INFORMATION TO USERS

This manuscript has been reproduced from the microfilm master. UMI films the text directly from the original or copy submitted. Thus, some thesis and dissertation copies are in typewriter face, while others may be from any type of computer printer.

The quality of this reproduction is dependent upon the quality of the copy submitted. Broken or indistinct print, colored or poor quality illustrations and photographs, print bleedthrough, substandard margins, and improper alignment can adversely affect reproduction.

In the unlikely event that the author did not send UMI a complete manuscript and there are missing pages, these will be noted. Also, if unauthorized copyright material had to be removed, a note will indicate the deletion.

Oversize materials (e.g., maps, drawings, charts) are reproduced by sectioning the original, beginning at the upper left-hand corner and continuing from left to right in equal sections with small overlaps.

Photographs included in the original manuscript have been reproduced xerographically in this copy. Higher quality 6" x 9" black and white photographic prints are available for any photographs or illustrations appearing in this copy for an additional charge. Contact UMI directly to order.

ProQuest Information and Learning
300 North Zeeb Road, Ann Arbor, MI 48106-1346 USA
800-521-0600

DISSERTATION

THE EFFECTS OF POWERHOLDER GENDER AND RACE/ETHNICITY ON GAINING COMPLIANCE IN THE CLASSROOM

Submitted by

Steven Michael Elias

Department of Psychology

In partial fulfillment of the requirements

for the Degree of Doctor of Philosophy

Colorado State University

Fort Collins, Colorado

Spring, 2001

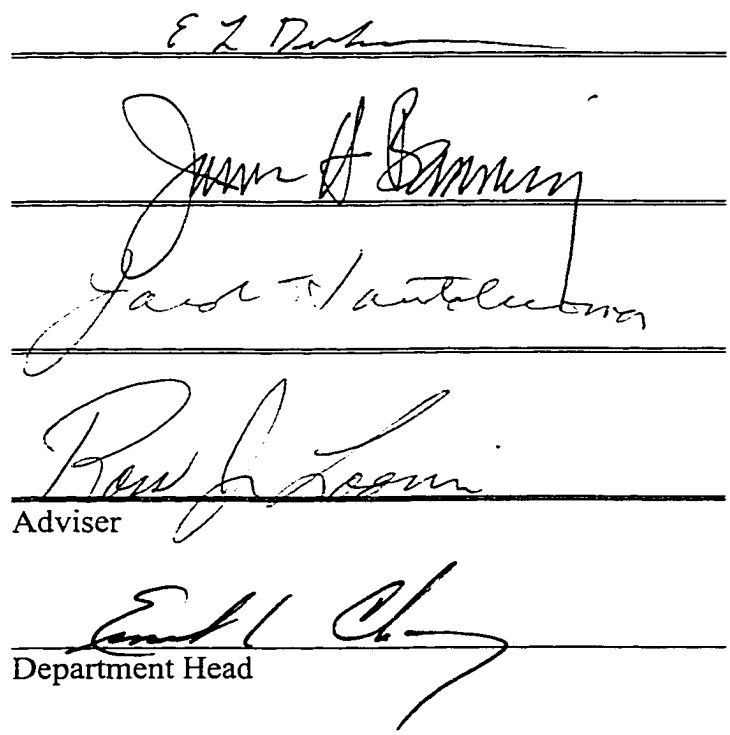
Bell & Howell Information and Learning Company
300 North Zeeb Road
P.O. Box 1346
Ann Arbor, MI 48106-1346

COLORADO STATE UNIVERSITY

February 28, 2001

WE HEREBY RECOMMEND THAT THE DISSERTATION PREPARED UNDER OUR SUPERVISION BY STEVEN MICHAEL ELIAS ENTITLED THE EFFECTS OF POWERHOLDER GENDER AND RACE/ETHNICITY ON GAINING COMPLIANCE IN THE CLASSROOM BE ACCEPTED AS FULLFILLING IN PART REQUIREMENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY.

Committee on Graduate Work



Adviser

Department Head

ABSTRACT OF DISSERTATION

THE EFFECTS OF POWERHOLDER GENDER AND RACE/ETHNICITY ON GAINING COMPLIANCE IN THE CLASSROOM

A 2 X 2 X 3 between subjects design was used to determine what impact an instructor's gender and race/ethnicity might have on his or her ability to gain compliance in the classroom when utilizing various bases of social power. It was hypothesized that student perceptions of, as well as compliance rates with, social power bases would differ when examining such instructor characteristics. Participants were 297 undergraduate students who completed the Interpersonal Power Inventory while viewing photos depicting male and female faculty members of varying ethnicities (Caucasian Non-Hispanic, African American, and Latino). Student perceptions of faculty members' power usage being either harsh (overt and punitive) or soft (subtle and non-coercive) differed based on instructor gender and race. For example, female instructors using legitimate position power were perceived as using a harsh power type, where as male instructors using the same power type were perceived as using a soft power base. Caucasian Non-Hispanic instructors using legitimate dependence power were perceived as using a soft power type, where as the same power type, when used by a minority instructor, was perceived as being harsh. Female faculty members consistently obtained higher compliance rates when utilizing soft, as opposed to harsh, bases of power. However, male instructors were able to use harsh or soft bases of power without compromising student compliance. With regard to individual power bases, male instructors obtained greater compliance ratings than female instructors when utilizing impersonal reward and informational power. Several findings lend support to the theory

of modern racism in that perceptions of, as well as compliance with, power usage favored Caucasian Non-Hispanic faculty members. For example, when utilizing personal reward power, Caucasian Non-Hispanic instructors obtained greater student compliance rates than did Latino instructors. These results indicate that although male and female instructors of varying ethnicities are in the same physical environment when in the classroom, they are in differing social environments. As a result, such an issue should be considered when planning future instructors' courses of training and mentorship. Furthermore, the current study indicates that when utilizing power, what works for one instructor might not work for another.

Steven Michael Elias
Psychology Department
Colorado State University
Fort Collins, CO 80523
Spring 2001

TABLE OF CONTENTS

Chapter	Page
I INTRODUCTION	1
Description of Power Bases	2
Description of Revised Power Bases	4
Harsh and Soft Power Bases	5
Social Power in the Classroom	6
The Influence of Instructor Gender	11
The Influence of Instructor Race/Ethnicity	15
Hypotheses	18
II METHOD	21
Design	21
Participants	21
Materials	22
Procedure	24
III RESULTS	27
Determining Harsh and Soft Bases	29
Compliance With Harsh and Soft Bases	34
Compliance With Individual Power Bases	37
IV DISCUSSION	52
Harsh and Soft Bases of Power	53
Individual Bases of Power	60
REFERENCES	64
APPENDICES: A. Recruiting Script	72
B. Cover Letter	74
C. Slides Depicting Instructors	76
D. Interpersonal Power Inventory	78
E. Debriefing Form	83

LIST OF TABLES

Table		Page
1	Description of Revised Social Power Bases	5
2	Power Type Descriptive Statistics and Alpha: All Participants	28
3	Distinction Between Harsh and Soft Power Bases: All Participant	30
4	Distinction Between Harsh and Soft Power Bases for the Male and Female Instructor Condition	32
5	Distinction Between Harsh and Soft Power Bases for the CNH, African American, and Latino Instructor Condition	33
6	Comparison of Compliance Rates for Harsh and Soft Power Bases: Male Instructor	35
7	Comparison of Compliance Rates for Harsh and Soft Power Bases: Male Instructors of Varying Race	36
8	Comparison of Compliance Rates for Harsh and Soft Power Bases: Female Instructor	38
9	Comparison of Compliance Rates for Harsh and Soft Power Bases: Female Instructors of Varying Race	39
10	Individual Power Bases Descriptive Statistics for the Instructor Gender Variable: All CNH Participants	41
11	Individual Power Bases Descriptive Statistics for the Instructor Race Variable: All CNH Participants	42
12	Individual Power Bases Descriptive Statistics for the Instructor Gender Variable: All Male CNH Participants	45
13	Individual Power Bases Descriptive Statistics for the Instructor Race Variable: All Male CNH Participants	46
14	Individual Power Bases Descriptive Statistics for the Instructor Gender Variable: All Female CNH Participants	48
15	Individual Power Bases Descriptive Statistics for the Instructor Race Variable: All Female CNH Participants	49

Chapter I

Introduction

For hundreds of years, individuals such as Hobbes, Machiavelli, and Nietzsche discussed issues related to power (Bruins, 1999). In 1938, Russell stated that "the fundamental concept in social science is Power, in the same sense in which Energy is the fundamental concept in physics" (p. 10). However, it was not until 1941, and the works of Kurt Lewin that power issues were systematically studied by social psychologists. At this point in time, Lewin's (1941) conception of power revolved around an individual's ability to induce "forces' of a certain magnitude" onto another individual. Years later, although most frequently cited for his work regarding cognitive dissonance, Leon Festinger (1953) conducted research pertaining to power. Specifically, Festinger wrote about power situations in which an individual would be threatened with punishment for a lack of compliance.

Although theorists such as Lewin and Festinger had written about social power for several years, an agreed upon definition of power was not established until 1959 (Cartwright, 1959). It was at this time that French and Raven (1959) published one of the most influential theoretical papers on social power. Although the original power typology proposed by French and Raven has been updated and broadened over the past 40 years, it still remains one of the most widely accepted and most popular conceptualizations of social power (Podsakoff & Schriesheim, 1985).

French and Raven (1959) defined social power as the potential ability of a powerholder to influence a target. A powerholder is any individual that possesses the ability, for whatever the reason may be, to influence another individual or group. A target is any individual, or group, that is potentially being influenced by a powerholder. Because it was central to their theory, French and Raven provided a definition of influence, as well as power. Influence is defined as a force that a powerholder exerts on a target so as to induce a change in the target. If an employer were to threaten an employee with termination for refusing to work overtime, social power would be at use. The employer in this scenario would be the powerholder because he or she possesses the ability to terminate the employee or target. The influencing force in this example would be that of coercion, which would be the threat of termination.

Although French and Raven's 1959 paper provided a definition of social power, it is more famous for the different bases, or power types, which it described. In their paper, French and Raven distinguished between five power types that they believed to be common and important: reward, coercive, legitimate, referent, and expert power. Raven (1965) later added a sixth power type, which he termed informational power.

Description of French and Raven's (1959) Power Bases

Reward power is established when a powerholder has the ability to either reward a target's compliance with something positive or to remove something negative. For example, an instructor might request that a student write an essay in return for extra credit points. In this example, the instructor (powerholder) would be rewarding the student's (target) writing (compliance) by giving them extra credit. Similarly, an instructor can agree to remove a negative grade from a student's record, if that student completes a

certain requirement. This second scenario would also constitute the use of reward power on the part of the instructor.

Coercive power refers to the situation in which a powerholder has the ability to punish a target's noncompliance. An instructor would be utilizing coercive power if she informed a student that he was going to be removed from the classroom if his distracting behavior continued. French and Raven (1959) point out that the use of either reward or coercive power will have differing impacts on the target's attraction towards the powerholder. Specifically, reward power tends to increase a target's attraction towards a powerholder, where as coercive power tends to decrease this attraction. Although this belief about attraction is based on prior theory (Lewin, 1935), it has not always been supported empirically. Bachman, Smith, and Slesinger (1966) report that the consistent reliance upon reward power may result in powerholders being perceived as using bribery. When such a perception does occur, the outcome is decreased attraction towards the powerholder.

Legitimate power is when a powerholder has a legitimate right to make requests of the target, and the target has an obligation to comply. Legitimate power is demonstrated when, for example, students comply with an instructor's request because they feel that a teacher has a legitimate right to make requests of them. Referent power is established when a target identifies, or has a feeling of oneness, with the powerholder. An example of referent power would be demonstrated when a student complies with the request of a faculty member because he admires that faculty member.

Expert power refers to the situation in which a target complies with a powerholder's request because the target perceives the powerholder as being someone

with superior knowledge. For example, students will study and memorize key terms because they believe the instructor providing them is an expert in his or her field. Informational power may exist if a powerholder presents information that is logical to the target (Raven, 1993). For example, a student might comply with an instructor's request to attend class because she is interested in the information that the instructor covers. It should be pointed out that in several studies examining the instructor-student relationship, expert and informational power have been the power types most likely to result in compliance with instructor requests (Elias, Loomis, & Mace, 1999; Elias & Mace, 2000; Erchul, Raven, & Whichard, 2000).

Description of Revised Power Bases

Thirty-four years after French and Raven first published their influential paper on social power, Raven revised the model, even though he believes, "most social influence can still be understood in terms of the six bases of power" (Raven, 1993, p. 234). Because the definition of power and the role of both powerholder and target remained constant, the major revision to the model is in the number of power bases identified.

Raven's revised model expanded on the original six power types to include eleven power bases. Because the eleven power types are based on the original six power types, the bases will not be redefined, but rather summarized in Table 1. Although expert, referent, and informational power have remained consistent with the earlier model, it can be seen that differentiations have been made for reward (personal and impersonal), coercive (personal and impersonal), and legitimate (position, dependence, reciprocity, and equity) power.

Table 1

Description of Revised Social Power Bases

Power Type	Description
Impersonal Coercive	Power stems from the powerholder's ability to deliver tangible punishments.
Personal Coercive	Power stems from the target's perception that non-compliance will result in personal disapproval from the powerholder.
Impersonal Reward	Power stems from the powerholder's ability to provide a tangible reward for compliance.
Personal Reward	Power stems from the target's perception that compliance can result in personal approval from the powerholder.
Legitimate Position	Power stems from the target's perception that the power-holder has a legitimate right to make requests of him.
Legitimate Dependence	Power stems from the target's perception that she is obliged to comply as a result of the powerholder being unable to help himself.
Legitimate Reciprocity	Power stems from the target's perception that he is obligated to comply due to the powerholder having done something similar for him in the past.
Legitimate Equity	Power stems from the target's perception that she is obligated to comply in order to "compensate for either hard work or sufferance" by the powerholder (Raven, Schwarzwald, and Koslowsky, 1998, pp. 310).

Harsh and Soft Power Bases

Although there are currently 11 social power bases, several studies have revealed an underlying structure to the taxonomy that can be best described in terms of two broad categories of power: harsh and soft power. This underlying structure has been found in early research, which made use of the1959 taxonomy (Bass, 1981; Kipnis, 1984; Yukl &

Falbe, 1991), as well as current research making use of the revised taxonomy (Raven, Schwarzwald, & Koslowsky, 1998; Elias et al., 1999; Elias & Mace, 2000; Erchul, Raven, & Ray, 1999).

In literature utilizing the revised power taxonomy, Erchul et al. (1999) describe harsh power types as being overt, punitive, and heavy-handed when compared to soft power types which tend to be more subtle, positive, and non-coercive. With respect to the revised power model, the soft power bases are expert, referent, informational, legitimate dependence, and legitimate position power. The harsh power bases are personal coercive, impersonal reward, legitimate reciprocity, personal reward, impersonal coercive, and legitimate equity power (Raven et al., Study 2, 1998).

Social Power in the Classroom

A review of the current social power literature reveals that research has been conducted in at least 16 major areas of psychology. For example, power research has been completed in the areas of management and organizational psychology (Hinkin & Schriescheim, 1990), counseling psychology (Leff, Raven, & Gunn, 1964), gender roles (Carli, 1999), relationship psychology (Frieze & McHugh, 1992), developmental psychology (Schwarzwald & Koslowsky, 1999), educational psychology (Aguinis, Nesler, Quigley, Lee, & Tedeschi, 1996), and consumer psychology (Busch & Wilson, 1976). However, the focus of the current research will be on social power usage in the classroom.

In studying graduate students, Aguinis et al. (1996) made the point that power in the classroom is a variable that has not received the attention it deserves. This is due in part to the misnomer that college teaching is easy due to there being very few disciplinary

problems with adult learners. However, Burroughs, Kearney, and Plax (1989) argue that the resistance and discipline issues found in the university classroom are "infinitely" difficult to handle. In fact, Jamieson and Thomas (1974) have pointed out that schools produce conflict and disciplinary issues just like any other organization. However, due to the imbalance of power that exists between students and instructors, power manipulations in classroom settings can have drastic, negative impacts.

Jamieson and Thomas (1974) describe the power dynamics that exist between students and teachers as being "dysfunctional." Although this description may seem extreme, it is based on the fact that students have little or no formal power when it comes to making academic decisions. Frustrated students have few channels and resources available to them when they wish to confront teachers or administrators. Similarly, due to their lack of formal power, students put themselves at risk when openly differing with instructors.

Social power research that has focused on educational settings has generally examined how teachers use power, how students perceive instructor power usage, and the outcomes that result from the power manipulations. Richmond and Roach (1992) state that power is inherent in the role of a teacher. Teachers make use of power so that they can influence students to facilitate academic growth, as well as be able to manage their classrooms (Roach, 1991).

The knowledge of power and its appropriate use is not just something that teachers come to learn after years of classroom experience, but rather is made known to beginning instructors by more experienced instructors. For example, experienced instructors frequently advise beginning instructors to "start out mean; get respect first and

then you can be friendly as the class progresses" (Roach, 1994, pp. 236). This clearly demonstrates a shift from the use of harsh power bases early in a semester to soft power bases later in a semester.

Although the use of harsh and soft social power bases in the classroom is not a widely researched topic, studies examining similar constructs can be found in the education literature. Such studies examine instructors using both pro and antisocial compliance-gaining tactics, frequently referred to as Behavior Alteration Techniques, in the classroom (Kearney, Plax, Richmond, & McCroskey, 1984). According to Kearney and Plax (1992, p.95), pro-social tactics "encourage students, elicit cooperation, and reflect traditional reward based power," while antisocial tactics "foster competitiveness, exclude students, undermine students self-esteem, and reflect traditional punishment-based power." From this, one can infer that harsh power manipulations resemble antisocial compliance-gaining tactics and soft power manipulations resemble pro-social compliance gaining-tactics. It is important to mention that in general, the best teachers are those who infrequently depend upon overt/harsh power manipulations (Kindsvatter, 1990).

Kearney, Plax, Sorensen, and Smith (1988) report that when examining compliance gaining messages, experienced instructors claim to use more pro and antisocial strategies than do prospective instructors. Although Plax, Kearney, and Sorensen (1990) did not find a significant difference between experienced and prospective instructors, in general, they were able to distinguish between the use of pro and antisocial messages. Of relevance is the reality that using either pro or antisocial messages does have an impact on the students who are the targets of the messages. For

example, it has been found that greater affective and cognitive learning is associated with students' perceptions of instructors using more pro-social (soft), and less antisocial (harsh), compliance gaining tactics (Roach, 1994). When instructors do resort to using harsh tactics, students are more likely to resist complying with requests (Plax, Kearney, Downs, & Stewart, 1986). The negative impact associated with harsh power manipulations in the classroom is best summed up by Roach's (1994, pp. 243) comment, "Because of the negative influence of these strategies on perceptions of learning and on the teacher-student relationship, instructors should probably avoid using antisocial compliance-gaining strategies."

The use of harsh and soft power bases has an effect on instructors as well. Instructors who use soft power bases report significantly greater job satisfaction (Plax, Kearney, & Downs, 1986). The use of harsh power bases can result in an instructor falling into a cycle of continued harsh influence attempts. Instructors frequently resort to coercion and harsh power bases when their initial attempts at gaining compliance are unsuccessful (Kindsvatter, 1990). Since it has been established that students resist harsh power manipulations, such practices run the risk of further thwarting compliance, which can potentially result in an instructor becoming frustrated and resorting to even more overt and negative power usage.

Along with harsh and soft bases of power, individual power types have been examined in the context of the classroom. However, the great majority of such research was completed before the original social power model (French & Raven, 1959) was broadened so as to include 11 power bases.

In an attempt to determine what power bases university students perceive their instructors as using, Jamieson and Thomas (1974) assessed perceptions of both undergraduate and graduate students. Interestingly, perceptions of faculty power differed between the two samples. Undergraduates gave the highest ratings to coercive and legitimate power respectively. Graduate students gave the highest ratings to expert and informational power respectively. These results indicate that undergraduate students perceive their instructors as using authoritarian modes of influence. Contrarily, at the graduate level, instructors are "perceived as influencing students primarily through power bases directly related to the overt purpose of education; i.e., expertise and information" (Jamieson & Thomas, 1974, pp. 329).

Even though it may be necessary to resort to coercive power, such manipulations do have a negative influence on students' attitudes and future instructor success (Kindsvatter, 1990). Aguinis et al. (1996) report that when graduate students perceive their supervising professors as using coercive power, the quality of the professor-student relationship is significantly reduced. Contrarily, if professors are perceived as having high referent, expert, and reward power, the quality of the professor-student relationship is significantly increased. With regard to actual compliance rates, Aguinis et al. report that the highest ratings were obtained when professors were perceived as having expert power and legitimate power. Similarly, Elias et al. (1999) report that for gaining compliance in the classroom, the most effective power types are informational, expert, impersonal reward, and legitimate position power.

Although the body of literature examining power in the classroom is respectable, there is very little research that specifically examines what role an instructor's gender

and/or race might play in his or her ability to gain compliance in the classroom. In order to examine these variables, one must assuredly refer to social power and social psychological research that has been completed in other domains. Therefore, one focus of the current research will be to address these issues of instructor gender and race as they relate to social power.

The Influence of Instructor Gender

Although the body of literature examining gender differences in social influence is not extensive, it does show that males have a greater number of influence resources available to them than do females (Carli, 1999). Research pertaining to organizational settings (Ragins & Sundstrom, 1989), marital relationships (Deaux & LaFrance, 1998), and everyday "human interactions" (Johnson, 1976) indicates that female power is greatly determined by stereotypes. Ragins and Sundstrom describe female stereotypes as including gentleness, submission, dependency, and nurturance. Contrarily, male stereotypes are described as including such characteristics as forcefulness, dominance, independence, ambition, and competitiveness. Based in part on these stereotypes, research indicates that power is associated with men, but not with women (Deaux & Emswiller, 1974).

In the workplace, women tend to exert less authority when compared to men in similar positions (Lyness & Thompson, 1997). In fact, female managers that display culturally defined feminine behavior possess very little ability to influence in their managerial roles. Female managers that display culturally defined male behaviors are considered to be unfeminine. This incompatibility between stereotypically female behavior and power may result in "role conflict" for women in organizations (Ragins &

Sundstrom, 1989). In general, "a more dominant style by women might be perceived as a violation of both gender and status expectations which in turn could result in lowered ability to get things done" (Deaux & LaFrance, 1998, pp. 807).

It should be noted that not all theorists believe women possess less power than men solely due to sex-role stereotypes. For example, Eagly (1987) argues that the differences between males and females regarding power are due to social roles. For example, men generally occupy the high power social role of worker more frequently than females and females generally occupy the low power social role of homemaker more frequently than males. More importantly, regardless of whether theories revolve around stereotypes or social roles, females are consistently believed to possess less power than males. In fact, when individuals are only informed about an influencing agents' gender, they tend to infer that men would be more successful in their influence attempts than women (Eagly & Wood, 1982).

Research that has examined the role of gender in the usage of harsh and soft power in the classroom indicates that female instructors do report using more soft power bases than do male instructors (Kearney and Plax, 1987). Given the reported benefits that accompany the use of soft power bases in the classroom, it would seem logical that instructors would make an effort to rely more upon the use of soft power. Although female instructors do report using more soft power bases, all instructors generally perceive their own power use more positively than do their students (McCroskey & Richmond, 1983).

Research also indicates that female instructors are especially put at a disadvantage if harsh bases are utilized. Broverman et al. (1972) report than females are expected to

make use of less direct (soft) forms of power. Should a woman resort to direct (harsh) power bases, she runs the risk of being thought of as pushy, overbearing, and unfeminine. Within the framework of the French and Raven (1959) typology, Johnson (1976) writes that since women are not as effective as men when using harsh or assertive forms of influence, they should avoid such strategies.

Of interests is that although women are more likely to gain compliance when making use of soft power bases, the use of either harsh or soft power bases does not impact compliance rates when the powerholder is a man. A woman's influence is reduced when she resorts to harsh power bases, but a man's influence is either enhanced or unchanged (Carli, 1999). From this, one can infer that compliance rates obtained from students should be significantly lower when a female instructor makes use of harsh, as opposed to soft, power bases. Contrarily, no significant difference in compliance rates would be expected when a male instructor makes use of either harsh or soft power bases.

Although not in educational settings, several studies have examined the impact of a powerholder's gender on his or her ability to successfully make use of individual power bases. Johnson (1976) theorized than male powerholders would possess greater coercive, reward, expert, and legitimate power than female powerholders. In theory, males would possess greater reward and coercive power than females because they have access to more resources with which to reward or punish targets. Males, when compared to females, would possess greater expert power because men are generally considered to have more expertise than women. Finally, males would possess greater legitimate power because men "command" more authority than do women.

Several theorists believe than men possess greater expert power due solely to stereotypes. Eagly and Mladinic (1989) have written that based on stereotypes, males are thought to have greater competence with regards to leadership ability when compared to females. Based on this belief, it is thought that males will be perceived as possessing greater expertise than females, which in turn results in greater expert power. Relevant to the current research, and in support of Eagly and Mladinic's contention, is the research finding that undergraduate students rate female instructors as being less competent than male instructors (Sandler & Hall, 1993).

Fiske and Ruscher (1993) have found that women, in general, do not receive the respect or same level of authority that men receive. When females are in a leadership position, their leadership behaviors tend to result in negative reactions compared to those reactions towards males in similar positions (Butler & Geis, 1990). Furthermore, when females do attain leadership positions, legitimacy is not attributed to them in the same way it is attributed to males. As a result, females who are in positions of power tend to experience resistance to their influence attempts (Eagly & Karau, 1991). From this, it can be inferred that females would achieve poor compliance rates when making use of legitimate position power.

Keeping in mind that legitimate power is no longer a single power type, but rather has been divided into four bases, might it be the case that female powerholders can achieve compliance using certain types of legitimate power? Theory would indicate that the answer to this question is yes. Legitimate power of dependence stems from powerholders being unable to help themselves. Based on research indicating that females frequently rely upon helplessness due to the perception that they lack resources and

competence (Johnson, 1976), one can hypothesize that females would be successful at using legitimate power of dependence.

The Influence of Instructor Race/Ethnicity

In scanning the index of Cartwright's (1959) Studies in social power, one would find no reference to research examining the influence of a powerholder's race. A literature review of power research since 1959 indicates that the variable of powerholder race has been neglected. In literature pertaining to clinical psychology, counselor race has received attention, but not with regard to counselors attempts at influencing clients (Merluzzi, Merluzzi, & Kaul, 1977).

One of the few findings related to how race might impact how influential a counselor might be with his or her clients compares expert to referent power. Specifically, African American counselors using expert power were more influential with respect to client attitude change than African American counselors using referent power (Merluzzi et al., 1977). Of importance is that this study examined just two of what are now eleven power bases. Furthermore, comparisons were made between African American counselors, but not African American and Caucasian Non-Hispanic (CNH) counselors.

A review of the educational literature concerning power and race also yields very little research. In fact, demographic factors that have been examined with regard to compliance-gaining attempts by educators are age, gender, and Japanese culture (Barraclough & Stewart, 1992). Due to the lack of literature on the subject of race and power, the theory of modern racism will be employed to discuss these issues, as well as generate hypotheses. Modern racism is defined as, "A form of prejudice that surfaces in

subtle ways when it is safe, socially acceptable, and easy to rationalize" (Brehm & Kassin, 1996, pp. 148).

Racial attitudes have changed dramatically over the past few decades in such a way that it is no longer acceptable to engage in blatant racism. Therefore, CNHs that no longer are comfortable expressing their racism in overt ways express it in subtler and less direct manners (Fiske, 1998). It is this type of expression that has become known as modern racism. Theorists differ in opinion as to why modern racism occurs, but regardless of the cause, the outcome is the same: discriminatory behavior.

Fiske (1998) writes that modern racists feel that African Americans do not deserve the attention and status that they have obtained, and that African Americans have pushed themselves into places that they are not wanted. Interestingly, this theory of modern racism includes the premise that CNHs believe African Americans' anger regarding discrimination is unreasonable because discrimination is no longer a problem. This is interesting because the outcome of these beliefs is subtle discrimination.

Katz, Wackenhut, and Hass (1986) write that modern racism is due to CNHs' "conflicted attitudes" towards African Americans. Specifically, CNHs believe that African Americans are disadvantaged and deserving of assistance, while at the same time feeling that African Americans are deviant and are therefore resented. Due to these conflicted attitudes, CNHs will empathize with African Americans publicly, while at the same time discriminating against them in ways that will not be detected.

Other theorists believe that most CNHs possess non-racist values, while at the same time have an aversion towards African Americans and other minorities. Because modern racists do not want to express their racist beliefs publicly, they do not engage in

overt discrimination. Rather, the modern racist will discriminate against minorities when it is safe to do so (Gaertner & Dovidio, 1986). This can be seen, for example, when an individual that claims not to be a racist tells blatantly racist jokes.

Several studies have shown that modern racism is prevalent among CNHs in the United States. For example, Sears and Allen (1984) found that when asked, many CNH Americans expressed support for the "principles" of racial equality. However, in practice, these same individuals were against mixed marriages, black political candidates, and racially symbolic policies.

Classic research by Allport and Postman (1947) lends support to the theory of modern racism. Allport and Postman showed participants a photograph of a subway train filled with passengers. On the train was an African American wearing a suite and a CNH holding a razor blade. Participants viewed the photo briefly and then described the photo to a second participant who did not see the picture. This second subject described the photo to a third participant. This process occurred until a sixth participant had the picture described to them. In more than half of the sessions, the sixth participant described the African American as holding the razor blade. Several participants reported that the African American not only held a razor, but also waved it at the CNH in a violent manner.

Modern racism has been seen in studies examining helping behavior. Frey and Gaertner (1986) had female participants work in groups with either African American or CNH confederates. When participants believed that the confederates were putting in effort on the group task, regardless of confederate race, the participants offered help. However, when participants believed that the confederate was not working hard, they

were willing to help the CNH confederate significantly more than the African American confederate. These results were interpreted as modern racism because as soon as the participants were able to excuse a lack of helping, they discriminated on the basis of race.

Social power research, such as the current study, provides an opportunity to test the theory of modern racism. If modern racism were to be seen in the realm of social influence, targets of influence attempts should report greater compliance with the requests of a CNH powerholder when compared to a minority powerholder. In this scenario, the subtle discrimination would be in reduced compliance with minority powerholders requests. In the classroom, modern racism would be demonstrated if students reported greater compliance with CNH instructors' requests when compared to those requests of minority instructors.

Hypotheses

Research using both the original five power type taxonomy (Bass, 1981; Kipnis, 1984; Yukl & Falbe, 1991) and the revised 11 power type taxonomy (Raven et al., 1998; Elias et al., 1999; Elias & Mace, 2000; Erchul et al., 1999) indicates the existence of an underlying two-factor structure that is comprised of two broad categories of power bases: harsh and soft. These findings have also been observed in the education literature (Kearney & Plax, 1992), however the categories of power are referred to as pro and antisocial compliance-gaining tactics. Given the consistency with which these results have been observed, it is hypothesized that students in the current study will identify the 11 social power types as being either harsh or soft.

Although it is expected that students will perceive the power bases as being either harsh or soft, it is hypothesized that differences will be observed in the power types

thought to be harsh or soft based on the instructor's gender and race. This hypothesis is based in part on prior research indicating that women using legitimate power, when compared to men, are perceived more negatively (Butler & Geis, 1990). Also, individuals report more positive feelings towards women in general (Fiske & Ruscher, 1993), which impacts perceptions of referent power. Specifically, females are perceived more positively than males when using referent power and are thought to possess greater referent power in general (Carli, 1999).

In theory, compliance rates in response to harsh and soft power bases tend not to change when the powerholder is a male (Carli, 1999). As a result, it is hypothesized that for male instructors, student compliance rates will not differ significantly for harsh and soft power bases. However, several studies have indicated that females using soft power bases will obtain greater compliance rates than those using harsh power bases (Broverman et al., 1972; Johnson, 1976; Carli, 1999). Therefore, it is hypothesized that soft power type usage by female instructors will result in greater reported student compliance than harsh power type usage.

With regard to individual power bases, theory indicates that females would be less effective when utilizing reward, coercive (Johnson, 1976), expert (Johnson, 1976; Eagly & Mladinic, 1989), and legitimate position (Johnson, 1976; Fiske & Ruscher, 1993) power bases. However, given the frequent perception that females lack both resources and competence (Johnson, 1976), it should follow that women would be successful when utilizing legitimate dependence power. For the current research, it is hypothesized that result related to the individual power bases will be consistent with prior research and theory.

The theory of modern racism indicates that given the opportunity, modern racists will engage in subtle forms of discrimination. Based on this theory, it is hypothesized that discrimination will be observed through lower compliance rates for minority instructors when compared to CNH instructors. It is expected that this finding will be observed when comparing harsh and soft power bases, as well as individual power types.

Chapter II

Method

Design

This study, using a 3 X 2 X 2 between-subjects design, examined what effects an instructor's race and gender might have on his or her ability to gain compliance in the classroom. A total of 297 participants were sampled. The powerholder race variable is comprised of three levels (CNH, Latino, and African American), while the powerholder gender variable is comprised of both male and female instructors. The final factor, which examines how compliance might be influenced by the participants' gender, entailed the sampling of male and female participants.

Participants

Participants were 297 undergraduate students (71.4% freshman, 19.2% sophomore, 7.4% juniors, 2.0% seniors; 117 males and 180 females) enrolled in introductory psychology courses at a large university in the Rocky Mountain region of the United States. The mean age of the participants was 18.8 years (SD = 1.41). Participants reported their ethnicities as being either CNH (88.2%), Mexican American (2.7%), African American (1.7%), Asian American (1.7%), Spanish American (1.7%), or Other (4.0%). All participants received research credits for their participation and were treated in accord with the ethical guidelines set forth by the American Psychological Association.

Materials

Compliance with instructor social power usage was assessed with a modified version of the Raven, Schwarzwald, and Koslowsky (1998) Interpersonal Power Inventory (IPI). The IPI was modified due to the original form measuring *perceptions* of power usage in organizational settings. The form used for the current research was modified such that it would assess *actual compliance* with power usage in the classroom. This was accomplished through the changing of the scales instructions. In its original form, the IPI instructions read, "When my supervisor asks me to do something differently, and I, though initially reluctant, do exactly what they ask, it is because." The modified instructions that allowed for compliance rates to be measured read as, "We will be presenting you with a number of reasons why you might or might not comply. You will indicate the likelihood of compliance by marking the numbers according to the above scale."

The IPI is a 44 item self-report scale that measures compliance with each of the 11 social power types. Within the IPI, four items address each of the individual power types. Based on a likert scale ranging from one to seven, the respondent indicates the likelihood for which each item would be cause for compliance with a university faculty member's request. A response of one indicates that the participant would definitely not comply. A response of seven indicates that the participant would definitely comply. Therefore, higher scores on the IPI are indicative of greater compliance.

Although the IPI is a relatively new measure, several empirical studies have documented its reliability. Raven et al. (1998, Study 1) obtained individual alphas for each power type ranging from .67 to .86. Making use of a second independent sample,

Raven et al. (1998, Study 2) obtained alpha coefficients for each power type that ranged from .63 to .88. Previous research has demonstrated that the IPI is effective at detecting both the harsh and soft bases of power through the use of principle component analysis (PCA).

A two-factor PCA by Koslowsky, Schwarzwald, and Ashuri (1998) accounted for 57.4% of variance in IPI scores, with alphas of .79 and .85. A two-factor PCA by Schwarzwald, Koslowsky, and Agasi (1998) accounted for 62.1% of variance in IPI scores, with alphas of .79 and .89. PCA conducted by Raven et al. (1998, Study 1 & Study 2) resulted in two-factors accounting for 59.3% and 60.1% of IPI score variance respectively. PCA conducted by Elias, Loomis, and Mace (1999) resulted in two-factors, which accounted for 60.3% of variance in IPI scores.

In order to assess the impact of instructors' race and gender on their effective use of social power, photographs were presented to participants depicting both male and female instructors of varying races. A total of six photographs were presented, with one photograph representing each of the following conditions: CNH-male, CNH-female, African American-male, African American-female, Latino-male, and Latino-female. These photographs have been obtained from the Wechsler Memory Scale-III (WMS-III) Stimulus Booklet (1997) to ensure that the slides vary only on the race and gender of the instructors depicted. Furthermore, due to the WMS-III being a standardized measure, the age attire, posture, and facial expressions of those individuals photographed has been controlled for.

Six experimenters (three male and three female) made use of six overhead projectors in separate locations. Each picture was displayed through an overhead

projector such that it had a height of 16 in. and a width of 13 in. This was accomplished by having each experimenter place their overhead projector 6 ft. from the screen. Participants were seated at individual desks in order to ensure independent working conditions.

Procedure

Because a between subjects design was used, and because all of the data were collected during the same time period, six data collection sessions were run simultaneously. Although the data were collected in a group setting, participants made prearranged appointments during which they had participated in the study. Students signed up to participate on the General Psychology participant pool website, where a recruiting script (see Appendix A) was posted. Six appointment times were made available, with each time being dedicated to one of the six instructor race/gender conditions (e.g., African American-female). Participants were not made aware that the appointment time they chose would determine the condition that they participated in.

As a means of control, experimenters were randomly assigned to each condition. Since one experimental condition was instructor gender, male and female experimenters were separated and the assignment to conditions occurred twice. In each instance the procedure was the same. Each condition was assigned a number ranging from one to three and experimenters then picked numbers out of a bowl to determine which condition they would oversee. This process ensured random assignment, while at the same time ensuring that a male experimenter would supervise the male instructor conditions and a female experimenter would supervise the female instructor conditions.

Upon arriving and being seated, participants were given a cover letter (see Appendix B) explaining the purpose of the study they would be taking part in. Due to the participants being asked questions about sensitive issues regarding race and gender, deception was used to reduce the risk of socially desirable responses being provided. The supplied cover letter had stated that the experiment was designed to determine how an instructor's facial expression might play a role in how well he or she is able to gain compliance in the classroom. The cover letter continued to explain that each participant was in one of several groups, each of which addressed a different type of facial expression made by a faculty member (e.g., neutral and angry).

Once the purpose of the study had been explained, one of the six slides (see Appendix C) portraying a faculty member was displayed on a screen through the use of an overhead projector. This method of display, for the purposes of empirical research, has been previously utilized with success (Strack & Neumann, 2000). While the portrait was being displayed, the experimenter distributed to each participant the IPI, as well as a demographic questionnaire (see Appendix D). The IPI was not distributed until the slide had been displayed in order to ensure that participants completed the questionnaire only after being exposed to the visual stimulus.

When all the questionnaires were distributed, participants were informed again that the experimenters were trying to determine if the type of facial expression being made by the instructor displayed would influence compliance rates. Participants were then given 20 minutes to complete the IPI, during which time the slide representing a faculty member was constantly displayed. Once all to the participants had completed the

IPI, the questionnaire was collected and a debriefing form (see Appendix E) was distributed.

Chapter III

Results

Each participant completed the 44-item IPI. Data were analyzed using the Statistical Package for the Social Sciences. Consistent with the method of Raven et al. (1998), the inter-item correlations among the four IPI items for each power type were computed. As with the Raven et al. study, several items were found to have low correlation coefficients pertaining to items from the same power type. Therefore, within each power type, the one item that had the greatest impact on reducing reliability was removed from the final analysis. This reduced the total number of IPI items from 44 to 33, with three items per power type.

For each participant, a compliance rating for each of the 11 power bases was calculated by computing the arithmetic average of the three items per power type. The individual ranges, means, standard deviations, and alphas for each of the 11 power types can be seen in Table 2. Student compliance ratings were highest for informational, legitimate position, impersonal reward, and expert power. This finding is consistent with prior research examining the effectiveness of the individual power bases in the classroom (Elias et al., 1999).

To assess whether students would perceive faculty power usage as being either harsh or soft, a Principle Component Analysis (PCA) was performed. To determine if student compliance rates differed significantly between soft and harsh faculty power

Table 2.

Power Type Descriptive Statistics and Alpha: All Participants

Bases	Range Minimum	Maximum	M	SD	α
Informational	2.00	7.00	5.25	.99	.78
Legitimate Position	1.67	7.00	5.24	.99	.74
Impersonal Reward	2.67	7.00	5.24	.98	.60
Expert	2.33	7.00	5.17	.95	.76
Legitimate Reciprocity	2.00	7.00	4.92	1.00	.69
Personal Reward	2.00	7.00	4.77	1.10	.75
Referent	1.67	6.67	4.58	1.08	.67
Legitimate Equity	1.33	7.00	4.58	1.16	.80
Personal Coercive	1.00	7.00	4.54	1.27	.83
Legitimate Position	1.00	7.00	4.53	1.16	.74
Impersonal Coercive	1.00	7.00	4.53	1.23	.78

usage, *t*-tests were computed. Multivariate tests, as well as tests of between-subjects effects, were performed when examining the compliance rates for each of the 11 individual power bases. When tests of between-subjects effects revealed significant differences in student compliance rates, post hoc analysis (Fisher's LSD) were performed to determine which levels of a given variable differed significantly.

Determining Harsh and Soft Bases

To test the hypothesis that students would identify the 11 power bases as being either harsh or soft, a principal component analysis with varimax rotation was performed on the mean scores of the 11 power bases. This method of analysis is consistent with prior research using the IPI (Koslowsky et al., 1998; Raven et al., 1998; Schwarzwald et al., 1998; Elias et al., 1999). Support for this hypothesis was obtained in that the analysis resulted in a two-factor solution that accounted for 62.23% of IPI score variance (see Table 3). Factor I ($M = 4.96$, $SD = .82$, $\alpha = .85$) explained 32.11% of the variance and was comprised of the harsh bases. Factor II ($M = 4.72$, $SD = .89$, $\alpha = .85$) explained 30.12% of the variance and was comprised of the soft bases. These results indicate that in classroom settings, students will perceive faculty power usage overall as being either subtle and non-coercive or overt and heavy handed.

In order to test the hypothesis that students would identify differing power types as being harsh or soft based on instructor gender or race, further principle component analyses were performed. Beginning with gender, individual principle component analyses with varimax rotation were performed for the conditions of male and female instructor. When examining the male instructor data, a two-factor solution was obtained

Table 3

Distinction Between Harsh and Soft Power Bases: All Participants

Power Type	Factor Loading	
	Harsh	Soft
Legitimate Reciprocity	.84	.24
Impersonal Reward	.79	.18
Legitimate Equity	.72	.30
Legitimate Dependence	.64	.46
Impersonal Coercive	.61	.17
Informational	.60	.44
Legitimate Position	.11	.83
Personal Reward	.37	.76
Expert	.29	.74
Personal Coercive	.27	.73
Referent	.49	.60

(see Table 4) where Factor I ($\underline{M}$ = 4.88, $\underline{SD}$ = .93, α = .83) explained 30.59% of the variance and was comprised of the harsh bases. Factor II ($\underline{M}$ = 4.96, $\underline{SD}$ = .83, α = .87) explained 32.45% of the variance and was comprised of the soft bases.

As with the male instructor data, when examining the female instructor data, a two-factor solution was obtained (see Table 4) where Factor I ($\underline{M}$ = 4.55, $\underline{SD}$ = .91, α = .83) explained 30.10% of the variance and was comprised of the harsh bases. Factor II ($\underline{M}$ = 4.97, $\underline{SD}$ = .80, α = .90) explained 36.23% of the variance and was comprised of the soft bases. Although analysis of both the male and female instructor data resulted in two-factor solutions, several of the power types differed across gender in terms of which factor they loaded on. This finding indicates that although students will perceive faculty power usage as being either harsh or soft, these perceptions will differ depending upon the gender of the instructor.

To assess student perceptions of harsh and soft power types based on race (CNH, African American, and Latino), three principle component analyses with varimax rotation were performed. For each race condition, two-factor solutions were obtained (see Table 5). For the CNH condition, Factor I ($\underline{M}$ = 4.88, $\underline{SD}$ = .83, α = .88) explained 37.20% of the variance and was comprised of the soft bases. Factor II ($\underline{M}$ = 4.84, $\underline{SD}$ = .87, α = .80) explained 25.52% of the variance and was comprised of the harsh bases.

For the African American condition, Factor I ($\underline{M}$ = 4.88, $\underline{SD}$ = .90, α = .85) explained 31.78% of the variance and was comprised of the soft bases. Factor II ($\underline{M}$ = 4.78, $\underline{SD}$ = .83, α = .85) explained 31.60% of the variance and was comprised of the

Table 4

Distinction Between Harsh and Soft Power Bases for the

Male and Female Instructor Condition

Power Type	Factor Loading (MI) Harsh	Soft	Factor Loading (FI) Harsh	Soft
Legitimate Equity	.82[a]	.21	.58[a]	.50
Legitimate Reciprocity	.80[a]	.31	.27	.81[ab]
Impersonal Coercive	.77[a]	.03	.54[a]	.27
Impersonal Reward	.73[a]	.22	.17	.81[ab]
Expert	.03	.85[a]	.50	.59[a]
Legitimate Position	.01	.81[a]	.74[ab]	.32
Personal Reward	.44	.69[a]	.80[ab]	.33
Informational	.33	.65[a]	.24	.81[a]
Referent	.35	.63[a]	.46	.68[a]
Legitimate Dependence	.49	.62[a]	.25	.82[a]
Personal Coercive	.50	.57[a]	.90[ab]	.06

Note: MI indicates male instructor condition; FI indicates female instructor condition; a indicates the factor for which the power type loaded; b indicates that the power type loaded on a different factor based on the instructor's gender.

Table 5

Distinction Between Harsh and Soft Power Bases for the CNH, African American, and Latino Instructor Condition

Power Type	FL-C		FL-A.A.		FL-L	
	Harsh	Soft	Harsh	Soft	Harsh	Soft
Impersonal Coercive	.82[a]	.02	.45[a]	.32	.72[a]	.20
Legitimate Equity	.77[a]	.30	.73[a]	.32	.69[a]	.39
Legitimate Reciprocity	.68[a]	.49	.85[a]	.15	.84[a]	.32
Impersonal Reward	.61[a]	.50	.83[a]	.10	.78[a]	.15
Expert	.05	.83[a]	.25	.77[a]	.34	.70[a]
Legitimate Position	.09	.78[a]	.05	.85[a]	.15	.79[a]
Personal Reward	.36	.73[a]	.38	.73[a]	.37	.77[a]
Legitimate Dependence	.28	.71[ab]	.69[a]	.46	.65[a]	.51
Personal Coercive	.34	.67[a]	.28	.74[a]	.24	.66[a]
Referent	.42	.63[a]	.59[ab]	.54	.31	.73[a]
Informational	.47	.57[a]	.49	.59[a]	.64[ab]	.37

Note: FL-C indicates factor loading for CNH instructor condition; FL-A.A. indicates factor loading for African American instructor condition; FL-L indicates factor loading for Latino instructor condition; a indicates the factor for which the power type loaded; b indicates that the power type loaded on a different factor based on the instructor's race.

harsh bases. For the Latino condition, Factor I (M = 5.03, SD = .84, α = .88) explained 32.35% of the variance and was comprised of the harsh bases. Factor II (M = 4.68, SD = .83, α = .84) explained 30.78% of the variance and was comprised of the soft bases. Table 5 indicates that, as with instructor gender, perceptions of harsh and soft power bases do differ depending upon an instructor's race.

Compliance With Harsh and Soft Power Bases

Student compliance rates with harsh and soft power were calculated by obtaining the arithmetic average for those power types that loaded on the specific factor. In order to test the hypothesis that male instructors' compliance rates for harsh and soft power base usage would not differ significantly, several comparisons of means were computed. Table 6 shows that for the male instructor condition, no significant differences were found between harsh and soft power bases when examining the data for all participants, male participants, or female participants (t ranging from -.06 to –1.36). These non-significant results indicate that regardless as to whether a male instructor utilizes harsh or soft bases of power, no significant difference in compliance rates will occur.

To confidently state that male instructors can use either harsh or soft power bases without compromising student compliance, no significant differences should be observed between harsh and soft compliance rates, regardless of the instructors' race. Table 7 shows that this finding did not occur. Although no differences were observed for CNH (t = -.61) and Latino (t = .79) instructors, student compliance ratings for African American instructors' harsh (M = 4.71, SD = .86) and soft (M = 4.87, SD = .86) power bases did differ significantly, t (99) = -2.35, $p < .05$, $\omega^2 = .04$. This finding indicates that male,

Table 6

Comparison of Compliance Rates for Harsh and Soft Power Bases: Male Instructor

Condition	M	SD	*t*	*df*	α	ω^2
All Participants						
Harsh	4.88	.93				
			-1.11	141	.27	.001
Soft	4.96	.83				
Male Participants						
Harsh	4.91	.88				
			-.06	54	.95	.000
Soft	4.91	.87				
Female Participants						
Harsh	4.86	.96				
			-1.36	86	.18	.009
Soft	4.98	.80				

Table 7

Comparison of Compliance Rates for Harsh and Soft Power Bases:

Male Instructors of Varying Race

Condition		M	SD	*t*	*df*	α	ω^2
CNH							
	Harsh	4.84	.87	-.61	99	.54	.006
	Soft	4.88	.83				
African American							
	Harsh	4.71	.86	-2.35	99	.02*	.04
	Soft	4.87	.86				
Latino							
	Harsh	4.90	.91	.79	96	.43	.004
	Soft	4.85	.79				

Note: * indicates a significant mean difference between power bases.

African American instructors would be less successful at gaining compliance in the classroom if they made use of overt and heavy-handed tactics. One caveat to this finding is that although the mean difference is significant, the instructor being African American accounted for just 4% of the variance.

It was hypothesized that female instructors using soft power bases would obtain greater compliance rates than those using harsh power bases. This hypothesis was supported in that higher student compliance rates were obtained for soft, as opposed to harsh, power bases. This finding was observed when examining the data for all participants, male participants, and female participants (t ranging from –4.97 to –7.56; see Table 8). As with male instructors, to confidently state that female instructors will consistently achieve greater student compliance through the use of soft power bases, these findings must be obtained regardless of the female instructor's race.

Whether the female instructors were CNH, African America, or Latino, their compliance rates were significantly higher when they made use of soft power bases (t ranging from –5.75 to –8.85; see Table 9). Given the consistency with which this finding has been obtained in the current study, as well as in prior research (Broverman et al., 1972; Johnson, 1976; Carli, 1999), it is safe to conclude that female powerholders will be less successful when utilizing harsh, as opposed to soft, bases of power.

Compliance With Individual Power Bases

To test the hypotheses regarding the effects of instructor gender and race on compliance rates for the individual power bases, several Two-Way Analysis of Variances (ANOVA) were performed. Because the hypotheses regarding instructor race were based on the theory of modern racism, only the data for CNH participants were examined.

Table 8

Comparison of Compliance Rates for Harsh and Soft Power Bases: Female Instructor

Condition		M	SD	*t*	*df*	α	ω^2
All Participants							
	Harsh	4.55	.91				
				-7.56	154	.001*	.27
	Soft	4.97	.80				
Male Participants							
	Harsh	4.35	.92				
				-5.84	61	.001*	.35
	Soft	4.91	.80				
Female Participants							
	Harsh	4.68	.87				
				-4.97	92	.001*	.20
	Soft	5.01	.81				

Note: * indicates a significant mean difference between power bases.

Table 9

Comparison of Compliance Rates for Harsh and Soft Power Bases:

Female Instructors of Varying Race

Condition		M	SD	*t*	*df*	α	ω^2
CNH							
	Harsh	4.66	.90				
				-5.75	99	.001*	.24
	Soft	5.04	.79				
African American							
	Harsh	4.54	.94				
				-7.41	99	.001*	.35
	Soft	5.04	.79				
Latino							
	Harsh	4.57	.88				
				-8.85	96	.001*	.44
	Soft	5.12	.79				

Note: * indicates a significant mean difference between power bases.

Based on gender stereotypes, female instructors were expected to achieve lower compliance rates than male instructors for each of the individual power bases, with the exception of legitimate dependence power. Descriptive statistics for the instructor gender condition (all participants) can be seen in Table 10. Multivariate analysis resulted in a significant main effect for the variable of instructor gender, (Wilks's $\Lambda = .92$), $\underline{F}$ (11, 246) = 1.92, $\underline{p} < .05$, $\eta^2 = .08$. Tests of between-subjects effects revealed a significant difference between male instructors ($\underline{M} = 5.40$, $\underline{SD} = .98$) and female instructors ($\underline{M}$ = 5.11, $\underline{SD} = .94$) utilizing impersonal reward power, $\underline{F}$ (1, 262) = 6.04, $\underline{p} < .05$, $\eta^2 = .03$. Similarly, a significant difference was observed between male instructors ($\underline{M} = 5.40$, $\underline{SD}$ = .94) and female instructors ($\underline{M} = 5.10$, $\underline{SD} = .96$) utilizing informational power, $\underline{F}$ (1, 262) = 6.64, $\underline{p} < .05$, $\eta^2 = .03$.

Based on the theory of modern racism, it was hypothesized that minority instructors, when compared to CNH instructors, would achieve decreased compliance rates when utilizing the individual power bases. Descriptive statistics from the instructor race condition (all participants) can be seen in Table 11. Multivariate analysis yielded a non-significant main effect of instructor race, (Wilks's $\Lambda = .89$), $\underline{F}$ (22, 492) = 1.37, $\underline{p}$ = .12, $\eta^2 = .06$. Tests of between-subjects effects yielded no significant differences in compliance rates for the individual power bases based on instructor race. Likewise, multivariate analysis yielded non-significant results for the instructor gender x instructor race interaction, (Wilks's $\Lambda = .93$), $\underline{F}$ (22, 492) = .83, $\underline{p} = .68$, $\eta^2 = .03$.

To ensure that participant gender did not influence the results, the data for the male and female participants were examined individually. Beginning with the male participants, descriptive statistics for the variables of instructor gender and instructor race

Table 10

Individual Power Base Descriptive Statistics for the Instructor Gender Variable: All CNH Participants

Power Base	Instructor Gender	N	M	SD
Impersonal Reward	Male	121	5.40	.98
	Female	141	5.11	.94
Impersonal Coercive	Male	121	4.64	1.28
	Female	141	4.41	1.27
Personal Reward	Male	121	4.79	1.06
	Female	141	4.75	1.09
Personal Coercive	Male	121	4.59	1.24
	Female	141	4.49	1.25
Legitimate Position	Male	121	4.50	1.24
	Female	141	4.54	1.09
Legitimate Dependence	Male	121	5.33	.97
	Female	141	5.18	.93
Legitimate Reciprocity	Male	121	4.94	.99
	Female	141	4.91	.94
Legitimate Equity	Male	121	4.64	1.17
	Female	141	4.57	1.11
Expert	Male	121	5.25	.90
	Female	141	5.05	.94
Referent	Male	121	4.66	1.08
	Female	141	4.46	1.05
Informational	Male	121	5.40	.94
	Female	141	5.10	.96

Table 11

Individual Power Base Descriptive Statistics for the Instructor Race Variable: All CNH Participants

Power Base	Instructor Race	N	M	SD
Impersonal Reward	CNH	87	5.21	.96
	African American	87	5.15	.92
	Latino	88	5.37	1.02
Impersonal Coercive	CNH	87	4.71	1.16
	African American	87	4.32	1.36
	Latino	88	4.54	1.30
Personal Reward	CNH	87	4.93	1.04
	African American	87	4.74	1.14
	Latino	88	4.64	1.02
Personal Coercive	CNH	87	4.61	1.32
	African American	87	4.59	1.32
	Latino	88	4.42	1.09
Legitimate Position	CNH	87	4.69	1.10
	African American	87	4.38	1.19
	Latino	88	4.50	1.17
Legitimate Dependence	CNH	87	5.30	1.00
	African American	87	5.13	.95
	Latino	88	5.31	.89
Legitimate Reciprocity	CNH	87	4.93	1.00
	African American	87	4.90	.87
	Latino	88	4.95	1.02
Legitimate Equity	CNH	87	4.65	1.21
	African American	87	4.47	1.12
	Latino	88	4.69	1.08
Expert	CNH	87	5.13	.95
	African American	87	5.12	.91
	Latino	88	5.18	.93

(Table Continues)

Power Base	Instructor Race	N	M	SD
Referent	CNH	87	4.66	1.02
	African American	87	4.43	1.14
	Latino	88	4.57	1.03
Informational	CNH	87	5.30	.93
	African American	87	5.24	.93
	Latino	88	5.18	1.03

can be seen in Table 12 and Table 13, respectively. For the male participants, multivariate analysis revealed a non-significant main effect for instructor gender, (Wilks's $\Lambda = .85$), $\underline{F}\ (11, 86) = 1.41$, $\underline{p} = .18$, $\eta^2 = .15$. However, tests of between-subjects effects did yield a significant mean difference between male instructors ($\underline{M} = 5.54$, $\underline{SD} = .90$) and female instructors ($\underline{M} = 4.95$, $\underline{SD} = .98$) utilizing impersonal reward power, $\underline{F}\ (1, 102) = 7.75$, $\underline{p} < .01$, $\eta^2 = .08$.

With regard to instructor race, multivariate analysis yielded a main effect that approached significance, (Wilks's $\Lambda = .70$), $\underline{F}\ (22, 172) = 1.55$, $\underline{p} = .06$, $\eta^2 = .17$. When examining the tests of between-subjects effects, a significant difference in compliance rate was observed for instructors utilizing personal reward power, $\underline{F}\ (2, 102) = 4.46$, $\underline{p} < .05$, $\eta^2 = .09$. Fisher's LSD post hoc analysis indicated that when using personal reward power, CNH faculty members ($\underline{M} = 5.01$, $\underline{SD} = .92$) obtained significantly higher compliance rates than Latino faculty members ($\underline{M} = 4.33$, $\underline{SD} = 1.05$). Multivariate analysis yielded non-significant results for the instructor gender x instructor race interaction, (Wilks's $\Lambda = .86$), $\underline{F}\ (22, 172) = .60$, $\underline{p} = .92$, $\eta^2 = .07$.

For the female participants, descriptive statistics for the variables of instructor gender and instructor race can be seen in Table 14 and Table 15, respectively. Regarding the variable of instructor gender, multivariate analysis yielded a non-significant main effect, (Wilks's $\Lambda = .91$), $\underline{F}\ (11, 144) = 1.23$, $\underline{p} = .25$, $\eta^2 = .09$. However, the tests of between-subjects effects indicate a significant difference between male instructors ($\underline{M} = 5.45$, SD = .87) and female instructors ($\underline{M} = 5.11$, $\underline{SD} = .96$) utilizing informational power, $\underline{F}\ (1, 160) = 5.47$, $\underline{p} < .05$, $\eta^2 = .03$.

Table 12

Individual Power Base Descriptive Statistics for the Instructor Gender Variable: Male CNH Participants

Power Base	Instructor Gender	N	M	SD
Impersonal Reward	Male	46	5.54	.90
	Female	56	4.95	.98
Impersonal Coercive	Male	46	4.56	1.28
	Female	56	4.07	1.39
Personal Reward	Male	46	4.71	1.03
	Female	56	4.57	1.07
Personal Coercive	Male	46	4.45	1.28
	Female	56	4.20	1.33
Legitimate Position	Male	46	4.45	1.28
	Female	56	4.39	1.09
Legitimate Dependence	Male	46	5.23	1.04
	Female	56	5.08	.97
Legitimate Reciprocity	Male	46	4.96	.99
	Female	56	4.89	.93
Legitimate Equity	Male	46	4.70	1.15
	Female	56	4.55	1.21
Expert	Male	46	5.19	.94
	Female	56	5.04	.98
Referent	Male	46	4.70	1.07
	Female	56	4.43	1.05
Informational	Male	46	5.33	1.06
	Female	56	5.08	.97

Table 13

Individual Power Base Descriptive Statistics for the Instructor

Race Variable: Male CNH Participants

Power Base	Instructor Race	N	M	SD
Impersonal Reward	CNH	30	5.26	.94
	African American	31	4.98	.94
	Latino	41	5.37	1.03
Impersonal Coercive	CNH	30	4.62	1.20
	African American	31	3.80	1.54
	Latino	41	4.42	1.24
Personal Reward	CNH	30	5.01	.92
	African American	31	4.67	1.08
	Latino	41	4.33	1.05
Personal Coercive	CNH	30	4.60	1.46
	African American	31	4.37	1.38
	Latino	41	4.06	1.09
Legitimate Position	CNH	30	4.43	1.04
	African American	31	4.27	1.18
	Latino	41	4.51	1.27
Legitimate Dependence	CNH	30	5.22	1.05
	African American	31	5.00	1.10
	Latino	41	5.21	.88
Legitimate Reciprocity	CNH	30	5.03	.95
	African American	31	4.94	.94
	Latino	41	4.83	.98
Legitimate Equity	CNH	30	4.80	1.20
	African American	31	4.44	1.16
	Latino	41	4.63	1.20
Expert	CNH	30	5.08	.82
	African American	31	5.05	1.05
	Latino	41	5.16	1.00

(Table Continues)

Power Base	Instructor Race	N	M	SD
Referent	CNH	30	4.70	1.06
	African American	31	4.42	1.11
	Latino	41	4.54	1.05
Informational	CNH	30	5.33	.97
	African American	31	5.15	.96
	Latino	41	5.12	1.10

Table 14

Individual Power Base Descriptive Statistics for the Instructor

Gender Variable: Female CNH Participants

Power Base	Instructor Gender	N	M	SD
Impersonal Reward	Male	75	5.32	1.03
	Female	85	5.21	.91
Impersonal Coercive	Male	75	4.70	1.29
	Female	85	4.64	1.15
Personal Reward	Male	75	4.84	1.07
	Female	85	4.87	1.09
Personal Coercive	Male	75	4.67	1.21
	Female	85	4.69	1.16
Legitimate Position	Male	75	4.53	1.22
	Female	85	4.65	1.08
Legitimate Dependence	Male	75	5.39	.93
	Female	85	5.24	.90
Legitimate Reciprocity	Male	75	4.94	1.00
	Female	85	4.92	.95
Legitimate Equity	Male	75	4.61	1.18
	Female	85	4.58	1.05
Expert	Male	75	5.28	.88
	Female	85	5.06	.93
Referent	Male	75	4.63	1.10
	Female	85	4.49	1.05
Informational	Male	75	5.45	.87
	Female	85	5.11	.96

Table 15

Individual Power Base Descriptive Statistics for the Instructor

Race Variable: Female CNH Participants

Power Base	Instructor Race	N	M	SD
Impersonal Reward	CNH	57	5.18	.98
	African American	56	5.25	.91
	Latino	47	5.37	1.02
Impersonal Coercive	CNH	57	4.75	1.14
	African American	56	4.61	1.17
	Latino	47	4.64	1.35
Personal Reward	CNH	57	4.89	1.10
	African American	56	4.78	1.18
	Latino	47	4.91	.93
Personal Coercive	CNH	57	4.61	1.25
	African American	56	4.71	1.28
	Latino	47	4.73	.99
Legitimate Position	CNH	57	4.82	1.12
	African American	56	4.44	1.20
	Latino	47	4.50	1.09
Legitimate Dependence	CNH	57	5.35	.98
	African American	56	5.21	.86
	Latino	47	5.39	.90
Legitimate Reciprocity	CNH	57	4.87	1.02
	African American	56	4.88	.84
	Latino	47	5.06	1.06
Legitimate Equity	CNH	57	4.57	1.22
	African American	56	4.48	1.10
	Latino	47	4.75	.97
Expert	CNH	57	5.15	1.02
	African American	56	5.15	.83
	Latino	47	5.19	.87

(Table Continues)

Power Base	Instructor Race	N	M	SD
Referent	CNH	57	4.63	1.01
	African American	56	4.43	1.17
	Latino	47	4.60	1.03
Informational	CNH	57	5.27	.92
	African American	56	5.29	.92
	Latino	47	5.23	.98

With regard to the variable of instructor race, multivariate analysis resulted in a non-significant main effect, (Wilks's $\Lambda = .90$), $\underline{F}\ (22, 288) = .75$, $\underline{p} = .79$, $\eta^2 = .05$. No significant differences were observed when examining the tests of between-subjects effects. Likewise, the instructor gender x instructor race interaction was non-significant, (Wilks's $\Lambda = .87$), $\underline{F}\ (22, 288) = .95$, $\underline{p} = .53$, $\eta^2 = .07$.

Chapter IV

Discussion

The main purpose of this study was to determine what role an instructor's gender and/or race might play in his or her ability to effectively use social power in the classroom. Based on the results of this study, it can be said that instructor race and gender do impact how students perceive, as well as comply with, faculty that are attempting to gain compliance from their students. These findings are important when one considers how frequently instructors make requests of their students. However, this studies results indicate that what might be an effective means of gaining compliance for one instructor, might actually reduce the odds of student compliance for another. Furthermore, findings lend support to both the stereotype that power is associated with males, but not with females (Deaux & Emswiller, 1974), as well as the theory of modern racism.

Before discussing the issues of instructor gender and race, it is important to make several points about the IPI (Raven et al., 1998). Although the IPI was originally comprised of 44 items, Raven et al. found that certain items did not correlate well with other items meant to address the same power type. Therefore, one item from each power type was dropped for the analysis performed by Raven et al. This very issue also arose in the current study. Several IPI items did not correlate with other items dedicated to the same power type. As a result, one item from each power type was removed, resulting in

a 33-item scale. Although the resulting reliability analyses were sufficient, the fact remains that certain items from the IPI warrant removal.

Another issue with the IPI is that it makes use of a generic scenario in which the target ranks the likelihood of their complying with a powerholder's request made through differing bases of power. Given that the scale is based on the 11 types of social power proposed by Raven (1993), other means of gaining compliance, which might differ dramatically from Raven's social power bases, go unexamined. When considering this issue, as well as the issue of several items consistently being dropped from the scale itself, it seems appropriate to conduct future power research in the area of scale development. The necessity for scale development in this area cannot be understated when considering the fact that the IPI is currently the only measure of the revised power taxonomy.

Harsh and Soft Bases of Power

Targets of influence attempts consistently perceive social power bases as being either harsh or soft (e.g., Bass, 1981; Kipnis, 1984; Elias et al., 1999; Elias & Mace, 2000). Again, harsh bases are thought to be overt and heavy handed, whereas soft bases are thought to be subtle and non-coercive. Given the consistency of this finding, it was hypothesized that as with prior research, students in the current study would perceive faculty power usage as being either harsh or soft. Support for this hypothesis was obtained when student perceptions of power were assessed. This indicates that as with other powerholder-target dynamics, the professor-student power dynamic is similar with regards to how power manipulations are perceived. This finding is important because it

lends support for generalizing results of power research from non-educational settings to the classroom.

Jamieson and Thomas (1974) have written that school settings are similar to organizational settings in terms of how conflicts arise and are dealt with. The current study offers support for this belief in that perceptions of power in the classroom run parallel to perceptions of power in the workplace. However, characteristics of powerholders that might influence a target's reactions are often overlooked. Therefore, making generalizations prior to examining such powerholder characteristics as gender and race might be premature.

Research indicates that when female powerholders make use of certain power types, they are perceived differently than when male powerholders utilize the same types. For example, compared to males, females that make use of legitimate power are perceived more negatively (Butler & Geis, 1990). Contrarily, females are thought to possess greater referent power than males because they are generally perceived more positively (Carli, 1999). From these findings, it was hypothesized that based on instructor gender, differences would be observed between which power bases were thought to be harsh or soft. Although analysis of both the male and female instructor data did reveal perceptions of harsh and soft bases, support for this hypothesis was obtained in that the specific power types within each factor differed.

Male instructors utilizing legitimate reciprocity power were perceived by students as using a harsh power base. However, when the instructor using legitimate reciprocity power was female, the student perceptions differed such that the usage was perceived as being a soft power type. Complying with an instructor using legitimate reciprocity power

means that the instructor had previously done something for the student, such that the student now feels obligated to reciprocate. The finding that perceptions of legitimate reciprocity power differ based on gender has several implications.

First, it can be inferred that when male instructors call in a favor, their students perceive them in a negative light. This perception might result from the stereotype that males have an abundance of resources available to them. If this stereotype truly exists, students would believe that the male instructor should not need their assistance, resulting in their feelings of obligation turning to feelings of negativity towards a male instructor asking for reciprocity. Second, it may be that female legitimate reciprocity power usage is perceived as being a soft base due to the stereotype that females lack resources (Johnson, 1976). If such a stereotype does exist, students would certainly not perceive such power usage negatively since the female instructor, who already lacks resources, has previously assisted them.

As with legitimate reciprocity, student perceptions of faculty using legitimate position power differed based on instructor gender. Specifically, usage by male instructors was perceived as being soft, where as usage by female instructors was perceived as being harsh. This again can be attributed to stereotypes. Legitimate position power stems from the powerholder's legitimate right to request compliance, which is generally due to the powerholder having some form of seniority or leadership over the target. This leadership role is consistent with male stereotypic behavior (forcefulness, dominance, independence, ambition, and competitiveness), but is inconsistent with female stereotypic behavior (gentleness, submission, dependency, and nurturance; Ragins & Sundstrom, 1989). Therefore, that female instructors using

legitimate position power is perceived as being harsh runs consistent with prior research indicating that females in leadership positions (e.g., faculty members) are perceived negatively when engaging in leadership behavior (Butler & Geis, 1990).

Given that students' perceptions of instructor power usage being either harsh or soft differed based upon the gender of the instructor, it is not surprising to learn that compliance rates with such power bases differed for male and female instructors as well. Prior research indicates that compliance rates for harsh and soft power bases should not differ when the powerholder is male (Carli, 1999). However, female powerholders are expected to make use of soft power bases (Broverman et al., 1972) to the extent that if they should resort to harsh bases, their compliance rates will decrease (Johnson, 1976).

These prior findings related to male and female compliance rates are generally supported by the current research. No significant differences in student compliance rates were observed when comparing male instructors usage of harsh and soft power. This held true when looking at the data for male CNH instructors, as well as male Latino instructors. For male instructors, the only situation in which differences in compliance rates were observed was when the instructor was an African American. In this situation, the compliance rates were greater when the African American instructor made use of soft power bases.

These findings related to student compliance rates with male instructors utilizing harsh and soft power have several implications. Results generally support the theory that males should be able to successfully use any type of power since power is associated with men (Deaux & Emswiller, 1974), and men have more influence resources available to them (Carli, 1999). Since compliance rates did not differ between harsh and soft bases

when the instructor was a male Latino or CNH, one can conclude that such instructors can successfully use either broad category of social power with success. Furthermore, such instructors that are solely concerned with gaining compliance in the classroom need not be concerned with how their students perceive them since compliance is likely to occur regardless of student perceptions.

When the male instructor was an African American there was a significant difference observed between student compliance rates for harsh and soft power. Students reported greater compliance when such an instructor utilized soft power bases. Given that this finding was observed only for the African American condition, one can infer support for the theory of modern racism. Recall that a modern racist will discriminate when there is an excuse available for doing so. For the current study, discrimination can be seen in decreased student compliance rates for only the African American instructor utilizing harsh power. The modern racist's excuse for the decreased compliance rate would be that the instructor was using an inappropriate, heavy-handed method of gaining compliance. However, this can be deemed an excuse for discrimination given that the identical inappropriate, heavy-handed method did not result in decreased compliance rates when the instructor was not an African American.

When compared to male instructors, the data pertaining to female instructors usage of harsh and soft power yielded almost the exact opposite results. Again, theory indicates that females should not make use of harsh power bases due to such usage resulting in decreased compliance rates. The results of the current study support this theoretical statement in that student compliance rates were significantly lower when female instructors utilized harsh, as opposed to soft, bases of power. This was a

consistent finding, regardless as to whether the female instructor was CNH or a member of a minority group.

It was previously mentioned that some teachers will start mean and then become friendly as the semester continues. In fact, this is the advised method for gaining compliance in the classroom that some experienced teachers provide to beginning instructors (Roach, 1994). The results of the current research suggest that this method is actually inappropriate. Given that male instructors can utilize either harsh or soft power without compromising student compliance, it seems counter intuitive to start a semester by being mean. Recall that Aguinis et al. (1996) report that the quality of the professor-student relationship is decreased when professors resort to coercive power. Therefore, if a male instructor were to initially resort to harsh bases of power, he would likely not accomplish anything with regards to student compliance, but could damage the relationship he forms with his students.

The current research suggests that having a female instructor start a semester by being mean would actually thwart her ability to gain compliance from her students. Given that student compliance rates were significantly lower for female instructors utilizing harsh, as opposed to soft, bases of power, it would seem more appropriate to advise a beginning female faculty member to start a semester by being kind and to continue being kind throughout the semester. Keep in mind that female instructors gained higher compliance rates when using soft power, regardless of their ethnicity. Therefore, these implications apply to female instructors that are CNH, as well as members of minority groups.

Of interest is that students perceived legitimate position power as being a harsh power type when it was utilized by a female instructor. Therefore, a female instructor is likely to be thought of as using heavy-handed and coercive methods of gaining compliance for simply exerting the authority that she actually possesses. Of more importance is that the female faculty member that asserts her legitimate authority is most likely going to be met with resistance and non-compliance from her students.

Given that student perceptions of power differed based upon instructor gender, data were examined in order to determine if perceptions of faculty power would differ based upon instructor race. Results indicate that student perceptions of power do differ depending upon the race of the instructor. Legitimate dependence power is used when the instructor absolutely needs the assistance of a student, resulting in the student feeling obligated to comply. In such instances that legitimate dependence power was used, CNH faculty were perceived as making use of a soft power base. However, when the faculty member was a minority (African American or Latino), students perceived the same power type as being harsh.

Although this finding could be interpreted as support for modern racism, given that the current sample was comprised of 88.2% CNHs, it seems more appropriate to interpret this finding as a form of ingroup favoritism. Ingroup favoritism refers to a "tendency to discriminate in favor of ingroups over outgroups" (Brehm & Kassin, 1996, pp. 135). Ingroup favoritism is being demonstrated in the current research in that CNH students think nothing wrong of helping a CNH instructor in need of assistance. However, when the instructor in need of assistance is an outgroup member, their requiring assistance is perceived negatively. Furthermore, recall the finding that African

American instructors obtain lower compliance rates for harsh as opposed to soft power usage. Given that legitimate dependence power was perceived as being harsh when used by minority faculty members, discrimination is demonstrated against the African American instructor in need through decreased compliance rates.

Individual Bases of Power

Until this point, the results of this study have been discussed in terms of harsh and soft bases of power. However, several hypotheses regarding individual power bases were generated and subsequently tested. Based on the stereotype that males in general possess greater power than females, the first of such hypotheses was that female instructors, when compared to male instructors, would achieve lower compliance rates on the part of their students.

Data analysis originally indicated that male instructors, when compared to female instructors, would have more success at gaining compliance in the classroom through the use of impersonal reward and informational power. However, further analysis indicated that which of these power types male faculty members would use with greater success was actually dependent upon the gender of the student. Male students reported greater compliance rates when a male, rather than female, faculty member utilized impersonal reward power. In the present study, impersonal reward power was demonstrated by having faculty increase the student's course grade if compliance occurred. Therefore, when male students believed that compliance would have a positive impact on their course grades, the motivation to comply was increased.

Female students reported greater compliance rates when a male, rather than female, faculty member utilized informational power. This indicates that female students

placed more value in the rationale for compliance provided by male instructors than female instructors. Given the academic setting, it can be assumed that the information being presented by the faculty member would be relevant to his or her field. Prior research findings indicate that male academics are perceived by students as being more competent than female academics (Sandler & Hall, 1993). Therefore, one can conclude that more merit is attributed to the male faculty members' information, which in turn would result in greater compliance when informational power is used. One caveat to this finding is that if male instructors were perceived as being more competent to the extent that the information they provided was thought to have more merit that that of female instructors, we would expect to see a significant difference in compliance rates when expert power was used. This finding, however, was not observed.

It is interesting to examine what power bases are more likely to result in acquiescence from female, as opposed to male, students. Female students, in the current study, showed an increase in compliance when the faculty member provided them with information as to why they should comply. Contrarily, faculty rationale did not impact male students compliance rates, but promises of improved grades did increase compliance. From this, it can be inferred that female students were more concerned with the reasons as to why they should comply, where as male students were more concerned with what they would get in return for compliance.

Based on the theory of modern racism, it was hypothesized that minority instructors would achieve lower compliance from their students when compared to CNH instructors. Overall, with the exception of one situation, this hypothesis was not supported. CNH instructors did not obtain higher student compliance ratings than

minority instructors, which does not lend support to the theory of modern racism. The only exception to this finding was observed when male students were asked to comply with requests made via personal reward power.

In this scenario, compared to a Latino faculty member, male students reported greater compliance with a CNH instructor. Personal reward power is in use when the target complies because they fear non-compliance will result in the powerholder thinking poorly or disapproving of them. The results indicate that students were more concerned with the impressions that their CNH instructors had of them than they were with the impressions of their Latino instructors. This finding again lends support for ingroup favoritism in that CNH students were concerned with their CNH faculty members, but were concerned to a significantly less extent with their Latino instructors. However, to state confidently that ingroup favoritism was occurring in the classroom, decreased compliance with personal reward power should have been observed for both Latino and African American instructors, but this was not the case.

The results of the current study have implications pertaining to academic, as well as, non-academic settings. Instructors should be made aware that students would perceive the means they use to gain compliance in the classroom in either a negative or positive light. Furthermore, female instructors should be aware that if they do resort to harsh bases of power, they run the risk of decreasing student compliance. Informing female instructors of this consequence is extremely important given that more experienced faculty recommend the usage of harsh power early in the semester.

Furthermore, minority faculty members should be aware that students will perceive, as well as react to, their influence attempts differently that those attempts made

by CNH instructors. When considering this issue, as well as the issue of instructor gender, it become apparent that caution should be used regarding the training methods implemented with teachers. For example, should a female instructor have a male instructor as a mentor, she may observe compliance gaining methods that are effective for her mentor, but would be ineffective for herself.

Although prior research in non-academic settings has consistently demonstrated that targets perceive power as being either harsh or soft, few studies have examined how those perceptions would be influenced by powerholder characteristics. Results of this study indicate that such characteristics as race and gender do influence perceptions of power. Therefore, research should be conducted in organizational settings in order to determine if these characteristics influence the power dynamic that exists within the supervisor-subordinate relationship. One finding that is consistent is that female powerholders increase their odds of gaining compliance when making use of soft power bases. Given this findings occurrence in both organizational and academic settings, it is safe to conclude that female powerholders should make every effort to have their influence attempts be perceived in a positive manner.

References

Aguinis, H., Nesler, M.S., Quigley, B.M., Lee, S.J., & Tedeschi, J.T. (1996). Power bases of faculty supervisors and educational outcomes for graduate students. The Journal of Higher Education, 3, 267-297.

Allport, G.W., & Postman, L.J. (1947). The psychology of rumor. NY: Holt.

Bachman, J.G., Smith, C.G., & Slesinger, J.A. (1966). Control, performance, and satisfaction: An analysis of structural and individual effects. Journal of Personality and Social Psychology, 4, 127-136.

Barraclough, R.A., & Stewart, R.A. (1992). Power and control: Social science perspectives. In V.P. Richmond & J.C. McRroskey (Eds.), Power in the classroom: Communication, control, and concern (pp. 1-18). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.

Bass, B.M. (1981). Stodgill's handbook of leadership (rev. ed.). New York, NY: Free Press.

Brehm, S.S., & Kassin, S.M. (1996). Social psychology (3rd ed.). Boston, MA: Houghton Mifflin.

Bruins, J. (1999). Social power and influence tactics: A theoretical introduction. Journal of Social Issues, 55, 7-14.

Burroughs, N.F., Kearney, P., & Plax, T.G. (1989). Compliance-resistance in the college classroom. Communication Education, 38, 214-229.

Busch, P., & Wilson, D.T. (1976). An experimental analysis of a salesman's expert and referent bases of social power in the buyer-seller dyad. Journal of Marketing Research, 13, 3-11.

Butler, D., & Geis, F.L (1990). Nonverbal affect responses to male and female leaders: Implications for leadership evaluations. Journal of Personality and Social Psychology, 58, 48-59.

Carli, L.I. (1999). Gender, interpersonal power, and social influence. Journal of Social Issues, 55, 81-99.

Cartwright, D. (1959). Studies in social power. Ann Arbor: University of Michigan Press.

Deaux, K., & Emswiller, T. (1974). Explanations of successful performance on sex-linked tasks: What is skill for the male is luck for the female. Journal of Personality and Social Psychology, 29, 80-85.

Deaux, K., & LaFrance, M. (1998). Gender. In D. Gilbert, S. Fiske, & G. Lindzey (Eds.), The handbook of social psychology: Vol. 1. (4th ed., pp. 788-827). Boston, MA: McGraw Hill.

Eagly, A.H. (1987). Sex differences in social behavior: A social-role interpretation. Hillsdale, NJ: Erlbaum.

Eagly, A.H., & Karau, S.L. (1991). Gender and the emergence of leaders: A meta-analysis. Journal of Personality and Social Psychology, 60, 685-710.

Eagly, A.H., & Mladinic, A. (1989). Gender stereotypes and attitudes towards women and men. Personality and Social Psychology Bulletin, 15, 543-558.

Eagly, A.H., & Wood, W. (1982). Inferred sex differences in status as a determinant of gender stereotypes about social influence. Journal of Personality and Social Psychology, 43, 915-928.

Elias, S.M., Loomis, R.J., & Mace, B.L. (1999). Effectiveness of social power usage by university faculty members. Manuscript submitted for publication. Department of Psychology, Colorado State University.

Elias, S.M., & Mace, B.L. (2000, April). Manipulating social power to gain compliance in interpersonal, organizational, and educational settings. Paper presented at the meeting of the Western Social Science Association, San Diego, CA.

Erchul, W.P., Raven, B.H., & Ray, A.G. (in press). School psychologists' perceptions of social power bases in teacher consultation. Journal of Educational and Psychological Consultation, 12 (1).

Erchul, W.P., Raven, B.H., & Whichard, S.M. (2000). School psychologist and teacher perceptions of social power in consultation. Manuscript submitted for publication. Department of Psychology, North Carolina State University.

Festinger, L. (1953). An analysis of compliant behavior. In M. Sherif & M.O. Wilson (Eds.), Group relations at the crossroads (pp. 232-256). New York: Harper.

Fiske, S.T. (1998). Stereotyping, prejudice, and discrimination. In D. Gilbert, S. Fiske, & G. Lindzey (Eds.), The handbook of social psychology: Vol. 2. (4th ed., pp. 357-411). Boston, MA: McGraw Hill.

Fiske, S.T., & Ruscher, J.B. (1993). Negative interdependence and prejudice: Whence the affect? In D.M. Mackie & D.L. Hamilton (Eds.), Affect, cognition, and stereotyping: Interactive processes in group perception (pp. 239-268). New York: Academic Press.

French, J.R.P., & Raven, B.H. (1959). The basis of social power. In D. Cartwright (Ed.), Studies in social power (pp. 529-569). Ann Arbor: University of Michigan Press.

Frey, D.L., & Gaertner, S.L. (1986). Helping and the avoidance of inappropriate interracial behavior: A strategy that perpetuates a nonprejudiced self-image. Journal of Personality and Social Psychology, 50, 1083-1090.

Frieze, I.H., & McHugh, Maureen, C. (1992). Power and influence strategies in violent and non-violent marriages. Psychology of Women Quarterly, 16, 449-467.

Gaertner, S.L., & Dovidio, J.F. (1986). The aversive form of racism. In J.F. Dovidio & S.L. Gaertner (Eds.), Prejudice, discrimination, and racism (pp. 61-89). San Diego, CA: Academic Press.

Hinkin, T., & Schriescheim, C.A. (1990). Relations between subordinates' perceptions of supervisor influence tactics and attributed bases of supervisory power. Human relations, 43, 221-237.

Jamieson, D.W., & Thomas, K.W. (1974). Power and conflict in the student-teacher relationship. Journal of Applied Behavioral Science, 10, 321-336.

Johnson, P. (1976). Women and power: Towards a theory of effectiveness. Journal of Social Issues, 32, 99-110.

Katz, I., Wackenhut, J., & Hass, R.G. (1986). Racial ambivalence, value duality, and behavior. In J.F. Dovidio & S.L. Gaertner (Eds.), Prejudice, discrimination, and racism (pp. 35-60). San Diego, CA: Academic Press.

Kearney, P., & Plax, T.G. (1987). Situational and individual determinants of teachers' reported use of behavior alteration techniques. Human Communication Research, 14, 145-166.

Kearney, P., & Plax, T.G. (1992). Student resistance to control. In V.P. Richmond & J.C. McCroskey (Eds.), Power in the classroom: Communication, control, and concern (pp. 85-100). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.

Kearney, P., Plax, T.G., Richmond, V.P., & McCroskey, J.C. (1984). Power in the classroom IV: Alternatives to discipline. In R.N. Bostrom (ed.), Communication yearbook 8 (pp. 724-746). Beverly Hills, CA: Sage.

Kearney, P., Plax, T.G., Sorenesen, G., & Smith, V.R. (1988). Experienced and prospective teacher's selections of compliance-gaining messages for "common" student misbehaviors. Communication Education, 37, 150-164.

Kindsvatter, R. (1990). Teacher social power and classroom discussion. In W.W. Wilen (Ed.), Teaching and learning through discussion: The theory, research, and practice of the discussion method (pp. 113-126). Springfield, IL: Charles C. Thomas.

Kipnis, D. (1984). The use of power in organizations and in interpersonal settings. In S. Oskamp (Ed.), Applied social psychology annual (Vol. 5, pp. 179-210). Beverly Hills, CA: Sage.

Koslowsky, M., Schwarzwald, J., & Ashuri, S. (1998). On the relationship between subordinates' compliance to power sources and organizational attitudes. Unpublished manuscript, Bar-Ilan University, Ramat Gan, Israel.

Leff, W.F., Raven, B.H., & Gunn, R.L. (1964). A preliminary investigation of social influence in the mental health professions. American Psychologist, 19, 505.

Lewin, K. (1935). Dynamic theory of personality. New York: McGraw Hill.

Lewin, K. (1941). Analysis of the concepts whole, differentiation, and unity. University of Iowa Studies in Child Welfare, 18, 226-261.

Lyness, K., & Thompson, D. (1997). Above to glass ceiling? A comparison of matched samples of female and male executives. Journal of Applied Psychology,82, 359-375.

McCroskey, J.C., & Richmond, V.P. (1983). Power in the classroom I: Teacher and student perceptions. Communication Education, 32, 175-184.

Merluzzi, T.V., Merluzzi, B.H., & Kaul, T.J. (1977). Counselor race and power bases: Effects on attitudes and behavior. Journal of Counseling Psychology, 24, 430-436.

Plax, T.G., Kearney, P., & Downs, T.M. (1986). Communicating control in the classroom and satisfaction with teaching and students. Communication Education, 35, 379-388.

Plax, T.G., Kearney, P., Downs, T.M., & Stewart, R.A. (1986). College student resistance towards teachers' use of selective control strategies. Communication Research Reports, 3, 20-27.

Plax, T.G., Kearney, P., & Sorensen, G. (1990). The strategy selection-construction controversy II: Comparing pre- and experienced teachers' compliance gaining message constructions. Communication Education, 38, 128-141.

Podsakoff, P.M., & Schriesheim, C.A. (1985). Field studies of French and Raven's bases of power: Critique, reanalysis, and suggestions for future research. Psychological Bulletin, 97, 387-411.

Ragins, B.R., & Sundstrom, E. (1989). Gender and power in organizations: A longitudinal perspective. Psychological Bulletin, 105, 51-88.

Raven, B.H. (1965). Social influence and power. In I.D. Steiner & M. Fishbein (Eds.), Current studies in social psychology (pp. 399-444). New York: Wiley.

Raven, B.H. (1993). The bases of power: Origins and recent developments. Journal of Social Issues, 49, 227-251.

Raven, B.H., Schwarzwald, J., & Koslowsky, M. (1998). Conceptualizing and measuring a power/interaction model of interpersonal influence. Journal of Applied Social Psychology, 28, 307-322.

Richmond, V.P., & Roach, K.D. (1992). Power in the classroom: Seminal studies. In V.P. Richmond & J.C. McRroskey (Eds.), Power in the classroom: Communication, control, and concern (pp. 47-65). Hillsdale, NJ: Lawrence Erlbaum Associates, Inc.

Roach, K.D. (1991). Graduate teaching assistants' use of behavior alteration techniques in the university classroom. Communication Quarterly, 39, 178-188.

Roach, K.D. (1994). Temporal patterns and effects of perceived instructor compliance-gaining use. Communication Education, 43, 236-245.

Russell, B. (1938). Power: A new social analysis. London: Allen and Unwin.

Sandler, B.R., & Hall, R.M. (1993). Women faculty at work in the classroom, or, why it still hurts to be a women in labor. Washington, DC: Center for Women Policy Studies.

Schwarzwald, J., & Koslowsky, M. (1999). Gender, self-esteem, and focus of interest in the use of power strategies by adolescents in conflict situations. Journal of Social Issues, 35, 15-32.

Schwarzwald, J., Koslowsky, M., & Agasi, V. (1998). Police officers' compliance to power sources as a function of captain's leadership style and work stress. Unpublished manuscript, Bar-Ilan University, Ramat Gan, Israel.

Sears, D.O., & Allen, H.M., Jr. (1984). The trajectory of local desegrigation controversies and whites' opposition to bussing. In N. Miller & M.B. Brewer (Eds.), Groups in contact: The psychology of desegregation (pp. 123-151). NY: Academic Press.

Strack, F., & Neumann, R. (2000). Furrowing the brow may undermine perceived fame: The role of facial feedback in judgments of celebrity. Personality and Social Psychology Bulletin, 26, 762-768.

Wechsler, D. (1997). Stimulus Booklet for the Wechsler Memory Scale-III. San Antonio, TX: Harcourt Brace.

Yukl, G., & Falbe, C.M. (1991). Importance of different power sources in downward and lateral relationships. Journal of Applied Psychology, 76, 416-423.

Appendix A

Recruiting Script

Recruiting Script

You are being asked to participate in a research study. The purpose of this study is to examine the relationships that might exist between instructors' facial expressions and how effective they would be at gaining compliance in the classroom. In order to participate you must be at least 18 years of age. If you decide to participate, you will fill out one questionnaire that should take approximately 20 minutes to complete. Your participation in this study is voluntary, and you may stop participating at any time without penalty. Furthermore, the information you provide will remain strictly confidential. Since this study will require approximately 20 minutes to complete, you will earn one research credit for your participation.

Should you have any questions about this study upon its completion, please contact Steven M. Elias, M. S. (491-1320) or Ross J. Loomis, Ph.D. (491-6059). Thank you for your participation.

Appendix B

Cover Letter

Dear Participant,

You are being asked to participate in a research study entitled "The Effects of Powerholder Facial Expression on Gaining Compliance in the Classroom." This study examines how a faculty member's facial expression (i.e. neutral versus angry) might influence how successful he or she would be at gaining compliance in the classroom. In order to participate in this study you must be at least 18 years of age. You will be asked to complete two questionnaires. One questionnaire revolves around compliance with social power usage on the part of a faculty member. The second questionnaire addresses demographic information. The questionnaires should take approximately 20 minutes to complete. Your participation in this study is voluntary, and you may stop participating at any time without penalty.

There are no known risks associated with this study and all information you provide will be anonymous. Your responses will not be used for identification purposes in any way.

Should you have any questions about this study upon its completion, please contact Steven Elias, M. S. (491-1320) or Ross Loomis, Ph.D. (491-6059).

Thank you for your participation.

Sincerely,

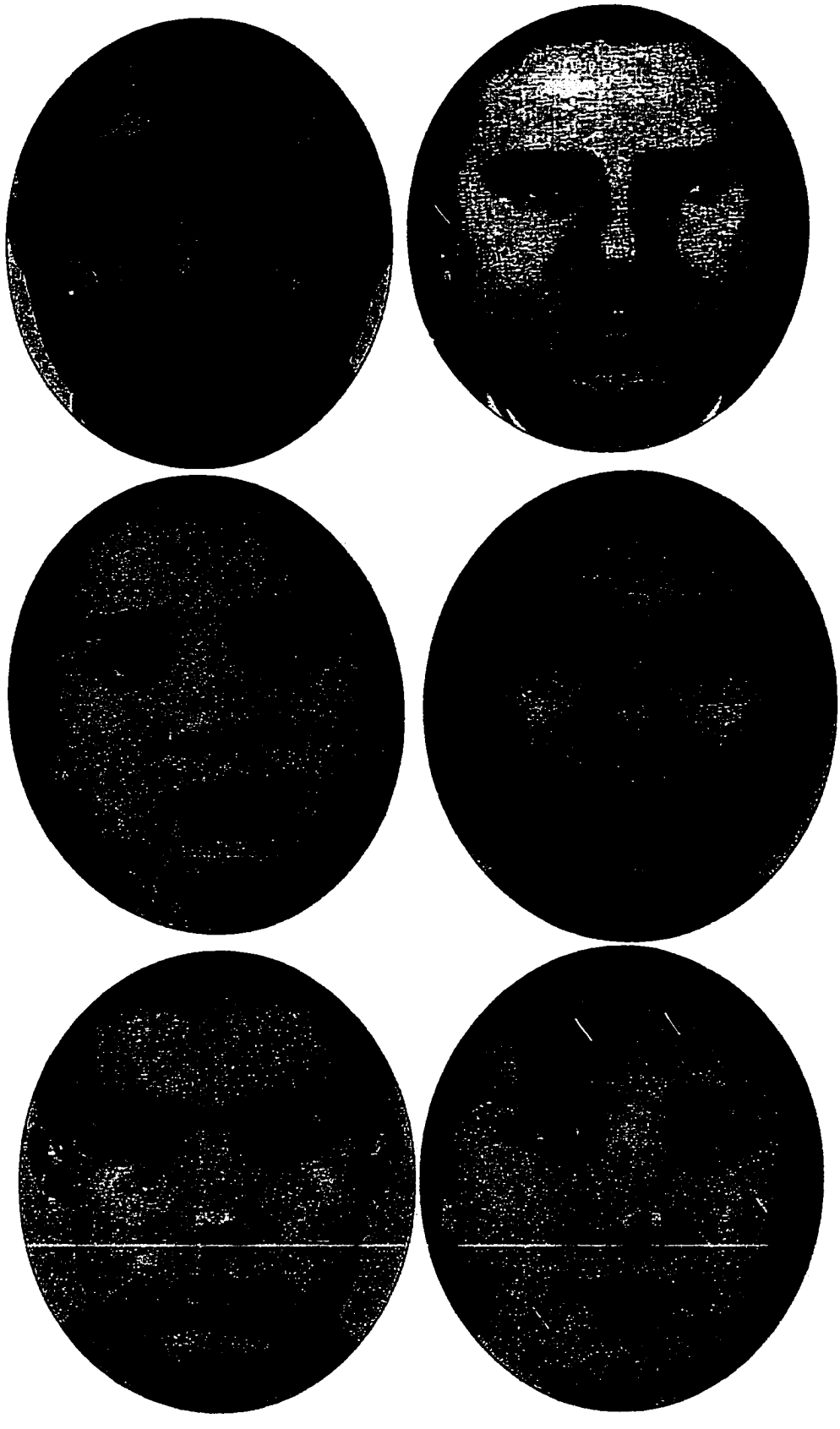
Steven Elias, M. S.

Ross J. Loomis, Ph.D.

Questions about participant's rights may be directed to Celia Walker at 970-491-1563.

Appendix C

Slides Depicting Instructors



Appendix D

Interpersonal Power Inventory

INSTRUCTIONS: Often instructors make requests of students. Sometimes students do not follow the instructor's directions exactly. Other times they will do exactly as their instructor asks. We are interested in how an instructor's facial expression might influence whether or not a student follows their request.

You are going to be shown a picture of a faculty member making a certain type of facial expression (i.e. neutral or sad). We would like you to assume that the faculty member in the picture has made a request of you. On the following pages there are a number of reasons why you might comply. Read each descriptive statement carefully, keeping in mind that it is the faculty member being displayed making the request. Decide how likely it would be that this is a reason you might or might not comply. On the accompanying answer sheet, fill in the number for each reason, which most closely corresponds to whether you feel this might or might not be a reason you would comply. Use the following options for your answer:

(1) I would definitely not comply.
(2) I would very probably not comply.
(3) I would probably not comply.
(4) I would possibly comply.
(5) I would probably comply.
(6) I would very probably comply.
(7) I would definitely comply.

Please make sure the number of the item on the answer sheet corresponds with the reason listed on this question sheet. Also, please remember that in each case we are dealing with a situation in which you have a choice to either comply or not comply with the instructor's request. You are indicating the *likely reasons why you would or would not comply.*

REMINDER: You are dealing with a situation in which this faculty member has made a request of you. We will be presenting you with a number of reasons why you might or might not comply.

(1) Definitely not comply	(2) Very probably not comply	(3) Probably not comply	(4) Possibly comply	(5) Probably comply	(6) Very probably comply	(7) Definitely comply

You will indicate the likelihood of compliance by marking the numbers according to the above scale.

__ 1. A good evaluation from him/her could lead to an increased grade.

__ 2. After all he/she is my instructor.

__ 3. My instructor probably knows the best way to do the job.

__ 4. Once he/she pointed it out, I can see why the change is necessary.

__ 5. I admire and respect my instructor and do not wish to disagree.

__ 6. My instructor can give me undesirable assignments.

__ 7. My instructor has done some nice things for me in the past and so I will do this in return.

__ 8. I like my instructor and his/her approval is important to me.

__ 9. It is clear that my instructor really depends on me to do this for them.

__ 10. I do not want my instructor to dislike me.

__ 11. By doing so I can make up for some problems I may have caused in the past.

__ 12. For past considerations I have received, I feel obligated to comply.

__ 13. My instructor can make things unpleasant for their students.

__ 14. It makes me feel better to know that my instructor likes me.

__ 15. I see my instructor as someone I can identify with.

REMINDER: This is the scale you are using to indicate the likelihood of compliance by marking the numbers according to the following scale.

(1) Definitely not comply	(2) Very probably not comply	(3) Probably not comply	(4) Possibly comply	(5) Probably comply	(6) Very probably comply	(7) Definitely comply

__ 16. I realize that unless I do so, my instructor's job will be more difficult.

__ 17. My instructor carefully explained the basis for this request.

__ 18. It would be disturbing for me to know that my instructor disapproved of me.

__ 19. I feel that my instructor probably knows more about this particular project.

__ 20. It is my instructor's job to tell me how to do this work.

__ 21. Complying helps make up for things I have not done so well previously.

__ 22. My instructor can help me receive special benefits.

__ 23. My instructor may be cold and distant if I do not do as requested.

__ 24. My instructor gave me good reason for changing how I did the job.

__ 25. I understood that my instructor really needed my help on this.

__ 26. I trust my instructor to give me their best direction.

__ 27. We are both part of the same work environment and should see eye to eye on things.

__ 28. He/she has the right to request that I do the work in a particular way.

__ 29. My instructor makes me feel more valued when I do as requested.

__ 30. I have made some mistakes and therefore feel that I owe this to my instructor.

__ 31. He/she can make it more difficult for me to get ahead in my program.

__ 32. My instructor can help me get ahead in my program.

__ 33. My instructor has previously done some good things that I have requested.

__ 34. It makes me feel personally accepted when I do as asked.

REMINDER: This is the scale you are using to indicate the likelihood of compliance by marking the numbers according to the following scale.

(1) Definitely not comply	(2) Very probably not comply	(3) Probably not comply	(4) Possibly comply	(5) Probably comply	(6) Very probably comply	(7) Definitely comply

__ 35. As a student, I have an obligation to do as he/she says.

__ 36. I look up to my instructor and generally model my work accordingly.

__ 37. I have not always done what he/she has asked so this time I feel I should.

__ 38. My instructor probably has more technical knowledge about this than I do.

__ 39. My instructor can make it more difficult for me to get a high grade.

__ 40. I realize that an instructor needs assistance and cooperation from their students.

__ 41. I expect to get some favorable consideration for this.

__ 42. I now understand why the recommended change is for the better.

__ 43. My instructor has let me have my way earlier so I feel obliged to comply now.

__ 44. I would be upset knowing that I was on the bad side of my instructor.

Demographics

1. Please circle your classification: Freshman Sophomore Junior Senior

2. Gender (circle)... Male Female

3. Age _____

4. Are you (circle)... White Black/African American American Indian
   Alaska Native Asian American Mexican American
   Spanish American Puerto Rican American Other

Appendix E

Debriefing Form

Social Power Study

Debriefing Information

The experiment you just completed examines how an instructor's gender and race might influence how effective he or she would be at gaining compliance in the classroom. Due to this being a sensitive topic, you were originally informed that groups of participants would be viewing pictures of faculty with different types of facial expression. In actuality, different groups of participants have viewed pictures of both male and female faculty members of different races. The faculty members' facial expression was really identical for each condition.

It is expected that participants will report the greatest compliance when the instructor portrayed is of the same race and gender. For example, it is expected that a CNH male will report the greatest amount of compliance when the instructor being portrayed is a CNH male as well.

Note that your data will have no identifying marks on it. At no time will your name be connected with your data. Due to the nature of this research, you may ask to have your data removed from the study.

If you have any questions or concerns about this research, or would like to discuss the results after the experiment has been completed, please contact Steven Elias or Dr. Ross Loomis at the following phone numbers and locations:

Steven Elias, M.S.
(970) 491-1320
B-219C Clark
Department of Psychology
Colorado State University
Fort Collins, CO 80523

Ross J. Loomis, Ph.D.
(970) 491-6059
C-78 Clark
Department of Psychology
Colorado State University
Fort Collins, CO 80523

Thank you for your participation!