the hypothesis regarding negative affect slightly was, which is further in line with current research on intergroup sensitivity.

The results from this study can be interpreted as listening to a group member who others find funny can help others identify them as a leader within the group. They help to make us as a group matter and can help to affirm the identity. Funny people help us to also feel more distinct as a group overall, allowing us to know who we are and who we are not. Additionally, humor can be seen as an attack on our ingroup and on our identity, and being the butt of a joke can allow for us to both stand more firm in our identity, as seen from the results of the primary

hypothesis of overlap with a person's ingroup. Humor directed towards members of an ingroup from a member of an outgroup can produce more negative feelings and thoughts, which was demonstrated by the results of the primary hypothesis investigating negative affect (See Hornsey & Imani, 2004; Thürmer, & McCrea, 2021).

Limitations

This study had numerous limitations. To begin, the humor was created by the researcher and was not pulled from a reliable source of humor, such as an actual comedian. Based on participant feedback given to the researcher, this could explain why some of the participants did not find the humor to be funny or relatable. Additionally, there were no survey questions asking participants to rate how funny the humor they listened to was. Had this been included, this could have been used to perform a manipulation check looking into the effectiveness of the audience response condition. Furthermore, the audio participants listened to for the survey was not of the greatest quality, and was reported to be quiet at times, which may have prevented the humor effect to fully apply. Furthermore, the audience response manipulation was overall ineffective and non-significant for most of the variables being studied. More so, the image shown to participants of what "Jack" looked like gave the impression that "Jack" was of a minority ethnic group, while the audio that was played to participants was of a White male (the researcher). This discrepancy, coupled with the idea that some may not find people of different skin colors or ethnicities "funny" could be a potential reason why some of the audience response manipulation scores were low.

Originally, this study was intended for only for individuals currently attending college/university, however due to low participant responses this was changed to include both current and former college/university students. Had this study only included participants who

were currently in college or who had recently graduated from college/university rather than both current and former college students, we may very well have seen different results. While this study looks at both current and former college students, I believe that because both were examined was why we did not find significance with all humor manipulations. This is because the humor used in this study focused on current predicaments that college students face today, such as increased parking spot costs, rising tuition, job uncertainty, and student debt. The vast majority of the participants who were surveyed were much older and already in well-established paying jobs with reported minimal to no student debt and did not necessarily have to worry about these issues. This could be another explanation as to why the humor that was used did not necessarily apply to everyone. In addition to this, there was no information about how far out of school the participants were (5 years vs 50 years). Because of this, some of the older participants may not think of the college experience today as being similar or relatable to when they were in school. Follow-up studies would benefit from adding a buffer for how far out of school a participant could be (e.g. no more than 5 years). Additionally, participants were not asked to indicate their preferred gender identity. Follow-up studies would benefit from gathering this information, as gender may additionally play a role in why some did not find the ingroup comedian to be funny with the addition of laughter.

Based on some participant response times, it was clear that some participants simply filled out the survey quickly to receive payment and did not pay much attention to the questions or answers they were giving. Furthermore, due to an error on part of the researcher, not all the questions were marked as required, thus allowing some questions to be skipped by participants. Future studies would benefit from ensuring that impossibly short responses are removed from the analyzes.

With these limitations discussed, there are plenty of ways to fine tune and improve upon this study. A greater focus on a current student population and increased attention to the language of the humor and overall quality may help to improve results in follow-up studies, as well as correcting the various mistakes mentioned above, such as required answers and not manually entering data.

Concluding remarks and future directions

With the focus on researching the use of humor in creative perceived group leadership, I believe that this study can be used as a steppingstone for future research with a focus on humor through the lens of social identity theory. Being one of only a handful of studies with this focus, I believe that this research can be used to further examine the impact that humor can have on a variety of situations and circumstances not just in creating a social identity or feelings of distinctiveness. Most of the current research focusing on the use of humor examines its effectiveness in advertisements and in retention of information, whereas this research looks more at how humor can be a mechanism for identifying with your group as well as identifying leaders within your group with whom you believe will be effective in securing your groups identity and building trust within the group.

Future research into this topic may be interested in expanding upon this study by examining how, for example, we identify with funny political leaders who may or may not be members of our ingroup, for example if you hear a clip of Donald Trump telling a joke and we hear people laughing at it, would you identify with him more versus a clip of Joe Biden telling a joke and no one laughs? What about the varying different types of humor? Does a dirty joke about someone's family allow you to identify them as a leader compared to someone who only

tells knock-knock jokes? There are many different directions that future research can take this topic, and I imagine they will yield interesting results if conducted properly.

Studies using humor through the lens of social identity theory are few and far in-between, and the current study helps to lay a foundation for future studies and research into this topic. This study helps to add further evidence and data to the ongoing research of social identity by introducing statistically significant findings and helping to raise questions about the importance of the study of humor while simultaneously raising more questions and research ideas.

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