

**THE GENERATION AND EFFECTS OF A STIGMA IN SMALL GROUPS:
A FORMAL THEORY AND TEST**

A Dissertation

by

D'LANE R. COMPTON

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

December 2007

Major Subject: Sociology

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ABSTRACT

The Generation and Effects of a Stigma in Small Groups:

A Formal Theory and Test. (December 2007)

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Drawing from the vast literature on stigmas, theories of status generalizations and affect, this study employs a formal framework to delineate among different kinds of stigmas and different processes by which they might operate. This study then considers the case of a particular type of stigma, a behavioral stigma, a label that is obtained from past behavior. The formalization distinguishes how knowledge of a particular type of stigma operates through group members who then cast an “other” into a stigmatized role with special attention to affect and behavior of the stigmatized individual and the other group members. Additionally, I am able to study the developmental process of stigma because, in the particular theoretical case I consider, the stigmatized individual is initially unaware of the stigma.

The findings indicate that stigma were created and did have an effect on individuals and groups. While the observable power and prestige effects were much more pronounced for measures of content versus measures of amount of interaction

stigmatized groups were characterized by more disapproval, fewer agreements and more interruptions than were nonstigmatized groups. Further, those who were stigmatized had less influence than other group members. In terms of feelings, there was support for the hypotheses suggesting that stigmatized individuals rate both themselves and their groups more negatively than do nonstigmatized group members. Also, those who were not stigmatized rated the stigmatized person more negatively than others. While there were no significant differences between Stigmatized and Control groups relative to happiness or group cohesion and efficiency, those in the Control groups were more committed to their groups than were those in the Stigmatized groups.

This study contributes to the large literature on stigma by examining one kind of stigma. It also contributes to several established literatures in social psychological theory. This study has implications for the power of the social construction of stigma and consequently for the power of social construction in the dismantling of stigma.

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CHAPTER I

INTRODUCTION

Investigating the creation and operation of stigma is critical for understanding the processes by which individuals and groups are subjugated. It is also critical for understanding how such processes might be diminished or even eliminated. I propose to examine a particular type of stigma, a behavioral stigma, a label that obtains from past behavior. I seek to examine the effects of such a stigma in the operation of the group and in both the affect and behavior of the stigmatized individual and the other group members. Additionally, I examine the developmental process of stigma because, in the particular theoretical case I consider, the stigmatized individual is initially unaware of the stigma.

The term stigma is used quite frequently by everyday people and the media. It usually refers to “disreputable” people, places, or actions, however references are rarely consistent and often vague (Page 1984). Although the concept of stigma is fairly commonly used, there seems to be no precise definition or application of the term. For the most part it seems that those who have focused on this term have delineated ways in which it has been, should be, and/or can be used. These include, but are not limited to, studies on personality (Crocker et al. 1998) and identity (Heise and Thomas 1989, Burke and Stets 1999, Howard 2000), and in reference to deviant or socially disadvantaged

This dissertation follows the style of the American Sociological Review.

groups (Goffman 1963, Jones et al. 1984, Falk 2001). Despite the lack of precision and consistency in which the concept of stigma has been defined and employed, all versions either implicitly or explicitly suggest that stigmas are socially bestowed devalued attributes or relationships.

One important aspect of stigmas that has received little attention is its creation and the process by which it generalizes or spreads. This will be one focus of my investigation. I will examine why it is that some forms of behavior may be viewed as a one time incident which does not affect one's status, whereas another form of behavior that occurs only once may label someone as deviant or immoral, and thus affect their future interactions. Not only do I seek to understand the creation process and under which conditions stigmas will operate, but also how this will affect group interaction, affect, and outcomes—such as group efficiency and commitment.

The study has several theoretical objectives. First, I will create a formal definition of behavioral stigma and demonstrate conditions under which a behavioral stigma will occur, spread, and order interaction. In order to develop this case, I will consider individual, group, and institutional contexts. Such an emphasis on a formal multi-level theory is very different from the way in which stigmas have been previously conceptualized and studied. Second, I will extend the status construction literature to include behavioral stigma—labels and perceived behavior. Past work has primarily examined how associations with resources and goal objects have determined status characteristics, although there has been some attention to sentiment, and valued behavior and personality characteristics (Ridgeway 1978, 1981, 1991, Ridgeway and Balkwell

1997, Webster and Hysom 1998). This study affords the opportunity to examine how the stigmatized individual is cast into a particular role by others and how this altercasting affects her behavior since it involves an actor who is unaware of her own stigma. Third, a precise and formal definition of stigma, which accepts the most common and basic ideas in the literature on stigmas, will allow the concept and its effects to be analytically separated and measurable. Additionally, strength of stigma and its effects will be measurable.

Developing a set of sufficient conditions under which stigma might be created can provide information about reversing those conditions. So, understanding the conditions can help develop interventions which could overcome or mediate some of the less desirable effects of stigmas.

CHAPTER II

LITERATURE REVIEW

Three different literatures relate to the investigation: the varied approaches toward stigmas; the literature on status inequalities in groups from an expectation states framework; and the literature on group affect. Although this study will draw on relevant literature from sociology, its central focus will be on social psychological approaches and the extension of structural social psychological frameworks and understandings.

STIGMA

The study of stigma has a long history in sociology and psychology. The term, stigma, itself derived from classical Greece in which it refers to a physical sign (often in the form of a brand) placed on outcast individuals and groups. For the Greeks, this physical sign was strongly associated with one's moral status and was generally carried by criminals and slaves—individuals who should be avoided (Goffman 1963).

By the 1950's and 1960's, academics used stigma to refer not only to undesirable individuals and groups (as also often used by the lay public whether a physical mark was present or not), but also to the individual's internalization of the experience of being stigmatized or being negatively stereotyped as a part of a stigmatized group. From this point however, rather than talking about an actual stigma the literature more often speaks to stigmatization and stigmatized people—who is stigmatized and how to deal with it. The term, stigma, itself was frequently implicit and implied a devalued trait. The idea

was that society devalued certain social groups (based on various characteristics) which often lead to issues of inequality and mistreatment.

Additionally, there has been some focus on how one's personality would be affected as he or she internalized a stigma—one would act differently if society treated them as inferior or lesser than other individuals (Crocker et al. 1998). Although these conceptions of stigma are not formally defined in much of the literature, they are often applied to “deviants” (Jones et al. 1984) or disadvantaged social groups such as the Jews (Sartre 1946), African Americans (Wolff 1963), and homosexuals (Katz 1981, Herek 1998). Other literature uses frameworks of stigma for groupings of people and social identities such as disabled people, the mentally ill and deformed, various types of criminals, unmarried mothers, single people, and homeless people (Goffman 1963, Page 1984, Falk 2001). In addition, some of the more recent literature on the subject expands the notion of stigma to include not only disadvantaged groups and those looked down on by society, but also those whom society favors yet may resent, such as celebrities and overachievers (Falk 2001).

Another application of stigma in the social psychological literature is in reference to identities. Identities are sets of meanings applied to the self in particular social roles and/or situations which defines what it means to be who one is in those roles or situations (Burke and Tully 1977, Burke and Stets 1999). This area of literature generally speaks to the issue of stigmatized social identities where social identities are defined by membership in various social groups and are considered to be socially bestowed. In the identity literature, stigma once again is generally implicit. It tends to

refer to one's attachment to a socially negative identity and is employed more as an external status for categorizing identity types. For example, one thread of this research explores how individuals with stigmatized identities negotiate them—whether they seek to promote these identities in order to create a sense of community or promote change in their negative status, or they seek to disassociate from their identity (Howard 2000). In addition, with regards to emotions expressed, it has been found that no matter the emotion being communicated, individuals with stigmatized identities are generally rated less favorably than those with valued identities (Heise and Thomas 1989). However, in both of the above examples, the focus is more issues of stigmatized identities and group status rather than on characteristics or dimensions of stigmas.

CONCEPTUALIZATIONS OF STIGMA

Perhaps the person most associated with the conceptualization of a stigma in the sociological literature is Erving Goffman (1963). He is often credited with resurrecting the term (Crocker et al. 1998). Goffman defines and details a conceptual scheme for stigmas drawing on previous applications in which he examines stigmas in a situational context based on social settings, categories, and social interactions. Goffman notes that stigmas are socially bestowed attributes which are deeply discrediting.

A person who is quite thoroughly bad or dangerous or weak...reduced in our minds from a whole and usual person to a tainted, discounted one...such an attribute is a stigma, especially when its discrediting effect is very extensive; sometimes it is also called failing, a

shortcoming, handicap. It constitutes a special discrepancy between virtual and actual social identity. (Goffman 1963:3).

Goffman further describes “three grossly different” types of stigma, namely, *abominations of the body* which refer to physical deformities and markings; *blemishes of individual character* which include various personality traits, reputations, and behaviors; and *tribal* stigmas which are stigmas that are transmitted through one’s lineage including issues of race, ethnicity, religion, etc. (Goffman 1963:4).

Goffman also emphasizes that stigmatized attributes may not always be easily noticeable to the public. Thus, there are two types of situations in which a person with a stigma is either *discredited* or *discreditable* (Goffman 1963:4). *Discredited* refers to situations in which the person with the stigmatized attribute assumes that their stigma is known or obvious to others, such as the case with many physical deformities and characteristics. *Discreditable* refers to situations in which the person with the stigmatized attribute assumes that their stigma is not generally known about or is hidden from public view, such as the case of one’s religion, sexual orientation, and so forth (Goffman 1963). However, in all of Goffman’s work, the disreputable attribute is known to the possessor.

In addition, Goffman asserts that more so than the actual attribute, we must observe the “language of relationships” to fully understand stigmas since what may be a stigma to one person at one time, may not be so to another person or at another time (Goffman 1963:3). This notion of a “language of relationships” or the social context, in

which an attribute is a stigma, sets the stage for much of the future sociological work (including mine).

Goffman's work extends our sociological understanding on two main fronts. First, he notes the importance of the situation and social context in which the attribute is a stigma. For example, (using Goffman's conceptualization) being a part of an interracial marriage in the 1950's may have carried with it a strong stigma, in current times this may not be the case. Likewise, the definition of race and what is perceived as an interracial marriage changes across time and place whereas once an Irish-Italian marriage in America would have been viewed as interracial, this would not necessarily be true today. Furthermore, the strength of a stigma may be relative based on the races involved in the marriage at certain times where the stigma may be stronger for an African America-Caucasian couple than for an Asian-Caucasian couple today.

Second, Goffman suggests that while an individual may always carry a stigmatized attribute, this attribute may not always be known to others. For example, how would a member of the interracial couple mentioned above be treated in new encounters with others when they are alone, as compared to when they have new encounters with others as a couple? It is feasible that they could have two entirely different experiences. However, according to Goffman, it is still unclear how an individual with the stigmatized attribute may act—whether they would actively seek to maintain their attribute's hidden status or not, etc.

Most literature that followed Goffman, draws on Goffman's conceptualization of stigma. Various other and similar definitions have been offered including “socially

inferior attributes” (Page 1984:2), “a devaluing social identity” (Crocker et al.1998: 505), “an attribute in a person or group which is viewed as setting that person or group apart from the rest of society” (Falk 2001:24) and so forth.

In a more psychological view, Jones et al. (1984) analyze the process of stigmatization via the relationships between those who are labeled as “deviant” and those who are considered to be “normal” (1). Although they focus more on identifying dimensions of stigmas (including the concealability of a stigma, the course of a stigma, the level of disruptiveness to social interaction of a stigma, aesthetic qualities of a stigma, the origin of the stigma for the individual, and the degree of danger the stigma may have for others), than an actual definition, they tend to refer to “one who is vulnerable to being labeled as deviant” as being stigmatized (Jones et al. 1984:1).

In one of the most recent books on the topic of stigma, Gerhard Falk examines how stigma affects Americans and identifies and describes those who are most often the targets of stigma in contemporary society. His initial definition, mentioned above, has no negative or devaluing inferences; however, he goes on to state:

Stigmatization can occur whenever and wherever some people find behavior of characteristics of others offensive and/or reprehensible often leading to sanctions of hostility, disapproval and punishment (Falk 2001:24-5)

Falk also recognizes, as do many of the researchers on this subject since Goffman, that his definition and framework are problematic since it leads to the premise that stigmas

can be anything since almost all behaviors and characteristics can be viewed by some audience at some point in time as deviant.

In Crocker et al.'s (1998) investigation of the experience of stigmatized individuals, they not only explore how stigmatized individuals interact with non-stigmatized individuals, but also how they understand, interpret, and cope with their stigmas. Crocker et al. (1998) assert that "there may be no single feature or even set of defining features that unambiguously signifies that an individual or group is stigmatized" (505) and that:

If forced to provide a single defining feature of social stigma, however, we would argue that stigmatized individuals possess (or are believed to possess) some attribute, or characteristic, that conveys a social identity that is devalued in a particular social context. (Crocker et al. 1998: 505)

They also stress that this definition is "loaded with meaning" and the notion of context inevitably determines what and who is stigmatized rather than an objective feature (Crocker et al. 1998: 505). Additionally, they observe that due to social context, it is not a matter of whether one has a certain socially devalued attribute, but that the belief that one possesses this attribute which leads to stigmatization (Crocker et al. 1998).

While the different conceptualizations agree about the importance and pervasiveness of stigma, there are problems with the general use of the terms because they are context dependent. This often leads researchers to focus on examples and applications of stigmas in specific contexts, in which they can more deeply analyze and illustrate the concept of stigma. However, one could argue this turns their analysis into

an analysis of a person or group's particular experience at a particular point in time, rather than an analysis of stigma.

While others have noted the problems with the lack of precision and consistency of definitions of stigma (Page 1984; Crocker et al. 1998), the following examples illustrate the complexities in defining and conceptualizing stigma with regards to current frameworks. As a consequence, this line of thought opens the door for numerous questions such as: why do some attributes elicit stigmatization while others do not (at any point in time); why are some forms of stigmatization stronger than others; why is an attribute stigmatizing to one individual, while that same attribute may not be stigmatizing to another; do the same attributes elicit different strengths of stigmatization in different individuals; and perhaps most importantly, if everyone has the propensity to become stigmatized, then does the concept of stigma lose its utility?

In addition to being employed in many different ways across many different situations, there seems no agreement in the literature about who decides what attributes are stigmas and who will be stigmatized—although a vague notion of society is often invoked. At times the notion of stigmatization seems to be derived from circular logic in which case stigmatization is based on the negative outcome of being stigmatized where one is stigmatized because they encountered a negative outcome or differential treatment based on a particular characteristic.

Relatedly, it is sometimes indistinguishable in the literature as to whether an individual is stigmatized which leads to differential and unequal treatment, or whether one is treated differently and thus they are referred to as stigmatized. Although similar,

these two statements may allude to very different processes. It is unclear as to if the process of stigmatization flows in only one direction or if the process can flow in both or two directions.

Moreover, and perhaps most remarkably, the initial creation of a stigma or stigmas seems to be absent from the literature. While the literature probably most frequently conceptualizes the experience of being stigmatized as involving some internalization of the stigmatized attributes of one's group—the question arises how and why did those specific attributes first become devalued? Also, how did one specific instance of devaluation spread and generalize?

STATUS INEQUALITY IN GROUPS AND LEGITIMATION OF STATUS HIERARCHIES

This study is also concerned with how group interaction contributes to structures of inequality. Past literature on status has shown that when individuals interact in task oriented situations their external or known characteristics organize and establish many features of the interaction (Berger et al. 1998; Webster and Hysom 1998). In fact, there is a long line of theoretical and empirical research on status characteristics which has resulted in a significant understanding of how status and status characteristics contribute to group interaction and the creation and reinforcement of structures of inequality (Webster and Hysom 1998; Sell et al. 2004).

Expectation states theory is one of the most developed and empirically supported theories of status (Ridgeway and Johnson 1990). It describes status organizing processes

in which group members form performance expectations based on status characteristics in task oriented groups (Berger et al. 1966). These expectations by group members, then lead to observable inequalities in face-to-face interaction including: amount of opportunities offered to participate, an individual's contribution to the task, the evaluation and reaction to those contributions by other group member, and the amount of influence an individual has as indicated by group members changing their opinion and accepting the individual's contribution. Berger et al. (1998) assert that the allocation of these four behaviors across the group "tend to be highly inter-correlated and collectively they represent what [they] call the 'observable power and prestige order' in the group (381)." This has also been referred to as the status structure (Ridgeway and Johnson 1990). Furthermore, it should be noted that whether or not status characteristics are initially relevant to the task at hand, the relationship holds between this external status and the individual's position in the power and prestige order of the group. In addition, expectation states theory has been very successful in explaining individuals' positions in groups where individuals differ with regards to external status characteristics (Ridgeway and Johnson 1990).

Status characteristics are the central concept in describing the status organizing process. Status characteristics are distinguishable characteristics that confer social advantages and disadvantages and, often, evoke estimations of social worth and performance expectations (Webster and Hysom 1998). Two types of status characteristics are specified by expectations states theory, namely, diffuse status characteristics and specific status characteristics. Attached to these two types of status

characteristics are specific and general expectations which are associated with each. Specific expectations refer to expectations to perform in a clearly delineated situation, while general expectations are not limited to any precise situation (Berger et al. 1998). For example, one's "math ability" suggests specific expectations towards performance capabilities on a math test; however, one's "intelligence" suggests more general expectations.

Diffuse status characteristics are characteristics that entail at least two differentially valued states which are associated with distinct sets of specific expectations for each state and a similarly evaluated general expectation state. Diffuse status characteristics are more likely to be observable and are often based on physical characteristics such as gender, race, age, physical attractiveness but may also include occupation, religion, and so forth. Diffuse status characteristics are based on culturally salient stereotypes, thus, whether any characteristics at any point in time is a diffuse status characteristic is not a theoretical question, but a question of fact (Berger et al. 1998). Group members who have characteristics with higher overall evaluations are said to have high status in relation to other group members, while those with lower overall evaluations are said to have low status in relation other group members.

Specific status characteristics are characteristics that entail at least two differentially valued states which are associated only with distinct sets of specific expectations for each state (Berger et al. 1998). Specific status characteristics can be either directly relevant to the task at hand or may be an indicator as to one's general ability. Examples of specific status characteristics include math or reading ability,

known awards or certificates, intelligence level, athleticism, and so forth. Specific status characteristics create high and low statuses like diffuse status characteristics, however, those which are directly relevant to the task are especially strong on the performance expectations formed.

Status characteristics organize interaction through the burden of proof process. The burden of proof process illustrates how the introduction of various actors, characteristics, and tasks affect the status structure (Berger 1998). It is well defined under specific scope conditions which are: a group is task oriented, group members have no prior history of interaction, the task at hand must be collective in which all group members contribute, the task must be meaningful to the group members, and *ceteris paribus* (Berger et al. 1974). Under these scope conditions, when status characteristics differentiate actors, they become activated. Once they are activated, they become relevant to the task and shape group members' performance expectations for their self and the other group members. These performance expectations then shape behavior where high status individuals in society will also have high status in the group and be offered more opportunities to participate, have more favorable evaluations to their contributions, and have greater influence in the group as compared to low status individuals. Thus, status hierarchies are formed which are consistent with the status quo. Consequently, group members' statuses characteristics then determine the power and prestige order, or status structure, of the group in which case those with high status are typically evaluated more favorably, seen as more competent, and given more rewards, than low status individuals.

The theory of reward expectations contributes to the expectations states framework by explaining how status produces expectations for rewards and how the allocation of rewards can create performance expectations (Berger et al. 1998). Furthermore, this theory develops the notion of referential structures which are “sets of socially validated beliefs held in common by actors (Berger et al. 1998: 382).” These belief sets situate the social reality of the actors (whether in a particular society, organization, or subculture) and give reference to what is valued and believed to be true. Moreover, they allow for an understanding about the “external reality” or culture in which the task group will be operating and determine the normative relationship between valued status characteristics and levels of rewards (Berger et al. 1998: 383). Berger, Ridgeway, Fisek, and Norman (1998) categorize three types of referential structures: categorical structures which include values that are generally associated with broad social categories; ability structures which associate various reward levels with esteemed abilities and are more so directly relevant to the task; and outcome structures which associate various reward levels with actual achievement on the task (Berger et al. 1998).

THE EVOLUTION OF STATUS CHARACTERISTICS

An important question raised in the status literature is how do characteristics evolve from a mere descriptive or nominal characteristic to one which encompasses social worth and status? There may be many ways in which this can occur. One major contribution is Ridgeway’s (1991) theory of the social construction of status value in which she delineates and formally tests one way in which status characteristics are

created and spread through society via micro-macro processes (Ridgeway 1991). The theory combines Blau's structural theory, which identifies the macro level effects of nominal characteristics and resource distribution on the likely characteristics of individual in various interactions, and expectation states theory to show how nominal characteristics are likely to be associated with situational beliefs of worth. This association will then create consensual beliefs at the macro level about status value as associated with the initially nominal characteristic (Ridgeway 1991).

Ridgeway points out that there are two notable aspects to status characteristics. First, each status characteristic conveys an independent status value at a macro and a micro level. However, a status characteristic is never encountered independent of other characteristics. Thus, it is difficult to make conclusions about a given characteristics distinctive qualities. Nevertheless, it seems that individuals break characteristics into distinct categories in which cultural beliefs are associated with them, some of which include an association of social worth and value, while others may not. In which case, gender, for example, may become a status characteristic, while eye color may not. Second, beliefs about value for any given status characteristics are similarly connected to greater cultural beliefs about general competence where those with greater status, no matter the characteristic, are also associated with greater competence (Ridgeway 1991).

The status construction theory begins with a nominal characteristic, N , which has at least two states, N_a and N_b , and no connotation of social value or performance expectations. The nominal characteristic will then become associated with a difference in exchangeable resources via four initial structural conditions: 1) *An inequality develops*

in the distribution of an exchangeable resource among a population. 2) The level of resources possessed is a socially meaningful distinction among the population. 3) The population is also divided into categories of a nominal characteristic, N. and 4) There is a correlation between the nominal characteristics and the resource characteristics such that N_a 's have a greater probability of belonging to the resource rich than the N_b 's (Ridgeway 1991: 371-2). Consequently, structural constraints help to arrange micro level interactions. Through previous experiences and subsequent interactions, consensual beliefs attach worth and status to the nominal characteristic. Lastly, it should be noted that these consensual beliefs can lead to dimensions of status despite any evidence of ability or lack thereof among the distinct categories of N.

It should be emphasized that Ridgeway's status construction theory does not claim to present all the necessary conditions under which status characteristics are created. Likewise, she does not deal with issues of historical origin or context. Instead, her focus is to identify particular structural conditions that are "sufficient" to cause a characteristic to become a status characteristic (Ridgeway 1991). After formally testing the theory, Ridgeway and Balkwell (1997) find added support for the above theoretical analysis. Additionally, further empirical support for this appears in Ridgeway, Boyle, Kuipers and Robinson and Ridgeway and Ericksen (2000).

Webster and Hysom (1998) further extended status construction theory to create a parallel line of research which applies to a greater range of situations to explain how status values develop. They identify additional circumstances theoretically sufficient to creating and maintaining status characteristics and also suggest how new characteristics

may be developed via changes in norms of expected behavior, attribution processes, and enforcement. In their first extension of status construction theory, they extend the theory beyond characteristics that are linked to exchangeable resources to include characteristics where this link is nonexistent (Webster and Hysom 1998). This allows the theory to go beyond diffuse status characteristics which are highly associated with exchangeable resources, such as gender and race, to include those which fit the definition of diffuse status characteristic, but are less discerned and associated with exchangeable resources in society such as physical attractiveness or sexual orientation.

Webster and Hysom's second extension examines how status characteristics can develop under conditions which do not include exchangeable resources or goal objects. Rather, they are constructed through patterns of behavior. They argue that consistent patterns of behavior can create performance expectations based on the type and rates of interaction, in which case, these expectations can attach to any of the actors' salient characteristics to create a status characteristic. Examples of this type of status characteristic can include speed of speaking, accents, body language, formal authority, and so forth—basically anything that may bias behavioral interaction to the advantage of one social actor over another (Webster and Hysom 1998).

The third extension of status construction theory defines a characteristic and creates a status value for it. While more speculative than the previous two, Webster and Hysom employ literatures on attribution processes, personality, and deviance and social control to exemplify three general trends in social interaction which are:

1) to recognize and categorize differences among individuals; 2) to impute dispositions from behavior, using existing categories; and 3) to create categories where previously they did not exist, given certain situational and interaction conditions (Webster and Hysom 1998: 365).

Their speculation draws on two important issues especially significant for this study on behavioral stigma. The first is their employment of attribution process where social actors seek to create cultural schemas which identify roles for self and others that dictate ways in which one “should” act. This view holds that actors will want to maintain consistent behavior in their interaction, and thus it is through this process of attribution that individuals identify others, their relationship to others, and know how to interact with others and anticipate future behaviors (Webster and Hysom 1998).

The second issue is the recognition of deviance and social control processes on the creation of entirely new status characteristics. Webster and Hysom (1998) assert that deviance and social control process contribute to notions of what is appropriate and inappropriate for social actors which can lead to differentiation (if norms are violated) and the activation of new characteristics.

Understanding behavioral stigmas and how they operate may further broaden the understanding of how characteristics evolve from a simple nominal characteristic to one which is associated with social worth and status. For example, it could be argued that stigmas are a subset of diffuse status characteristics—as they meet the definition of a diffuse status characteristic. Thus, generating a stigma is one way that diffuse status characteristics might be created where once a stigma has been activated and legitimated

through the diffuse status structure it then becomes a diffuse status characteristic. Not only could it be argued that stigma is a subset of diffuse status characteristics, but that they are an especially strong diffuse status characteristic due to their association with disapproval and the negative devaluation. Additionally, behavioral stigmas extend the status construction literature to include perceived behavior and labels. Moreover, this study seeks to introduce a discussion of degree to the status literature.

AFFECT AND GROUP INTERACTION

The third area of focus for this study is the literature on emotions, and more specifically the literature on group affect. The sociology of emotions has revealed that a significant amount of human behavior is influenced by emotional attachments and affective commitments rather than being purely motivated by rational-economic incentives (Thoits 1989). This has interesting implications for social exchange theories, an area which has largely neglected emotion and primarily focused on behavior and rational-choice principles (Lawler and Thye 1999).

Past literature on emotions has offered many different definitions and applications of emotion and affect. In a fairly comprehensive literature review of the sociology of emotions, Peggy Thoits (1989) found that most definitions of emotion “involve: (a) appraisals of situational stimulus or contexts, (b) changes in physiological of bodily sensations, (c) the free or inhibited display of expressive gestures, and (d) a cultural label applied to specific constellations of one or more of the first three components (Thoits 1989: 318).” However, it is not necessary that all of the above components are present

(Thoits 1989). Thoits also, asserts that emotions are different from feelings or affects where affects are “positive and negative evaluations (liking/disliking) of an object, behavior, or idea” and that emotions can be considered a “culturally delineated type” of affect (Thoits 1989:318). According to this framework, affects encompass emotions.

The theoretical and empirical work that has sought to combine the sociology of emotions and social exchange theories tends to define emotion as a transitory feeling that draws on positive and negative evaluations (such as good/bad and happy/sad), while affect is viewed to be more enduring (Lawler 1992, Lawler and Yoon 1998, Lawler and Thye 1999). In addition, both emotion and affect are portrayed as internal states which are not entirely controlled by actors (Lawler and Thye 1999). Overall, this framework is congruent with Thoits’ findings listed above.

At the individual level, affect control theory proposes that individuals use sentiments to construct and validate identities that are coherent with their social identities, settings, and behaviors. More specifically, “people cast themselves and others into situational identities and then construct events to validate sentiments evoked by the identities while maintaining the integrity of the behaviors and the spirit of the settings as well (MacKinnon and Heise 1993).” Affect control theory regards emotions as an experience of identity validation; in this manner, social interactions produce confirmation and are the consequences of fundamental sentiments.

In related work on identity control processes, Burke asserts that distress or anxiety caused by interruptions to the identity process can lead to changes in one’s identity. In this case, distress is an autonomic activity that suggests there are

incongruencies in the identity control system. The identity control system portrays the identity process as a feedback loop in which an individual applies a set of meanings, or identity, to their self in social situations which then act as a standard of reference of who one is or should be. When the identity becomes salient a feedback loop is activated. The feedback loop has four components: the standard (the identity), an input from the social situation (appraisals of relevant meanings), a comparison process between the standard and the social input, and the output behavior (Burke 1991). The process seeks to modify the inputs and outputs so that they correspond with the identity standard. Thus, the perceived meanings of which one is implied by the social setting and can alter not only an individual's behavior, but how they view their self.

Groups are routinely nested within other groups. So, for example, we may interact within a classroom, but the classroom experience is also affected by the university, college, state and country. Edward Lawler (1992) has shown how individual choice and freedoms in nested groups can lead to greater notions of autonomy and affective attachments to the nested group which can then generalize to the larger group or organization as a whole. In an extension of this work, Lawler and Yoon (1996) examined how and when people in social exchange relationships become committed to the relationship. Employing dyads, they found that the groups with equal power or greater total or mutual power led to exchanges that stimulated positive emotions and created perceptions of a cohesive unit in which actors were more likely to continue to exchange with one another despite other attractive alternatives and were more likely to contribute to a new joint venture with their partner (Lawler and Yoon 1996). The

positive emotions are in part a product of the successful exchanges which actors attribute to their relationship with one another. The resulting “theory of relational cohesion” suggests that repeated or frequent exchanges between actors may produce both affective and uncertainty-reduction processes which would then explain the repetitive exchanges and formation of commitment. The exchange relationship would thus become “a valued object in itself (Lawler and Yoon 1996: 89).”

In one extension of the theory of relational cohesion, Lawler and Yoon demonstrated that network structures can create cohesive relationships for some actors and not for others based on differential exchange frequencies among the actors (Lawler and Yoon 1998). The differential exchange frequencies produced by the network structure will, in turn, create varying degrees of cohesion among social actors due to successful exchanges and the positive feelings which are associated with them (Lawler and Yoon 1998). They further assert that these effects will be more apparent in equal-power relations compared to unequal-power relations and will be weaker when a group identity is present and shared by all members (Lawler and Yoon 1998). In networks that contain equal-power and unequal-power relationships, “internal pockets” of cohesion are more likely to appear in the equal-power relationships due to the affective processes that associate positive feelings with the successful and repetitive exchanges (Lawler and Yoon 1998: 871).

The theory of relational cohesion has also been applied to multi-actor productive exchanges by Lawler, Thye, and Yoon (2000). Productive exchanges are exchanges in which two or more actors contribute individual resources to an interdependent task

which requires the coordination of all the members in the exchange (Lawler, Thye, and Yoon 2000). Lawler, Thye, and Yoon (2000) employed 3 person groups and found that as in the dyadic social exchanges, the multi-actor productive exchanges where actors were equally dependent or had a greater average dependence on one another (relative to groups which were unequal) increased the frequency of productive exchanges (Lawler, Thye, and Yoon 2000). Also, as in the dyadic social exchanges, the multi-actor groups appeared to be more cohesive due to the positive emotion that was generated from the more frequent productive exchanges. However, contrary to what the theory would suggest, Lawler, Thye and Yoon did not find that predictability enhanced the perception of group cohesion. Also, while the greater cohesion in groups did increase commitment behaviors, it is not able to predict the re-investment, by group members, to a more risky joint endeavor (Lawler, Thye, and Yoon 2000).

CHAPTER III

THEORETICAL FRAMEWORK

This study will generate the derivations and specify the scope conditions necessary to build a formal theory of behavioral stigma. This theory seeks to demonstrate the creation and generalization of a behavioral stigma and to describe its effect on social interactions. To do this, I will first formally define the concepts and scope conditions necessary to make testable predictions.

BEHAVIORAL STIGMA

As mentioned previously, there have been many explicit and implied definitions of stigma in the academic literature. However, all versions seem to agree on two features of stigma—one, that they are socially bestowed and, two, that they tend to at the very least imply a devalued characteristic or relationship.

Definition 1: A characteristic, x , is a *behavioral stigma* if and only if:
there is a label attached to an individual and
the label concerns deviant behavior (see definition 2).

Definition 2: *Deviant behavior* is behavior that is:
Different from the average behavior of a particular group and
disapproved of from the perspective of that group.

This definition is created from the literature on stigmas (including Goffman (1963) and Crocker and her colleagues, 1998), combined with the normative behavior

dimension of Jackson's (1965) work on the structural characteristics of norms. Specific to this study, behavioral stigmas emerge in the context of group interaction.

Assumption 1: Stigma generalizes from an individual's activities and then to the individual.

Corollary 1: The stronger the disapproval associated with the deviant behavior, the stronger the stigma.

Assumption 2: A label applied to an individual at one point in time will generalize to subsequent points in time.

Derivation 1: If an individual has a stigma at time 1, then group members will express disapproval at subsequent points in time

Derivation 1 results from combining definitions 1 and 2 and the second assumption.

STATUS INEQUALITIES AND GROUP HIERARCHIES

Definition 3: *Competence* is the ability to master events and have events turn out in the desired manner or outcome sought.

Definition 3 is taken from Ridgeway (1991).

Definition 4: *Compliance* is the voluntary acceptance of directives.

This definition utilizes Ridgeway (1984), Ridgeway and Diekma (1989) and Berger, Ridgeway, Fisek, and Norman's (1998) work on behaviors associated with power and prestige orders.

Derivation 2: If group members disapprove of group member A's behavior, then

A is accorded less compliance.

This derivation results from the definition of behavioral stigma (definitions 1 and 2) and the first assumption.

Definition 5: *Action opportunities* are the opportunities a person has to perform.

This definition utilizes Berger, Conner, and Fisek (1974) work on legitimation and Ridgeway and Johnson's 1990 work on socioemotional behavior.

Assumption 3: Those with lower levels of compliance are also seen as less competent at a task (less compliance due to the disapproval).

Assumption 4: Those with lower perceived competence are accorded less action opportunities.

Derivation 3: If a stigma is attached to group member A, then A is accorded less action opportunities and consequently will act less.

Derivation 3 results from the definition of stigma (definitions 1 and 2), the definition of action opportunities (definition 5) and assumptions 3 and 4.

Definition 6: *Influence* is the ability to win a disagreement or elicit a change of opinion to your favor.

Definition 6 is taken from Berger and his colleagues (1974) and Ridgeway and Johnson (1991).

Derivation 4: If a stigma is attached to group member A, then A will have less influence over the group.

The fourth derivation results from the definition of stigma (definition 1, 2) and the definition of influence (definition 6) and assumptions 3 and 4.

AFFECT FOR STIGMATIZED

Assumption 5: Group members will base self-evaluations on their perceived competence relative to other group members—they will order or rank their competence.

Derivation 5: If group member, A, perceives a lower level of competence relative to other group members, then this will lead A to a negative self-evaluation.

This derivation results from assumption 5.

Definition 7: *Affect* is defined as an enduring emotion or feeling that involves a positive or negative evaluative state that involves neurological and cognitive features.

This definition is largely drawn from Lawler (1992) and Lawler and Yoon's (1998) work on emotions and social exchanges.

Assumption 6: Self-evaluations are positively associated with self-affect.

Derivation 6: If group member, A, has a negative self-evaluation stemming from group interaction, then this will lead to A having negative self-affect. (by definition 7 and assumption 5, 6)

This derivation results from the definition of affect (definition 7) and assumptions 5 and 6.

Assumption 7: Affect generated within a particular context is generalized to the context itself (classical conditioning assumption).
More specifically, self-affect generated within a particular group

context generalizes to affect toward the group itself

Derivation 7: If group member, A, has negative self-affect stemming from group interaction, then A will also have negative affect towards the group.

Derivation 7 results from the definition of affect (definition 7) and assumptions 6 and 7.

GROUP AFFECT

Assumption 8: Evaluations of an individual will generalize to affect towards the individual.

Assumption 9: Greater inequality in groups will lead to negative affect and to less cohesion toward the group. (taken from the theory of relational cohesion by Lawler and Yoon 1996)

Derivation 8: Group members will have more negative affect towards the stigmatized group member compared to the other group members

Derivation 8 results from the definition of Stigma (definitions 1 and 2) and assumptions 1 and 8.

Derivation 9: Equal status groups will have greater positive emotion and more cohesion, whereas unequal status groups will lead to negative emotion and less cohesion.

This derivation is a result of the definition of affect (definition 7) and the ninth assumption.

Definition 8: *Commitment* is the attachment an individual feels to a collective entity and is behaviorally defined as the willingness to continue

interaction.

Definition 8 utilizes Kantar's (1968) and Lawler and Yoon's (1996) work on commitment and social groups and organizations.

Assumption 10: Positive emotions and greater group cohesion will lead to more group commitments.

Derivation 10: Groups that are equal will have more commitment towards the group and will be more willing to work together in the future compared to unequal groups (def 8, assumption 10).

This derivation is a result of the definition of commitment and assumption 10.

Assumption 11: Greater commitment reduces uncertainty due to more frequent and predictable exchanges.

Definition 9: *Efficiency* is the accuracy of task outcomes; the number of correct responses relative to total response.

Assumption 12: For groups engaged in tasks that require contributions from all group members, more frequent and predictable exchanges will lead to greater group efficiency.

Derivation 11: Equality in groups will lead to greater efficiency on task outcomes compared to groups that are unequal (def 9 and assumption 12).

Derivation 11 results from the definition of efficiency (definition 9) and assumption 12.

SCOPE CONDITIONS

As an initial study of the creation and operation of stigma, relatively restricted scope conditions are employed. First, groups have no prior history of interaction. They are task oriented and engaged in a collective task where they care about the outcome of the task. This task is not connected to any specific area of expertise and group members initially have equal status. Additionally, groups expect to have future interaction and to work together on other tasks.

CHAPTER IV

RESEARCH DESIGN

OVERVIEW OF METHODOLOGY

The previous section defined the independent variable—behavioral stigma, the dependent variables—group hierarchy, and observable power and prestige variables (which are compliance, action opportunities, task contributions, and influence), and the assumptions and derivations that describe the relationship between these variables. The formal theory suggests that a behavioral stigma in a group will affect the group hierarchy and the observable power and prestige variables, even when the stigmatized person is unaware. To test these formulations, I have designed an experimental test with two conditions. One condition, *Stigmatized*, consists of groups in which one group member is associated with a negatively evaluated behavior. The other condition is a *Control* condition in which group members have no knowledge of others' previous behavior.

To create a behavioral stigma, I needed to find a behavior that would be viewed negatively by the subject population. As an initial test for the strength of disapproval associated with behavior, a short survey was conducted. This survey was administered to 57 respondents who were representative of the subjects in the task group experiments (white, female, undergraduate students). The survey is the first test for the manipulation strength, which was critical to the rest of the study. (Of course, post-experimental manipulation checks were also employed.)

After the strength and validity of the referential belief structure was established the experiment was conducted: groups of three women were randomly assigned to one of the two conditions. There were 20 groups for each condition for a total of 40 groups and 120 participants. In the *Stigmatized* condition, one of the women was randomly assigned to be labeled as “disruptive” in past experiments. This information “mistakenly” became available to the other two women in the group via a scheduling sheet at the beginning of the experiment. In the control condition, group members receive no information about each other.

Groups were then given information and instructions on completing a problem solving task. The task, taken from Johnson and Johnson’s *Joining Together: Group Theory and Group Skills* (2002), is an exercise called *Fallout Shelter*. This task asks participants to imagine that nuclear war has been announced and that the group has access to a small fallout shelter. However, they must decide what resources and supplies they should take to survive during and after the attack. They are then given a list of items and asked to rank them in order of importance for their survival. Group members first rank the items individually and then they are asked to rank them as a group. The comparison between the initial rankings and the group ranking provides a measure of influence. The group ranking task creates a decision making situation in which some controversy will occur among the group members. It is also unlikely that any one group member would be an expert on the task. The exercise has right and wrong answers so that the group can be evaluated and compared to other groups. Also, participants were told

that they would earn a bonus for higher number of correct answers to ensure that they would take the task seriously.

SUBJECTS

Subjects for this study were white female undergraduates who attend Texas A&M University—College Station. Status characteristics such as sex category and race/ethnicity were held constant so that the only differentiating characteristic among group members was the stigma. Subjects were recruited from introductory social science classes (see Appendix A). Individuals who were interested in participating in social psychological studies for the sociology department were asked to fill out a form that included their name, telephone number, major, classification, age, gender, racial/ethnic identity, and a schedule of when would be the most convenient time for them to participate (see Appendix B). Respondents were then separated out by gender and race and ethnicity. Only white women were called to participate in this study while other subjects recruited were asked to participate in other on-going studies. Subjects who participated in the 5-10 minute long survey were paid \$1.00 (see Appendix C), and those who participated in the experiment received \$15.00 for the completion of the task, in addition to a \$5.00 bonus. The experiments took approximately one hour each.

PRETESTING

The study involved two pretests. The first employed 6 groups and established that the *Fallout Shelter* task was appropriate for this study in that it instigated group

interaction and participants found it interesting and were able to complete the task. A second pretest involved thirteen groups and established that the manipulation was taking effect. Both pretests indicated that subjects understood the tasks and could complete them in the amount of allotted time. However, some of the subjects did not report seeing the manipulations. Based on this information, we amended some of the experimental procedures including changing the disruptive label on the information sheet, video-taping the debriefing, and adding a one-on-one interview with each member of the group if a group member did not indicate seeing the manipulation on their post questionnaire. Only groups in which all subjects indicated seeing the manipulation were employed¹.

TASKS

The study involved two parts. The first part required that participants complete the *Fallout Shelter* (see Appendix D) ranking on their own and then a second time as a group. The individual ranking was included for two reasons: all participants would have thought about the task; and the individual ranking could be compared to the group ranking as a measure of the influence of the group

PROCEDURE

120 white females participated in this study. Each group consisted of three subjects. In the experimental groups, one subject was randomly assigned to the

¹ A total of six groups were excluded from the study due to a violation of conditions. In four groups, only one group member indicated that they had seen the manipulations, and two groups were discarded due to experimenter error (digital video tape ran out part way through group task, and a mislabeled information sheet).

stigmatized condition. The study was conducted in the TAMU Social Psychological Laboratory and involved two research assistants. Both research assistants were graduate students in the department. One research assistant, A, was a white female who was responsible for handling the payments and the manipulation of the study while another research assistant B, a white male, instructed the participants for the study and was blind to the manipulation.

When participants came to the social psychology laboratory, they were greeted by the two researchers. Participants were given name tags and informed that they would be participating in a pre-test of a study on group interaction. They were told that there would be some questions concerning the study itself and their experience in the study afterwards and that it would be helpful for them to know the names of their fellow group members. After subjects introduced themselves to one another they were seated in separate cubicles and told that research assistant B was going to go over the informed consent sheets (see Appendix D) for the study while research assistant A was going to go get some paperwork from the main office for them to fill out so that they could be paid at the end of the study (Appendix E contains the scripts used by the researchers for the studies). The informed consent form included information from the TAMU Institutional Review Board and their rights and obligations as subjects. The form also informed the participants the study would be videotaped and how the videotapes would be stored.

Research assistant A then made folders for each participant. A receipt of payment form, a copy of their original scheduling sheet, and copies of the other two group member's scheduling sheets were included in the folder (see Appendix F). In each

folder the payment form was on top and their scheduling sheet was the last page. This was so participants would have to go through all the paperwork to see their form. In experimental groups, the stigmatized person's scheduling sheet was always directly behind the receipt of payment form.

The scheduling sheet form not only allowed for the scheduling of participants, but it also played a part in the experimental manipulation and is the vehicle in which the "stigma" was revealed to the experimental groups. For the purpose of this experiment we made the form into two sheets—the first page contained only a name and phone number while the second page contained respondents' name and all other information concerning their status and schedules. This was primarily done so that we could keep individual's phone numbers private since we would be revealing the scheduling sheet to the other group members and to give more authenticity to the study since the sheets were previously filled out by the participants. However, we also used this as an excuse to have them re-examine their scheduling sheets and to reveal the stigma in the experimental groups.

Once research assistant B indicated they had finished with the informed consent sheets, research assistant A would re-enter the room with the folders. Participants were then told by research assistant A that they had a little more paperwork to fill out before the study could begin so that could be paid at the end of the study. Each participant was handed her own folder to keep personal information private. Participants were told that they should have two sheets in their folder—the first was a form that they would need to fill out to get paid. They were asked to first write their group number and the names of

their fellow group numbers on the receipt of payment form. (This was done so that the group members could further register the names of their fellow group members.) They were then told to finish filling out the form. Once everyone finished with the payment form, participants were told that they should also have a second sheet which was a copy of their own scheduling sheet from when they were originally recruited. They were specifically asked to add their phone number, since this was a copy and did not include the first page of the original form, and to make any other revisions to their schedules should they want to be in future studies.

At this point the group members saw that there were more than two sheets in their folders and generally brought this to the attention of research assistant A. (If no one raised their hand, research assistant A would notice that one participant had extra paperwork—this rarely occurred) At this point, research assistant A, would look over the folder and then ask if the same had happened to anyone else. All of the group members responded, that this “mix-up” had also happened to them after which all of the participants were then asked to set the two scheduling sheets of the other group members aside and to only include their paperwork in the folders. Research assistant A would then individually pick up the folders and leave the other paperwork behind on their desks stating that participants could use it in case they forgot or needed to spell names. Research assistant A, then left the room to take care of the bureaucratic details for paying the participants.

Research assistant B, then handed out the written instructions (see Appendix D) and played a video of the instructions for the task that the subjects would be participating

in. The video instructions were presented by Professor Jane Sell. Participants were also informed that generally groups do better when group members work together and that groups could earn bonus pay if their group did well compared to the other groups.

After instructions were given, research assistant B asked if there were any questions and if everyone understood the task. Once questions were answered (if there were any), research assistant B passed out the task ranking sheet and the participants were given 10 minutes to complete their individual rankings in their cubicles (see Appendix D). Once all of the subjects finished their individual rankings, research assistant B directed them to move to a small round table where they would complete the second part of the study, the group ranking sheet (see Appendix D), and could be videotaped.

Groups were given 20 minutes to complete the group ranking sheet. After groups finished the fallout shelter task, research assistant B would then asked participants to return to their cubicles to complete a questionnaire on the study (See Appendix G), while he tallied their scores on the group task.

Once all participants completed their questionnaires, research assistant B then went over the answers, informed the groups of their group ranking score, and also gave subjects a chance to discuss the task and their efforts. During this time, research assistant A looked over the post questionnaires to see if all information had been filled out. In experimental groups, research assistant A would also check to see if group members saw the manipulation. If the manipulation was not noted, research assistant A would then ask to speak to each group member privately and asked some follow up

questions concerning the information “mistakenly” given to them at the beginning of the study² (See Appendix H).

Participants were then asked to return to the small round table to be paid and learn more about the study. At this time, participants were debriefed (see Appendix I). In a brief explanation, they were told that the study was a study concerning group interaction and stigmas³. In experimental groups, subjects were then given a chance to state if they knew what the stigma was in their group. Research assistant A specifically addressed the “disruptive” label and informed the group that the label was not real. Control groups were informed that they were in fact control groups without a stigma present. Research assistant A then answered any questions and paid the subjects. The subjects were asked to sign a receipt which acknowledged their payment. Each subject received \$15.00 for participation and a \$5.00 bonus for a total of \$20.00.

Once the entire experimental process was complete the videos were then transcribed and coded.⁴ Also, the individual ranking sheets, group ranking sheets, and post study questionnaires were entered into a database and tallied.

² Only three groups received the individual subject interview to further discern whether the manipulation had taken effect.

³ Due to the employment of deception, researchers addressed all questions and concerns of the subjects with attentiveness and care. Deception was a necessary component of this study—without which we would not have been able to generate and follow the effects of a behavioral stigma.

⁴ Coding was performed by two graduate student researchers. Coders used pretest groups to develop a coding schema for observable power and prestige measures. Each group member was coded based on the content of their contributions. The coding schema originally consisted of 14 categories including: directives, reiterations, qualifiers, expert, agreement, disagreement, organization, question of coordination, question of knowledge, interruption, laugh, negative, positive behavior, negative behavior. Word counts and who wrote on the behalf of the group were also noted.

INDEPENDENT VARIABLE

The independent variable for this study is the behavioral stigma. Groups were randomly assigned to either a *Stigmatized* condition or a *Control* condition. However before testing the conditions, I needed to establish the referential belief structure for the behavioral stigma based on the culture at TAMU. This would allow me to choose a behavior on which to base the stigma. The belief structure was tested using a questionnaire that surveyed beliefs about various behaviors of hypothetical fellow group members (see Appendix C). The questions were designed to draw on beliefs about what is currently believed to be true about behavior in task groups. The survey was administered to 57 subjects who represented the population from which experimental subjects were recruited.

Behavioral Stigma

A behavioral stigma is a label that is attached to an individual and is concerned with a deviant behavior—different and disapproved of behavior from the perspective of the group. Based on the referential belief structure survey, I opted to employ disruptive behavior as the basis for the stigma. In the study, the behavioral stigma was manipulated when the subjects “mistakenly” received the scheduling sheets of their fellow group members. The subjects received this information prior to undertaking any tasks and to organizing into their groups.

In the stigmatized condition, a subject was chosen at random to be labeled as having been “disruptive” in past studies. The actual label read:

This person was SO DISRUPTIVE in the Personality Survey, we had to stop the whole thing. Sorry to reschedule her but she was the only one we could find to complete the group for this time.

--H

Appendix F gives an example of this manipulation. In the control groups, there was no label attached to any of the scheduling sheets. In the experimental groups, the label was given to the two non-stigmatized group members only, while the stigmatized group member received scheduling sheets with no labels.

DEPENDENT VARIABLES

The dependent variables in this study are measures of hierarchy, content measure of the group interaction, affect, and efficiency and influence. The degree of hierarchal structure is measured through observable power and prestige components analyzed from the recorded group interactions while working on the group task. Influence was measured by comparing the individual rankings of each group members to the final group ranking. Affect measures are taken from the post study questionnaire responses, while efficiency measures are based on how correct groups were on the group task ranking in the allotted amount of time.

Hierarchy and Group Content Measures

As previously mentioned, status hierarchies in groups can be measured by employing components of observable power and prestige (OPP) which include task contributions, action opportunities, influence, and compliance. These components are

based on observed behavior during group interactions and, in the case of influence, measures of change from the individual rankings to the group ranking. This study measures directives given, number of agreements, disagreements, questions, and qualifiers. It also examines various action rates including laughter, positive and negative behaviors, and word counts. These variables are taken from procedural and substantive statements made by participants during their interaction on the group task.

Directives are commands asserted to control the discussion or activity and they are generally employed by higher status group members (Zelditch and Walker 1984). Because they are attempts to control the interaction, I expect that participants who have not been associated with the stigma would have more directives than stigmatized participants. Lower status individuals also are more likely to accept or comply with directives made by higher status individuals. Acts of compliance include verbal and behavioral compliance, along with silence—or not objecting to a directive. For the purpose of this study, only verbal acts of compliance are tallied so as to not include any assumptions concerning the intent behind a group member's silence or behavior. If group members have great differences in the amount of compliant acts this would indicate greater inequality than if the compliance rates are similar. In contrast to acts of compliance, disagreements are actions which indicate disapproval and challenge another group member's suggestion. Disagreements are relatively rare in newly formed task groups (for discussion, see Goar and Sell, 2005) as they signal conflict. I expect that groups with stigmatized individuals will be characterized by more disagreements for group members would also indicate greater inequality in group status hierarchies.

Questions⁵ and qualifiers are statements that are considered as “passive” behavior and are attributed to lower status group members (Johnson 1993). Lower status group members are more likely to ask for suggestions and information rather than give suggestions and information. Likewise, they are more likely use qualifiers which indicate uncertainty and doubt when making suggestions compared to higher status group members. Examples of qualifiers include comments like: “I’m not sure, but I think...;” “Maybe this is wrong, but I think...; or “..., but I don’t know.” I expect that stigmatized individuals will have greater number of questions and qualifiers than those who are not stigmatized.

In addition to questions and qualifiers, I also measured the number of reiterations of previous directives and claims of expertise. These would be examples of “proactive” behaviors. I reason that lower status group members will be more likely to draw on these behaviors when voicing their opinions as to reinforce their points because they have to order to attempt to influence others.

This study also examined positive and negative behaviors. Positive behaviors included laughing, paying a compliment to someone, and various hand gestures including “high-fives” or “thumbs-ups.” Negative behaviors would include items such as putting someone down, rolling eyes, using sarcasm, etc.

Lastly, word counts are employed as a measure of action rates and used as general measure of hierarchy. Individuals in groups are differentiated based on

⁵ The content of questions is also considered. For example rhetorical questions and questions concerning consensus do not necessarily signal compliance or passivity and as such these forms of questions will not be considered for the variable measuring questions.

performance expectations, when this occurs higher status individuals tend to take and receive more opportunities to speak than do lower status individuals (Johnson 1994). It was also noted as to who organized⁶ the group and filled out the group ranking form.

Each of the previous components of observable components of observable power and prestige demonstrates different forms of group dynamics. As such, this study also considers an aggregate group level measure which will indicate how the overall group interactions differ based on condition. In order to identify the degree to which groups are more or less hierarchal, this study will employ measures of within group stratification based on differences between the most active group member only and the most active group member versus the each of the other two group members. These three measures provide a “standardized” measure of within group stratification based on the calculated proportions of the group totals where a measure of 0 represents perfect inequality and 1 represents perfect equality within the group.

Affect

As already noted, measures of affect were taken from the post study questionnaire responses and modeled after Izard (1991), Lawler and Yoon’s (1993, 1996, 1998), and Lawler et al.’s (2000) well established research on emotion and commitment. Developed by Izard (1991), Lawler and his colleagues have employed a series of bipolar word sets which are polarized on a 10 point continuum. There are three general categories for the word sets including pleasure/satisfaction, interest/excitement,

⁶ The measure for organizer of the group was (based on organization directives and questions of coordination such as: “what did y’all put for the first one?” and “now all we need to do is 14 and 15.”

and group cohesion. The pleasure/satisfaction index employs word pairings which indicate how gratified one feels about one's interactions. The interest/excitement index indicates how energized one feels about one's group interactions, while the group cohesion index offers a measure of how included individuals feel in the group and group solidarity. For the first two indexes concerning satisfaction and excitement, lower numbers represent greater positive emotion while higher numbers represent more negative emotion. For the group cohesion index, higher numbers represent greater cohesion.

Factor analysis was employed to create affect indexes drawing on these measures of emotion and cohesion. For the purpose of this study, the post questionnaire posed only the pleasure/satisfaction index concerning the subject's feelings about their own performance and the performance of the other two group members, while all three indexes were posed concerning the overall group interaction. Once factor analysis confirmed the appropriateness of my indexes for my model, t-tests were then conducted to compare responses to the affect index based on the conditions upon which individuals were assigned to and whether or not they were stigmatized.

Commitment

Group members also self-reported on the post questionnaire whether or not they would like to work with their group and fellow group members in the future. They could answer: yes, no, or unsure when asked about working with the same group and working with person 1 and person 2. These three questions allowed for the commitment measures.

Efficiency

Efficiency measures are based on how correct groups were on the group task ranking in the allotted amount of time. This measure was created by taking the absolute difference between the groups final ranking answers for each question and comparing them to the “correct” answers as defined by the Department of Defense.

Given the measures discussed above, I can now translate the theoretical derivations into hypotheses.

HYPOTHESES

The hypotheses are as follows:

Hypothesis 1: In Stigmatized groups, there will be higher levels of disagreements

than in groups where a stigma is not present.

The first hypothesis is taken directly from the first derivation which states that if an individual has a stigma, group members will then express their disapproval throughout their interaction.

Hypothesis 2: There will be higher levels of agreement in Control Groups than in Stigmatized groups.

Hypothesis 2 is derived from the first two derivations which state that stigmas generalize across time and that the disapproving nature of the stigma will lead to the stigmatized group member being accorded less compliance by the rest of the group.

Hypothesis 3: A stigmatized group member will be accorded less action

opportunities and, thus, act less than a group member who is not stigmatized.

This hypothesis is derived from the first and third derivations which assert that the disapproval associated with the stigma over time will lead to less action opportunities for the stigmatized group member, and as a consequence fewer action opportunities, and consequently less actual actions taken by the stigmatized group member as compared to other group members.

Hypothesis 4: The person who is associated with the stigma will have less influence than a group member who is not associated with a stigma.

This hypothesis is derived from derivations 1 and 4 which state the disapproval associated with the stigma over time will lead to the stigmatized group member having less influence by the rest of the group.

Hypothesis 5: Groups where a stigma attaches to a group member will form group hierarchies with greater inequality than in groups without the presence of a stigma.

The fifth hypothesis is based on derivations 1, 2, 3, and 4 which specify the relationship between hierarchy formation and the manner in which status is derived. Because the stigmatized group member will be accorded less influence, action opportunities and compliance than other group members, the entire group will be characterized with greater inequality than in groups without a stigma.

Hypothesis 6: The stigmatized individual will have more negative affect

toward herself than a group member who is not stigmatized

Hypothesis 6 is derived from derivations 1, 5 and 6 which specify the relationship between how status is derived by the group and the socio-emotional feelings associated with status.

Hypothesis 7: The stigmatized individual will have more negative affect toward the group, compared to other group members.

This hypothesis is derived from derivations 1 and 7 which assert that the disapproving nature of the stigma over time will lead to the stigmatized person having negative self-affect stemming from group interactions which will also generalize to negative affect towards the group.

Hypothesis 8: Group members will have more negative affect towards the stigmatized group member relative to the other group members.

Hypothesis 8 is derived from derivations 1 and 8 which state that the disapproved of behavior will lead to group members having negative affect towards the person the behavior is associated with.

Hypothesis 9: Stigmatized groups will be characterized by more negative affect toward the group than Control groups.

This hypothesis is derived from derivations 1, 8, and 9 which specify that the disapproved of behavior will lead to group members having negative affect towards the person the behavior is associated with and as a result also having less positive affect toward the group compared to a group without a stigmatized group member.

Hypothesis 10: Stigmatized groups will be less cohesive than Control groups.

This hypothesis is also derived from derivations 1, 8, and 9 which specify that stigma will lead to group members having negative affect towards the person the stigma is associated with and the resulting inequalities in status among group members will lead to negative emotion and less cohesion than in equal status groups.

Hypothesis 11: Stigmatized group members will have less commitment than
Control group members

Hypothesis 11 is derived from derivations 1, 8, 9, and 10 which stipulate that the negative affect towards the stigmatized person, the resulting inequalities in status among group members which lead to negative emotions and less cohesion in the group will also lead to less group commitments and to group members being less willing to work together in the future compared to the groups with equal status members.

Hypothesis 12: Stigmatized groups will be less efficient than Control groups.

The final hypothesis is derived from derivations 1, 8, 9, 10, and 11 which specify that the negative affect towards the stigmatized person, the resulting inequalities in status among group members, the negative affect toward the group as a whole, less group cohesion and commitments, all, will lead to less efficiency on task outcomes for groups containing a stigmatized person as compared to those that do not.

CHAPTER V

RESULTS

REFERENTIAL STRUCTURE – STIGMA

To experimentally generate a stigma, I first had to find a behavior that was disapproved of by the group from which participants would be chosen. To do so, I created and administered a short survey (see Appendix C) to 7 undergraduate social science classes at TAMU. Because white, female undergraduates were to be participants in the study, I employed only the responses from the fifty seven white females in these classes. The survey consisted of relatively abstract statements concerning various types of behaviors—some statements included context for the behavior while others were behaviors in general. Respondents were then asked to rate the behaviors on an eleven point scale where 1 represented strong disapproval, 11 represented strong approval, and 5 was neutral. More specifically, respondents were asked to assume that they were working on a paid task with two others whom they had just met. They were then asked to indicate the degree to which they approved or disapproved of a group member's behavior. The results of the survey are presented below in Table 1.

Table 1. Behavioral Approval Ratings for White Female Undergraduates:
Means and Standard Deviations of Referential Structure Survey

Dependent Variables	Mean	Std Dev	Min	Max
In General				
Disruptive	3.1	1.20	1	5
Focused	10.3	0.88	8	11
Punctual	10.2	1.21	6	11
Does not follow directions	2.9	1.52	1	7
Tardy	4.1	1.53	1	8
Organized	9.9	1.83	2	11
Profanity at work	3.4	1.81	1	7
Served time in prison	4.2	1.61	1	7
With Context				
Disruptive to the point of cancellation	1.5	0.93	1	5
Disorganized during task	3.4	1.62	1	6
Loud and rowdy during task	3.1	1.58	1	8
Burglarized dorm room	1.4	0.69	1	4
Cheated in class	2.0	1.33	1	6
Quiet and calm during task	8.7	1.59	4	11
Disorganized at home	6.0	1.14	2	10
Profanity on phone	2.0	1.43	1	6
Cheated during task	1.8	1.25	1	6
Loud and rowdy at parties	6.3	1.84	2	11
N = 57				
Age	20.5	2.00	18	29

* Scale from 1-11 where 1 is strong disapproval, 11 is strong approval, and 6 is neutral.

The mean response demonstrates that a group member being disruptive is fairly negative with a mean score of 3.05 on the scale, while set in context and being disruptive to the point of a meeting needing to be rescheduled is 1.46 on the eleven point scale. In fact, being disruptive during a task rates as the second most disapproved of behavior tested. Only burglarizing a dorm room is viewed with more disapproval, however, these two behaviors are not statistically different. Respondents found that being punctual, focused, and organized in general were the most approved of behaviors, while serving time in

prison had a mean rating of 4.19 on the scale—and fairly close to neutral. It is also interesting to note that when behaviors set in context are rated much higher or much lower than the general behaviors.

CODING

All group interaction was recorded, transcribed, and coded for content. Coding was performed by two graduate student researchers—one was a white female while the second was a white male. They were blind to the condition they were coding. Coders used pretest groups to develop a coding schema for observable power and prestige measures. Each group member was coded based on the content of their contributions. The coding schema originally consisted of 14 categories including: directives, reiterations, qualifiers, claims of expertise, agreement, disagreement, statements that organized the task, questions of coordination, questions of knowledge, interruption, laugh, negative comments, positive behavior, and negative behavior. Word counts and who wrote on the behalf of the group were also noted.

RELIABILITY CHECKS

Reliability was assessed for each group member and calculated for each variable by dividing the mean value of both coder scores by the higher value⁷. During the practice of coding of pre-test groups it was evident that some of the categories would need to be dropped due to either low reliability or infrequent use of the category. Once all groups were coded, reliability was calculated for all participants and analyses were conducted for categories that were greater than 75% reliable. The coding reliabilities are listed below in Table 2.

Due to low reliability, qualifiers, negatives, and negative behaviors will be dropped for the analyses. Claims of expertise are also borderline unreliable due to the low number of occurrences.

⁷ There are different measures of reliability. Such an agreement measure is not always warranted. However, in this case, there is a low probability that both coders would agree on a selection by chance alone due to the numerous categories—fourteen, in addition to having an option for no code.

Table 2. Coder Reliability for Observable Power and Prestige Measures

	Position	Coder 1	Coder 2	Average	Reliability
Directive	L	1607	1480	1543.5	96.0%
	M	1667	1533	1600	96.0%
	R	1762	1595	1678.5	95.3%
Reiteration	L	121	207	164	79.2%
	M	126	225	175.5	78.0%
	R	167	225	196	87.1%
Qualifier*	L	135	37	86	63.7%
	M	173	41	107	61.8%
	R	105	28	66.5	63.3%
Expert*	L	11	5	8	72.7%
	M	4	4	4	100.0%
	R	4	7	5.5	78.6%
Agree To	L	214	332	273	82.2%
	M	246	358	302	84.4%
	R	209	381	295	77.4%
Disagree With	L	48	34	41	85.4%
	M	32	24	28	87.5%
	R	38	25	31.5	82.9%
Organize	L	151	153	152	99.3%
	M	128	129	128.5	99.6%
	R	160	155	157.5	98.4%
Question-Knowledge	L	211	123	167	79.1%
	M	152	84	118	77.6%
	R	168	108	138	82.1%
Question-Coordination	L	327	428	377.5	88.2%
	M	375	443	409	92.3%
	R	437	527	482	91.5%
Interrupted By	L	238	269	253.5	94.2%
	M	221	272	246.5	90.6%
	R	245	306	275.5	90.0%
Laugh	L	116	115	115.5	99.6%
	M	99	116	107.5	92.7%
	R	104	129	116.5	90.3%
Negative*	L	0	1	0.5	50.0%
	M	0	0	0	100.0%
	R	0	1	0.5	50.0%
Behavior (+)	L	20	33	26.5	80.3%
	M	26	35	30.5	87.1%
	R	24	30	27	90.0%
Behavior (-)*	L	4	0	2	50.0%
	M	12	2	7	58.3%
	R	9	0	4.5	50.0%

* Variable dropped from Analyses due to low reliability.

MANIPULATION CHECKS

There were seven checks to ensure that scope conditions were met and that the experimental manipulations were viewed by the specified group members. The first check was to ascertain that group members had no previous history of interaction. Occasionally, we would get two group members who had a class together or lived in the same dorm or apartment complex. When this occurred the research assistants made sure to inquire as to how much previous interaction had occurred. If there was anything beyond occasionally seeing the person (in the parking lot, at their place of work, or in a large lecture class⁸), all three participants were paid for showing up and rescheduled for a different times and to different groups.

The next three checks were to make certain that specified group members had seen the experimental manipulation—that they had see the label that stigmatized one of their fellow group members. These three checks were on the post questionnaire and asked about what group members knew about one another. They were asked to fill in the blanks for their fellow group member's names, age, and whether they had been in any past studies—and if so which one. This would ensure that they had viewed the informational sheet concerning their fellow group members. This was also important in ascertaining whether or not group members had associated the negative label to the correct group member. However, this did not gauge whether they had actually read the label.

⁸ Group members who had been in small or discussion based classes together were also rescheduled.

The next two checks involved making sure that the participants had viewed and understood the directions for the study and task they would undertake. Participants were asked about bonuses and about information about the task. All respondents correctly answered these two questions.

While most participants indicated that they had viewed the information sheet where the stigma was revealed, the last manipulation check occurred if a respondent had not so indicated. While the researcher who was blind to the condition was “tallying” the scores for the group task, the other researcher would pick up the questionnaires. In doing so, she would glance over the above mentioned manipulation checks. Should it appear that one respondent had failed to note that she had seen the information sheet and thus the stigmatizing label; the researcher would then inform the respondents that they would next have a brief individual interview in which they were asked 3 follow up questions (see Appendix J). The researcher asked each respondent individually: “what else did you know about people in your group, did you have any information about other studies that people may have been in, and did you happen to read the extra scheduling sheets that I mistakenly provided to you?” After which she stated, “because I made a mistake, and it’s just important for us to know.” The individual interviews were only necessary on three occasions. It should also be noted that there were no cases where both nonstigmatized group members failed to see the information sheet of the stigmatized person. Had this happened, we would have skipped the individual interview and the group would be discarded as not meeting scope conditions.

PRIMARY RESULTS

My hypotheses suggest that a stigma will be created by associating a group member with disapproving behavior. Furthermore, this association will be generalized across time and have an effect on group behaviors, hierarchies, affect, and task outcomes. To address the hypotheses, I performed t-tests and compared means for the dependent variables⁹. T-tests are appropriate given that I have but two treatments or conditions and my dependent variables are interval level. Table 3 illustrates my findings by group and Table 4 illustrates my findings for individuals within Stigmatized groups.

⁹ STATA software was employed for all statistical analyses.

Table 3. Group t-test Results

	Stigma Mean (std dev) N=20	Control Mean (std dev) N=20	t	p-value (one tailed)
H1: Disagreements	1.22 (1.75)	0.46 (0.78)	-3.06	0.001
H2: Compliance				
Interruptions	8.71 (11.5)	4.21 (6.95)	-2.60	0.005
Reiterations	4.38 (2.84)	4.55 (3.30)	0.31	0.378
H5: Hierarchy				
Directives	0.79 (.07)	0.83 (.09)	1.51	0.069
Reiterations	0.66 (.14)	0.68 (.14)	0.65	0.258
Agreement	0.72 (.14)	0.74 (.12)	0.58	0.282
Disagreement	0.58 (.21)	0.59 (.28)	0.19	0.424
Organize	0.51 (.12)	0.55 (.14)	0.96	0.172
Question-Knowledge	0.64 (.14)	0.62 (.14)	-0.33	0.371
Question-Coordination	0.62 (.16)	0.62 (.14)	0.07	0.471
Interruptions	0.65 (.24)	0.79 (.22)	1.90	0.032
Laughs	0.75 (.20)	0.89 (.14)	2.68	0.005
Positive Behaviors	0.70 (.30)	0.80 (.27)	1.45	0.078
Word Count	0.71 (.13)	0.73 (.13)	0.44	0.332
H9: Group Affect Toward Group				
Unhappy	31.3 (4.81)	32.4 (4.39)	1.29	0.100
Bored	22.2 (9.09)	18.3 (7.69)	-2.47	0.007
H10: Cohesion	39.2 (6.96)	40.4 (7.40)	0.91	0.183
H11: Commitment	8.0 (1.83)	8.6 (1.33)	2.11	0.018
H12: Efficiency	52.8 (8.40)	52.1 (8.64)	-0.45	0.327

Observable Power and Prestige

The numerous components of the observable power and prestige orders show different dynamics of group interactions, how group hierarchies can be formed, and thus creating status. After examining the coder reliability, I was able to employ ten of my observable power and prestige measures as dependent variables to represent these various dynamics. As previously mentioned, I was unable to employ qualifiers, claims of expertise, negative comments, and negative behaviors due to low inter-coder reliability.

The first hypothesis states that stigmatized groups will have higher levels of disapproval than in nonstigmatized groups. This hypothesis was tested by comparing the Control and Stigmatized groups on average number of disagreements. On average, stigmatized groups had 1.22 disagreements among the group members, compared to .46 disagreements in nonstigmatized groups. This is a statistically significant difference with a t of -3.06 and a p -value less than .01. Another interesting finding is that on average stigmatized group members disagreed with their fellow group members 1.53 times during the interaction while nonstigmatized members averaged .7 disagreements during their interactions. This is also a statistically significant. Thus, I find support for my first hypothesis.

The second hypothesis states that there will be less compliance and more disruption in stigmatized groups compared to the control groups. To measure compliance, I looked at interruptions and reiterations. With regards to interruptions, stigmatized groups had a mean of 8.71 interruptions during their task while control

groups had on average 4.23 interruptions. This is a statistically significant difference with a t of -2.60 and a p -value less than .01. I found no statistical difference in means between the stigmatized and control groups for reiterations however, when looking solely at stigmatized groups and the means between the stigmatized individual and the nonstigmatized group members, there was a significant difference on rates of reiterations. As theory would predict, stigmatized individuals reiterated their points at a higher frequency than did nonstigmatized group members within the stigmatize groups. Stigmatized group members had on average 5.8 reiterations during their interactions while nonstigmatized group members had 3.7 during their interactions¹⁰. Overall, I find support for hypothesis 2.

The third hypothesis states that a group member who is associated with a stigma will be allowed less action opportunities and thus act less compared to group members who are not associated with the stigma. Unlike the previous two hypotheses tests, this hypothesis requires looking only at the group members within stigmatized groups. As can be seen in Table 4, I looked at three different dependent variables for this hypothesis—the number of directives a group member had during the interaction, the number of times a group member organized the task during the interaction, and a word count for each member during the task. As can be seen in table 3, none of the means between the stigmatized individual and the nonstigmatized group members are significantly different. The hypotheses concerning the amount of interaction are not supported. This suggests that the stigmatized individuals do act as frequently as other

¹⁰ $t = -2.86$, p -value < .01

group members. However, the content of those interactions is more telling. For example, perhaps a stigmatized group member offers a directive three times because the group does not “hear” the directive and continues to discuss the matter at hand while other group members offer 3 different directives or perhaps length of speaking time or how often someone speaks would be more telling than how many words they use.

Table 4. Individuals within Stigmatized Groups t-test Results

	Stigma Mean (std dev) N= 20	Nonstigmatized Mean (std dev) N=40	t	p-value (one tailed)
H3: Action Opportunities				
Directives	39.00 (22.3)	38.52 (14.6)	-0.10	0.461
Organized	12.38 (10.32)	14.27 (9.88)	0.69	0.247
Word Count	762.60 (518.23)	695.13 (317.71)	-0.62	0.178
H4: Influence	37.6 (27.3)	28.9 (12.35)	-1.71	0.047
H6: Self Affect	31.7 (5.03)	28.8 (6.19)	-1.85	0.035
H7: Affect Toward Group	32.7 (4.37)	30.6 (4.92)	-1.60	0.058
H8: Nonstigmatized Group Members Affect Toward	12.13 (8.5)	9.84 (6.24)	1.70	0.049

Hypothesis 4 predicts that stigmatized group members will have less influence in the group compared to their nonstigmatized members. To test this hypothesis, I compared the scores from the individual ranking task to the group task. I created a scale in which I was able to count how far off individuals were from their original individual ranking from the final group ranking. Higher scores indicate that individuals had greater change from their individual score to the group ranking score. Lower scores indicated less change from a participant's original score on the individual ranking sheets to the final scores on the group ranking sheets. This also indicates that individuals with greater change between their scores would also have less influence with in the group—whether through silence or verbally challenging the group and losing their claim. The t-test for the measure of influence indicates a statistically significant difference between stigmatized group members and nonstigmatized group members with a t of -1.71 and a p-value of less than .05. On average, stigmatized group members were off by 37.6 points from their individual ranking score compared to the group ranking score, while nonstigmatized members were off by 28.9 points on average. Hypothesis 4 is supported.

The fifth hypothesis states that stigmatized groups will form group hierarchies with greater inequalities than the control groups. To test this hypothesis, I first created a scale for each of the reliable measures of observable power and prestige measures in which perfect equality would be represented a score of 1, while perfect inequality would be represented by 0¹¹. I next ran t-tests with the eleven observable power and prestige

¹¹ This measure was adapted from Sell et al. 2000. This equality scale divides the amount of perfectly equal interaction of a group (33% for groups with the members where perfectly equal interaction would be 1 contribution for every 3 members) by a baseline proportion of the person with the highest contribution on the measure. For example assume group member L, M, R, had the following scores on directives

equality measures (see Table 3). While not all measures were statistically significant, all appeared to have the expected directionality in which stigmatized groups were farther away perfect equality with a score of 1 and closer to 0 suggesting greater inequality compared to the control groups. Only measures of interruptions, laughs, and positive behaviors were significantly different between stigmatized groups and control groups with a p-value of less than .05. Also, directives were borderline and significant at a p-value of less than .1. Thus, I find some support for this hypothesis that stigmatized groups have greater inequality with regards to interruptions, laughter, and other positive behaviors than did the control groups. One other interesting finding to note is that the greatest difference in equality between the two groups was negative behavior. As noted previously negative behavior was dropped from my formal analysis due to its low reliability (and most likely due to the infrequency of this type of behavior). However, it should be noted that there were 14 instances of negative behavior and all but 2 of those instances occurred in stigmatized groups. Of the 20 stigmatized groups, half reported at least one instance of negative behavior, while only 2 of the 20 control groups (10%) reported at least one instance of negative behavior. Such negative behaviors included rolling eyes, death stares, and sarcasm.

Affect

For hypotheses 6-10, confirmatory factor analysis was employed to create the affect and cohesion scales for my dependent variables taken from the post questionnaire

respectfully: 51.5, 35.5, 39 for a group total of 126 directives during the interaction. L has the highest proportion of interaction in the group, L has given 40% of the directives in this group. In a perfectly equal group, we know that L would have only given 33% of the directives. Thus, I divide L's proportion of group interaction in the proportion for perfect equality in a 3 person group and receive .83 on the scale from 0 to 1.

survey. The factors were derived from bipolar adjective indexes developed by Izard and used by Lawler, Thye and Yoon, 2000. I employed a .5 loading standard and rejected loadings for the factors that were at or lower than this standard based on both theoretical and empirical criteria. This is a conventional cut-off to form the scales and ensure that the items clearly and strongly loaded on each underlying factor (Kim and Mueller 1978). The results yielded three factors—an unhappiness scale, an unmotivated scale, and a cohesion scale. For each of the three scales, I also conducted an alpha reliability analyses to assess internal consistence of each scale. For each scale, there was great improvement from my saturated model to the factor model and my reliabilities were very high with alpha scores all above .90 (See Appendix Table 3)

With regards to the cohesion scale for group interaction, I did drop 2 variables from the analysis, namely the distant/close and teamwork/self-oriented variables. I opted to drop the distant/close variable because it was found to be a better fit in the interest/excitement factor which is not theoretically consistent and was found to be a micro unit off from the .5 threshold in which I based my analysis. While it could be rounded up, I opted to eliminate it. Also, the teamwork/self-oriented variable did not meet the .5 cut-off and was thus not incorporated. Table 4 shows my findings for Hypotheses 6-12.

Hypothesis 6 states that stigmatized individuals will have more negative affect toward their performance than group members who are not stigmatized. Higher numbers indicate more negative affect. The mean for the stigmatized group member is 31.7 on the index concerning how happy they were with their performance on the task compared to

28.75 for their fellow group members. The t-test for this hypothesis indicates a significant difference between the two means with a t of -1.84 and a p-value less than .05. Hypothesis 6 is supported.

The seventh hypothesis states that the stigmatized group member will have more negative affect toward the group as a whole compared to those in the group who are not stigmatized. I found that on average, stigmatized members rated their unhappiness about their group interaction at 32.7 while nonstigmatized group members rated their unhappiness with the group interact at 30.6 with a t of -1.6 and a p-value less than .1. While this analysis employs a less conservative p-value, I believe it does offer appropriate support for my hypothesis. Additionally, the mean unhappiness for members in the control groups was 32.4. This is interesting as it suggests that it is the presence of the stigmatized person that seems to perpetuate the unhappiness.

Hypothesis 8 predicts that within stigmatized groups, group members who are not stigmatized will be less happy with the stigmatized group member compared to the nonstigmatized group member. Results indicate support for this hypothesis: On average, group members rate their unhappiness with the stigmatized member at 12.1 while they rate their unhappiness with nonstigmatized members at 9.84. A t-test indicates this is a statistically significant difference with t of 1.70 and p-value less than .05.

The ninth hypothesis asserts that groups which contain a stigmatized group member will have more negative affect toward group interactions compared to groups without a stigmatized group member. For this hypothesis, two t-tests were employed comparing group means on how groups reported their feelings toward their group

interaction on the unhappiness and boredom indexes. With regards to negative affect and the unhappiness measure, Stigmatized groups rated their group interaction as 31.3 on average compared to Control groups who average 32.4 on the unhappiness index. This is significant at the .1 but not .05 level. In addition, the level of unhappiness with the group interaction is more negative for Control groups than for Stigmatized groups. This is unexpected with regards past theory and does not lend support to hypothesis 9.

The second t-test for hypothesis 9 addresses the question as to who found the group interaction more boring—individuals in Stigmatized groups or individuals in Control groups. With a t of -2.47 and a p-value less than $< .05$, there is a significant difference in the mean ratings of the two groups on the boredom scale. Individuals in Stigmatized groups rated their group interaction as 22.1 on the scale, while individuals in Control groups rated 18.3 indicating that group members in Control groups found the group interaction to be less boring than did group members in the Stigmatized groups on average. This is an expected finding and does offer some support to hypothesis 9. Consequently, I find only partial support for hypothesis 9.

The tenth hypothesis states that Stigmatized groups will be less cohesive than Control groups. On average, Stigmatized groups report a mean of 39.2 on the cohesion index while Control groups report a mean of 40.4. This is not a significant difference, and does not support hypothesis 10.

Hypothesis 11 states that group members in Stigmatized groups will have less commitment toward their group than group members in Control groups. This hypothesis was tested by comparing the two groups' averages on the commitment measure which

asked participants to rate on a scale of 1-11 whether they would want to continue to work with the same group in the future or not. Group members in Control groups rated their commitment 8.6 on average. This was a significant difference from group members in Stigmatized groups who rated their commitment to the group 7.9 on average, with a t of 2.11 and a p -value less than .05. Thus, I find support for hypothesis 11.

The final hypothesis states that Stigmatized groups will be less efficient and accurate at their task compared to Control groups. I tested efficiency by scoring the group rankings on the Fall Out Shelter task based on how far off (in absolute numbers) they were for each question from the correct answer. On average, Stigmatized groups scored 52.8 on the task, while Control groups scored 52.1 on average. These two means are both relatively low and not significantly different from one another. Thus, I find no support for the final hypothesis.

SUMMARY OF RESULTS

The stigmas that were created did have effects. But the observable power and prestige effects were much more pronounced for measures of content versus measures of amount of interaction. In terms of measures between groups, Stigmatized groups were characterized by more disapproval, fewer agreements and more interruptions than were Nonstigmatized groups. Further, those who were stigmatized had less influence than other group members.

In terms of feelings, I found support for the hypotheses suggesting that stigmatized individuals rate both themselves and their groups more negatively than do

nonstigmatized group members. Also, those who were not stigmatized rated the stigmatized person more negatively than others.

While there were no differences between Stigmatized and Control groups relative to happiness or group cohesion, those in the Control groups were more committed to their groups than were those in the Stigmatized groups.

Finally, efficiency measures were quite low, and there were not significant differences between Stigmatized and Control groups.

CHAPTER VI

SUMMARY AND CONCLUSIONS

To be stigmatized is to be devalued. Once individuals are devalued, all matter of discrimination and subjugation can follow. Consequently, a fuller understanding of the creation and operation of stigma is critical for understanding how such processes might be diminished or even eliminated. I have examined a particular type of stigma, behavioral stigma, a label that obtains from past behavior and sought to examine the effects of such a stigma in the operation of task groups with regards to both behavior and affect of the stigmatized individual and the other group members. Additionally, I examine the creation and developmental process of stigma because, in the particular theoretical case I consider, the stigmatized individual is initially unaware of the stigma. This study is interested in how people behave when they become stigmatized and how the others will then treat them and how this will then affect the group as a whole. It also explores one avenue by which diffuse status characteristics might be created.

My predictions were tested via an experiment that made it possible to control the type and strength of the stigma as well as group members' awareness of the stigma. I first assessed the relative strength of the stigma and then employed an experiment with two conditions. Three participants, initially equal in status such as age, ethnicity and sex category, were either randomly assigned to groups in which two group members were informed about a behavioral stigma of the third member or to groups with no information about any previous behaviors of its members.

This study is the first one that actually “creates” a stigma and the first that considers the question of how such a stigma affects the unknowing possessor. The formal theory is based upon the perspective that the definition of self is constructed, to a large degree, upon the actions of others. Although the interaction we consider is short, the results indicate an intense process by which the stigma label creates a stigmatized person and group interaction defined around it.

Although the stigmatized person is unaware, she was “uncomfortable” as indicated by her ratings about herself and about the group. Some of the predictions concerning some of the traditional measures of observable power and prestige, action rates and directives were not supported. Indeed the stigmatized person seems to talk as much and to give directives as often as others. In fact, ironically, one apparent reason this occurred is because the stigmatized person could not seem to “get her point across” and so had to reiterate. But, the content measures of observable power and prestige did show the predicted differences. Although the stigmatized person acted often, she was also interrupted and disagreed with often. In fact, stigmatized groups evidenced much higher rates of disagreement than did groups that contained no stigmatized person. This is as predicted, but is especially interesting given the (usually) very low numbers of disagreements in newly formed task groups. The groups that contain a stigmatized person are very different from most groups that have been experimentally investigated.

There was no difference in efficiency between the two groups. While I had predicted that groups with a stigmatized member would be less efficient than the control groups, this was predicated on the idea that when interactions are problematic (such as in

the stigmatized groups), task completion was more difficult. However, the results indicate that the stigmatized group member had little influence in the final rankings. So the lack of difference may result from a tacit coalition between the nonstigmatized group members.

Stigmatized group members had higher levels of negative affect toward their performance and toward the group performance compared to the Control group members, while nonstigmatized group members had higher level of negative affect toward the stigmatized group member compared to nonstigmatized group members.

Perhaps, the strongest indicator of how a label effected group interaction was encompassed by the commitment measure in which respondents were asked whether they would like work with fellow group members in the future. Specifically, those in the control conditions were much more favorable about working together in the future.

THEORETICAL EXTENSIONS

This study contributes to several theoretical areas. I used the insights from a vast literature on stigmas to try to create a formal framework that might delineate among different kinds of stigmas and different processes by which they might operate. Second, I employed expectation states theory, a well established theory, to provide a general approach to the issue of group processes and the “spread” of stigma. I also import the insights from the theory of relational cohesion to address participants’ affect toward their self and others.

The results give credence to my formulation. They also provide insight for further theoretical and empirical elaborations. People do react to the label of a disapproved of behavior rather than the actual behavior of the person, regardless of whether it is true. Furthermore, the reaction creates an actual stigma—the label becomes true. The “stigmatized” person was treated as one of lower status and reacted accordingly. One piece of striking evidence of this occurred with disagreements. Those in groups that were composed of a stigmatized person were characterized by high numbers of disagreements. In addition, the odds of a person associated with a stigma disagreeing with another member or the group was 33% higher than those who were not associated with a stigma in the group.

There are several theoretical questions that are suggested by this research. First, it would be important to examine the dynamics of stigmatization. These groups are relatively short-lived but in observing the interactions, it seemed that the stigmatization definitely had a time trajectory. Initially, the stigmatized person seemed to act often—offering opinions frequently. However, when others did not acknowledge or actively disagreed, the stigmatized person might try other kinds of strategies. This process would be important to examine. It may be that some kinds of strategies might be more useful in overcoming the stigma than others. For example, displaying “group motivation” is usually a strategy that helps low status interactants (see Ridgeway, 1982). Consequently, there might be some kinds of statements that might “win over” group members. Directives would probably not be such statements.

This study contributes to the large literature on stigma by examining one kind of stigma. It also contributes to several established literatures in social psychological theory. My theory and results have implications for the power of the social construction of stigma and consequently for the power of social construction in the dismantling of stigma.

REFERENCES

- Berger, Joseph, Bernard P. Cohen, Morris Zelditch Jr. 1966. "Status Characteristics and Expectation States." in Berger, J. Zelditch Jr., M. Anderson, B. (eds) Sociological Theories in Progress. Vol. 1:29-46. New York: Houghton Mifflin
- Berger, Joseph, Thomas Conner, and M. Hamit Fisek. 1974. Expectation States Theory: A Theoretical Research Program. Cambridge, MA: Winthrop.
- Berger, Joseph and Cecilia L. Ridgeway 1986. "Expectations, Legitimation, and Dominance Behavior in Task Groups." American Sociological Review. 51(5):603-617.
- Berger, Joseph, Cecilia L. Ridgeway, M. Hamit Fisek, Robert Z. Norman, 1998. "The Legitimation and Delegitimation of Power and Prestige Orders." American Sociological Review. 63 (June:379-405).
- Burke, Peter. 1991. "Identity Processes and Social Stress." American Sociological Review. 56: 836-849.
- Burke, Peter and Jan Stets. 1999. "Trust and Commitment Through Self-Verification." Social Psychology Quarterly. 62(4): 347-366.
- Burke, Peter J. and Judy Tully. 1977. "The Measurement of Role/Identity." Social Forces. 55: 880-97.
- Crocker, Jennifer, Brenda Major, and Claude Steele. 1998. "Social Stigma." The Handbook of Social Psychology, Vol. 1, 4th edition. Boston, MA: McGraw Hill. 504-553.

- Falk, Gerhard. 2001. *Stigma: How we treat outsiders*. Amherst, MA: Prometheus Books.
- Goffman, Erving. 1963. *Stigma: Notes on the management of spoiled identity*.
New York: Simon and Schuster Inc.
- Heise, David R. and Lisa Thomas. 1989. "Predicting Impressions Created by
Combinations of Emotion and Social Identity." *Social Psychology Quarterly*.
Vol 52: 141-148.
- Herek, Gregory M. 1998. *Stigma and Sexual Orientation: Understanding prejudice
against lesbians, gay men, and bisexuals*. Sage Publications: London.
- Howard, Judith A. 2000. "Social Psychology of Identities." *Annual Review of
Sociology*. 26: 367-393.
- Izard, Carroll E. 1991. *The Psychology of Emotions*. New York: Plenum.
- Jackson, Jay. 1965. "Social Stratification, Social Norms, and Roles." in Ivan D. Steiner
and Martin Fishbein (eds) *Current Studies in Social Psychology*. New York:
Holt, Reinhart, and Winston, Inc.: 301-309.
- Johnson, Cathryn. 1993. "Gender and Formal Authority." *Social Psychological
Quarterly*. 56(3): 193-210.
- Johnson, Cathryn. 1994. "Gender, Legitimate Authority, and Conversation." *American
Sociological Review*. 59(1): 122-135.
- Johnson, David W. and Frank P. Johnson. 2002. *Joining Together: Group Theory and
Group Skills*, 8th edition. Boston, MA: Allyn and Bacon.
- Jones, Edward E., Amerigo Farina, Albert. H. Hastorf, Hazel Markus, Dale T. Miller,
and Robert A. Scott. 1984. *Social Stigma: The psychology of marked*

relationships. New York: Freeman and Co.

Katz, Irwin. 1981. *Stigma: A Social-Psychological perspective*. Hillsdale, NJ:

Erlbaum.

Kim, Jae-On, and Charles Mueller. 1978. *Introduction to Factor Analysis: What It Is and How to Do It*. Thousand Oaks, CA: Sage Press, November 1.

Lawler, Edward J. 1992. "Affective Attachments to Nested Groups: A Choice-Process Theory." *American Sociological Review*. 57: 327-339.

Lawler, Edward J. and Shane Thye. 1999. "Bringing Emotions into Social Exchange Theory." *Annual Review of Sociology*. 25:217-244.

Lawler, Edward J., Shane Thye, and Jeongkoo Yoon. 2000. "Emotion and Group Cohesion in Productive Exchange." *American Journal of Sociology*. 106: 616-657.

Lawler, Edward J. and Jeongkoo Yoon. 1996. "Commitment in Exchange Relations: Test of a Theory of Relational Cohesion." *American Sociological Review*. 61: 89-108.

MacKinnon, Neil J. and David R. Heise. 1993. "Affect Control Theory: Delineation and Development." In Joseph Berger and Morris Zelditch, Jr. (Eds.), *Theoretical Research Programs: Studies in the Growth of Theory*. Stanford, CA: Stanford University Press.

Page, Robert M. 1984. *Stigma*. Boston, MA: Rutledge and Kegan and Paul.

Ridgeway, Cecilia L. 1978. "Conformity, Group-Oriented Motivation, and Status Attainment in Small Groups." *Social Psychology*. 41: 174-188.

- Ridgeway, Cecilia L. 1981. "Nonconformity, Competence, and Influence in Groups: A test of two theories." *American Sociological Review*. 46: 333-347.
- Ridgeway, Cecilia L. 1982. "Status in Groups: The Importance of Motivation." *American Sociological Review* 47: 76-88.
- Ridgeway, Cecilia L. 1984. "Dominance, Performance, and Status in Groups." *Advances in Group Processes*. Edited by E. J. Lawler. Greenwich, CT: JAI Press.
- Ridgeway, Cecilia L. 1991. "The Social Construction of Status Value: Gender and Other Nominal Characteristics." *Social Forces*. 70(2): 367-386.
- Ridgeway, Cecilia L. and James Balkwell. 1997. "Group Processes and the Diffusion of Status Beliefs." *Social Psychology Quarterly*. 60: 14-31.
- Ridgeway, Cecilia L., Elizabeth Heger Boyle, Kathy Kuipers, Dawn T. Robinson. 1998. "How do Status Beliefs Develop? The Role of Resources and Interactional Experience." *American Sociological Review*. 63: 331-350.
- Ridgeway, Cecilia L. and David Diekema. 1989. "Dominance and Collective Hierarchy Formation in Male and Female Task Groups." *American Sociological Review*. 54:79-93
- Ridgeway, Cecilia L., and Kristan G. Erickson. 2000. "Creating and Spreading Status Beliefs." *American Journal of Sociology* 106:579-615.
- Ridgeway, Cecilia and Catheryn Johnson. 1990. "What is the Relationship Between Socioemotional Behavior and Status Groups." *American Journal of Sociology* 95: 1189-1212.
- Sartre, John Paul. 1946. *Anti-semitic and Jew*. New York, NY: Schocken Books.

- Sell, Jane, J. David Knottnerus, Christopher Ellison, and Heather Mundt. 2000. "Reproducing Social Structure in Task Groups: The Role of Structural Ritualization." *Social Forces*. 79(2): 453-475.
- Sell, Jane, Michael J. Lovaglia, Elizabeth A. Mannix, Charles D. Samuelson, and Rick K. Wilson. 2004. "Investigating Conflict, Power and Status Within and Among Groups." *Small Group Research*. 35: 44-72.
- Thoits, Peggy A. 1989. "The Sociology of Emotions." *Annual Review of Sociology*. 15:317-342.
- Webster, Murray Jr., and Stuart J. Hysom. 1998. "Creating Status Characteristics." *American Sociological Review*. 63 (June: 351-378).
- Wolff, Max. 1963. "The Issues in Integration." *The Journal of Educational Sociology: A Magazine of Theory and Practice*. 36: 241-324.
- Zelditch, Morris Jr., and Henry A. Walker. 1984. "Legitimacy and the Stability of Authority." *Advances in Group Processes* 1: 1-25.

APPENDIX A

RECRUITMENT OF RESPONDENTS

Recruiting Talk Script

My name is Dr. Jane Sell and I am here to tell you about some studies that we are conducting and see if you are interested in volunteering for these studies. You have the opportunity to see how sociologists conduct experimental studies and you will be paid for your participation. Now, I can't tell you right now exactly what study you would be in and exactly how much you will be paid because we are recruiting for several different studies right now. But I can tell you *about* how much these studies would be paying. Some of the studies involve working with people and making different investment decisions. These studies pay from about \$5 to about \$40. Other studies (insert information that pertains to other studies we might recruit for). Examples of the studies include examining how face-to-face communication differs from communication over the computer.

I will hand out these sign up sheets which ask for your name, telephone number and the times you find most convenient for participating in the studies. If you decide to sign up, we will use these sheets and call you up and then schedule you. At the time we talk, we can tell you more about the specifics of the study, the time etc. And then, at that time, you can say yes, no or schedule some other time.

Now, you may have heard some stories about experiments that actually caused people to have negative experiences. There is a very famous study, for example, the Milgram study in which people thought that they were shocking other people to the point of hurting them---they really weren't, but they thought that they were. This experiment is considered to have ethical problems because people suffered psychological trauma just from being in the study. Well, I want to assure you that nothing like this is going on in our studies. Partly because of some problems in experiments, new federal guidelines were developed for all studies that used human subjects. Here at A&M, all our studies go through the human subjects board (called the IRB). Importantly, if you should feel uncomfortable while in ANY study, you should just leave.

Another thing that I want to make sure you understand is that you are not obligated in any way to sign up. Your participation has nothing to do with this class. Dr. (fill in professor's name) won't know if you come or don't come. There is no extra credit for participation. So, just because I show up here in your class, don't feel obligated to sign up. If you are interested and would like to earn some money, fill out the form and pass it in to me. If you are not interested, simply hand in the blank form.

I appreciate your help. Any other questions?

Telephone Scheduling Script

Hello. This is _____. I am scheduling for some studies you volunteered for. You were probably recruited in one of your classes by Dr. Sell or D’Lane Compton for studies that pay for participation. I am calling to schedule one of those studies now. This study involves making decisions with others in your group. The time and the pay for the studies vary. Ordinarily, the study can take between half an hour and an hour and half. And the pay for the participation can vary from \$5 to \$30.

We run our studies in the Academic building room 305. Do you know where the Academic Building is? (give directions if they don’t know). I have openings for participation at _____ and _____. Are any of those times good for you?

{if yes, person is scheduled}

{if no, the person is asked if there is a better time for them}

Thank you very much for your participation. Again, we will see you at _____(time) in ACAD 305.

APPENDIX B
SCHEDULING SHEET

Social Science Research Laboratory

Name: _____ Sex: _____

Age: _____ Ethnic/Racial Identification: _____ Classification: _____

Have you ever been in any social science research studies? (Please circle the correct response)

No

Yes---if yes, please describe briefly

What times are MOST CONVENIENT for you to participate? (please fill in)

	Mornings	Afternoons	Evenings
Monday			
Tuesday			
Wednesday			
Thursday			
Friday			
Saturday			
Sunday			

Thank You

If you have any questions about these studies, feel free to contact Dr. Jane Sell, Sociology
Department: 845-6120

Social Science Research Laboratory

Name: _____ Sex: _____

Phone #: _____

APPENDIX C

REFERENTIAL SURVEY

Questionnaire

Assume that you have been asked to work on a paid task at Texas A&M with two other you have just met. You have different kinds of information about these people.

Below is a list of statements concerning a group member's behavior. Please indicate the degree to which you approve or disapprove of each of the behaviors.

1. A group member is punctual.

1-----2-----3-----4-----5-----6-----7-----8-----9-----10-----11
Strongly disapprove Strongly Approve

2. A group member is disorganized at home.

1-----2-----3-----4-----5-----6-----7-----8-----9-----10-----11
Strongly disapprove Strongly Approve

3. A group member does not follow directions.

1-----2-----3-----4-----5-----6-----7-----8-----9-----10-----11
Strongly disapprove Strongly Approve

4. A group member is quiet and calm during the task.

1-----2-----3-----4-----5-----6-----7-----8-----9-----10-----11
Strongly disapprove Strongly Approve

5. A group member cheats during the task.

1-----2-----3-----4-----5-----6-----7-----8-----9-----10-----11
Strongly disapprove Strongly Approve

6. A group member is loud and rowdy during the task.

1-----2-----3-----4-----5-----6-----7-----8-----9-----10-----11
Strongly disapprove Strongly Approve

7. A group member is organized.

1-----2-----3-----4-----5-----6-----7-----8-----9-----10-----11
Strongly disapprove Strongly Approve

8. A group member is tardy.

1-----2-----3-----4-----5-----6-----7-----8-----9-----10-----11
Strongly disapprove Strongly Approve

9. A group member is disruptive.

1-----2-----3-----4-----5-----6-----7-----8-----9-----10-----11
Strongly disapprove Strongly Approve

10. A group member is disruptive to the point that a group meeting has to be rescheduled.
 1-----2-----3-----4-----5-----6-----7-----8-----9-----10-----11
 Strongly disapprove Strongly Approve
11. A group member burglarizes a dorm room.
 1-----2-----3-----4-----5-----6-----7-----8-----9-----10-----11
 Strongly disapprove Strongly Approve
12. A group member is focused.
 1-----2-----3-----4-----5-----6-----7-----8-----9-----10-----11
 Strongly disapprove Strongly Approve
13. A group member is disorganized during the task.
 1-----2-----3-----4-----5-----6-----7-----8-----9-----10-----11
 Strongly disapprove Strongly Approve
14. A group member cheats in class.
 1-----2-----3-----4-----5-----6-----7-----8-----9-----10-----11
 Strongly disapprove Strongly Approve
15. A group member is loud and rowdy at a party.
 1-----2-----3-----4-----5-----6-----7-----8-----9-----10-----11
 Strongly disapprove Strongly Approve
16. A group member has served time in prison.
 1-----2-----3-----4-----5-----6-----7-----8-----9-----10-----11
 Strongly disapprove Strongly Approve
17. A group member uses profanity in work situations.
 1-----2-----3-----4-----5-----6-----7-----8-----9-----10-----11
 Strongly disapprove Strongly Approve
18. A group member uses profanity to someone calling to confirm an appointment.
 1-----2-----3-----4-----5-----6-----7-----8-----9-----10-----11
 Strongly disapprove Strongly Approve
19. I am: male female
20. My age is: _____
21. The racial or ethnic group that I identify myself with is _____ .

APPENDIX D

FALL OUT SHELTER TASK

Informed Consent

I agree to participate in a study concerning how people within small groups make decisions about different tasks and interact with one another. The study will involve about 150 people and will be conducted in rooms located in the Academic Building. I will be interacting with two (2) other women in a group and our interactions will be videotaped. Although my first name will be used in the taping, no specific names will be connected with the results. Also, I understand that I do not have to answer any questions that make me feel uncomfortable. The videotapes are retained for 5 years and then will be destroyed. If I am uncomfortable with the videotaping process, I can ask the researcher to erase the tape. The researcher will then erase the tape.

This study is not associated with any class at Texas A&M University. I understand that no class credit is involved and that my participation in this study will not affect my grades now or in any future classes at Texas A&M University.

The study is confidential. Although my first name and last initial may be used, my last name will never appear on any documents that are connected to my responses. The records connected to the study are stored securely.

I will receive the money I earn during this experiment. The amount of money that I earn may vary from study to study, as it depends on the decisions that I and others in my group will make. On average, the study will take about an hour. For participating, I will receive \$15 and a bonus of up to \$5 depending on how well my group scores.

If I am uncomfortable during the study I may stop at any time. If I stop, I will earn the amount up to the time I stop. Other than the financial compensation, there are no direct risks or benefits to being a participant in this study.

This research study has been reviewed and approved by the Institutional Review Board—Human Subjects in Research at Texas A&M University. For research-related problems or questions regarding subjects' rights, I can contact the institutional Review Board through Ms. Angelia Raines, Director of Research Compliance, Office of Vice President for Research at (979) 458-4067 (araines@vprmail.tamu.edu).

I have read and understand the explanation provided to me. I have had all my questions answered to my satisfaction, and I voluntarily agree to participate in this study.

I have received a copy of this consent form.

Signature of Subject

Date

Signature of Researcher

If you have any further questions, feel free to contact D'Lane Compton or Dr. Jane Sell, Sociology Department, TAMU, 845-6120.

EXPERIMENT DIRECTIONS AND VIDEO SCRIPT

We have been conducting a large number of studies to examine what kind of factors make groups more or less effective. In particular, we are studying how groups work together to solve different kinds of problems. One consistent finding is that people working together tend to produce more accurate and efficient solutions than people working alone.

Today you are in one of these studies. You and your group will be working on a task. The task for today involves working on a nuclear fallout shelter scenario. In this scenario, the possibility of a nuclear war has been announced. You and the members of your group have access to a small basement fallout shelter. When the attack warning signal is announced, you must immediately go to the shelter. In the meantime, you must decide what to take with you to help you survive during and after the attack. You are outside the immediate blast areas. The greatest danger facing you is from radioactive fallout. In order to help your decision making, you will be asked to rank various items in order of their importance to your survival in the shelter.

We ask that each of you first look over the scenario individually and rank your items on an answer sheet that will be provided to you in a moment. We give you ten minutes for this. Once everyone has done this, we then will ask you to move to a table and work on the ranking as a group and the rationale for the ranking. You should discuss the problem until you have come to a consensus and have one single ranking for your shelter. It is important the group members work as a group. You should try to develop a way to work on the task that helps your group become most efficient. By efficient, we mean that you should have the best possible ranking in the allotted time. What we suggest, is that you poll the group for each item to see if anyone has a suggestion for its ranking or if everyone agrees. That is, after every item, the group should reach an agreement or consensus about the ranking of the item. So when someone suggests an answer the group must reach an agreement about whether the answer is the one the group wishes to submit.

This exercise, that you will be working on today, is based on *Protection in the Nuclear Age*, this is a project from the Civil Defense Preparedness Agency, an agency within the Department of Defense and according to their experts there is a correct or most optimal ranking of the items. This ranking is what your ranking will be compared to in order to judge your group's efficiency. So, your group will be rated based on how accurate your final ranking is.

So, again, your objectives are to work as a group, to consider everyone's opinions, and to try and solve the scenario as accurately as possible in the allotted time.

We will be giving group bonuses to groups who work together to efficiently solve the problem. These bonuses will be given at the end of the study when you will find out how well your group did on the problem. These bonuses vary from \$1 to \$5 per person or \$3 to \$15 per group based on your overall group score.

So, let me summarize the information about the task:

1. You will first complete the fallout shelter ranking individually.
2. You will then be asked to work together as a group.
3. You will be asked to complete the scenario in 20 minutes.
4. We ask that you work on the basis of group consensus. This means that you should poll group member's opinion after every item. Further, the group members need to agree before going on to the next item.
5. The group may earn bonus money based on their performance. The bonuses vary from \$1 to \$5 per person or \$3 to \$15 per group.

We are just about ready to begin. You will have 10 minutes to do the first ranking on your own and then 20 minutes to work on the group ranking together.

The researchers will be happy to answer any questions you might have about the study.

Once again, thank you for your participation.

Name _____

Individual Ranking Sheet

Please complete the fallout shelter ranking task.

The possibility of a nuclear war has been announced and the alert signal has been sounded. You and the members of your group have access to a small basement fallout shelter. When the attack warning signal is announced, you must immediately go to the shelter. In the meantime, you must decide what to take with you to help you survive during and after the attack. You are outside the immediate blast areas. The greatest danger facing you is from radioactive fallout. In order to help your decision making, rank the following items (1-15) in order of their importance to your survival in the shelter.

- | | |
|--|--|
| ___ one large and one small garbage can
with lids | ___ liquid chlorine bleach |
| ___ broom | ___ vaporizing liquid fire
extinguisher |
| ___ containers of water | ___ flashlight and batteries |
| ___ blankets | ___ battery-powered radio |
| ___ canned heat stove | ___ soap and towels |
| ___ matches and candles | ___ first aid kit with iodine,
medicine (prescriptions
included) |
| ___ canned and dried foods | ___ Geiger counter (measures
the level of radiation) |
| ___ cooking and eating utensils | |

Fallout Shelter Exercise: Group Ranking Task

The possibility of a nuclear war has been announced and the alert signal has been sounded. You and the members of your group have access to a small basement fallout shelter. When the attack warning signal is announced, you must immediately go to the shelter. In the meantime, you must decide what to take with you to help you survive during and after the attack. You are outside the immediate blast areas. The greatest danger facing you is from radioactive fallout. In order to help your decision making, rank the following items (1-15) in order of their importance to your survival in the shelter. **Be sure to double check your final ranking answers!**

___ one large and one small garbage can
rationale: _____

___ liquid chlorine bleach with lids
rationale: _____

___ broom
rationale: _____

___ vaporizing liquid fire extinguisher
rationale: _____

___ containers of water
rationale: _____

___ flashlight and batteries
rationale: _____

___ blankets
rationale: _____

___ battery-powered radio
rationale: _____

___ canned heat stove
rationale: _____

___ soap and towels
rationale: _____

___ matches and candles
rationale: _____

___ first aid kit with iodine,
rationale: _____

___ canned and dried foods
rationale: _____

___ medicine (prescriptions included)
rationale: _____

___ cooking and eating utensils
rationale: _____

___ Geiger counter (measures the level of radiation)
rationale: _____

Group Member Names:

Fallout Shelter Exercise:* Answers

1. Containers of water. (The average person would need at least 1 quart of liquid per day. Each person should be allowed to drink according to need because studies have shown that nothing is gained by limiting the liquids below the amount demanded by the body. Two weeks is probably the maximum time needed to stay in the shelter. After that, other sources of water could be found.)
2. Canned and dried foods. (Enough food should be on hand to feed everyone for two weeks, if possible. However, most people can get along on about half as much food as usual and can survive for several days without any food. Therefore, this is not as important as the water.)
3. One large and one small garbage can with lids. (Next to water and food, the most important concern is sanitation. Poor sanitation will attract diseases and vermin. The small garbage can be used as a toilet, and the large garbage can can be used to store garbage and human wastes until they can be taken outside and buried. Burial of the garbage is important to prevent spread of disease by rats or insects.)
4. First-aid kit and iodine and medicines. (Useful if anyone gets hurt or falls ill; should include medicine for anyone with chronic illness. The iodine can be used to sterilize water.)
5. Battery-powered radio. (Useful for obtaining information about what is happening outside the shelter and for information on when it is safe to come out. Useful for contact with outside world.)
6. Soap and towels. (Useful and important for sanitation.)
7. Liquid chlorine bleach. (Useful for sprinkling in the toilet to control odors and germs; it could also be used to sterilize any water that has become cloudy and might contain bacteria.)
8. Matches and candles. (Would help illuminate the shelter and thus make it more comfortable, particularly because there is not likely to be any natural source of light or electricity available.)
9. Blankets. (Would be used for heat and comfort; would be of important but moderate use.)
10. Flashlight and batteries. (Useful for illumination.)
11. Cooking and eating utensils. (Useful in preparing and serving foods but not essential.)
12. Broom. (Useful for brushing radioactive fallout off anyone who had to leave the shelter for emergency reasons before he or she reentered.)
13. Canned heat stove. (Useful if a heat supply is needed. However, it can only be used if there is adequate ventilation for the fumes; it could be dangerous.)
14. Geiger counter. (Unnecessary. It could be used to check the level of radiation outside the shelter to determine when it is safe to emerge, but the same information and more can be obtained from the radio. Also, fallout particles are visible and the radiation from them is given off quickly, so danger from radiation could be reduced by waiting 24 to 48 hours after the large particles have stopped falling.)
15. Foam fire extinguisher. (Useful for fighting fires outside the shelter but could not be used within the shelter because of danger from the fumes.)

* This exercise is based on information in *Protection in the nuclear age* (Washington, D.C : Department of Defense, Civil Defense Preparedness Agency, February 1977).

APPENDIX E

EXPERIMENTAL SCRIPT

RESEARCH ASSISTANT 1 (NOT BLINDED)

[Wait for folks to arrive in hall]

As they arrive:

- ask their name and check off name on clip board
- “Hello, are you here for the sociological study?”
- “What is your name?”
- repeat name and check off list
- Fill out a name tag for them using big block lettering
- “Here you go, [insert name]”
- If fourth person shows:

Once everyone has arrived and has a name tag:

“I think we are almost ready to begin. I just want to thank you all for showing up today. As mentioned when we called you, you will be doing a group activity. This will be the group you will be working with today. You may want to introduce yourselves. Once we begin the study, it will be important that you know one another’s names because you will need to list your fellow group members on some of the paper work.”

Seat the respondents individually based on arrival order in carol’s.

“This is RA2, he will be conducting the today’s study. RA2 is going to pass out your informed consent sheets while I run next door and get some materials. If you finish just sit tight until I get back.”

Prep folders based on group type—stigmatized or control.

Return to lab and pass out folders:

“We have some other paper work for you to go over and fill out before we begin the study. Please open your folder. You should have two sheets. Please make sure you have both of them at this time. The first sheet is green and should be a form for our record keeping and so we can pay you. For this form you will need to know your group number and the names of your fellow group members. Your group number is ___ and in case you forgot the names your fellow group members, this group is made up of [list names for everyone]. [Repeat number and names.] Please fill out the rest of the form, however, you do not need to sign it until we pay you. Also, I will need to collect them so that I can get your money ready while you complete the study. Because these forms have your social security numbers on them, I will need to collect them individually.”

“Behind the green payment form you should have a copy of your scheduling sheet from when we originally recruited you. Since, we are running multiple studies, we have made a copy of your form, however, only the original has your phone number on it, so please add your phone number to this copy and make any updates should you want to do more studies.”

“While you do this I will come around to each of you and individually collect your payment forms so that I can pay you at the end of the study.”

[Notice that there is more than one scheduling form in their folder and that they are stapled together]

“Oh that shouldn’t be in there...it should just be your form...one single sheet...Sorry we put that in there. Does everyone have more than just their form? Oh I see. These are all of the scheduling sheets for the group. If you have more than just your form, please set the others aside for now and I will get them when I get your payment forms. I guess you can use them to make sure you spelled the other group member names correctly. However, please keep your scheduling sheet in the folder with the receipt of payment form.”

RESEARCH ASSISTANT 2 (BLINDED)

[Welcome by RA1]

[Hand out informed consent]

“This is the informed consent, it tells you a little about the study. The main things to note are that if you are ever uncomfortable or should want to leave you may. It also talks about how you will be paid. So read it over and when you are done, please sign both copies. I will pick up one and you may keep the other. Once you are done, just sit tight and D’Lane will be back with the payment forms for you to fill out.”

[Enter RA1 and her spiel]

Ok, now that we are finished with all the paper work we may begin the study.

[Pass out instructions]

This study has two parts—an individual portion and a group portion. I will play a video in which Dr. Sell explains the study to you in more detail. It is very important that you pay attention to her instructions. You can also follow along with the Instruction sheet I have just passed out. [Play video]

Are there any questions?

[pass out Individual Ranking sheet]

“So here are the individual ranking forms. You will have 10 minutes for this portion to complete this task on your own. [Tony can stay in the room or leave but should tell them when they have 2 more minutes.]

“Now that you have completed your individual ranking task you may move to the round table over here [points toward table] for the group ranking portion of the study. Feel free to take your Individual ranking sheet, however, please leave everything else at your carrel. We will have pencils at the table for you to use.”

[Everyone sits]

“For this portion of the study, you will have 20 minutes to complete the group ranking. Remember that the group must reach a consensus and that everyone should agree on each step as well as the final ranking. I will come back in 15 minutes to give you a 5 minute warning on your allotted time. Does anyone need anything before I hit record?”

[hit record and leave the stop watch leave room for 15 minutes]

[give five minute warning]

[stop recording]

[Handout Questionnaire]

“Ok, we have a questionnaire for you to fill out, and to do that and to pay you, we ask that you go back to your individual seats While you are filling this out, I will grade your group ranking to see how well yall did.”

[Grade Group Ranking, once everyone has turned in their questionnaire]

“So, do you want to know how yall did? You did very well. Actually, this is a very difficult group project. Overall, you scored _____. So, because you did so well you will be getting our maximum bonus of \$5 per person. If you would like to see what the experts’ claim the most optimal ranking is I can give you an answer sheet to look over, however because we will be running the study the whole summer we ask that you not take it out of the classroom or share this information with others.

“I will go get RA1 now so she can pay you.”

[Exit RA2]

[RA1 Debriefs, Discusses, Pays, and Thanks]

APPENDIX F**CONTENT****Receipt of Payment**

Name : _____

Study Name: Fall Out Shelter Group Study

Date of Study: _____

Group #: _____

Social Security #: _____

Amount Paid: _____

I have received payment for my participation in this study.

Signature

EXPERIMENTAL MANIPULATION

This Person was SO DISRUPTIVE in the Personality Survey, we had to stop the whole thing.

Social Science Research Laboratory

Name: _____ Sex: _____

Age: _____ Ethnic/Racial Identification: _____ Classification: _____

Have you ever been in any social science research studies? (Please circle the correct response)

Yes

Yes--if yes, please describe briefly

Personality

Sorry to resched but she was the only one we could find to complete the group for this time. H

What times are MOST CONVENIENT for you to participate? (please fill in)

Mornings Afternoons Evenings

Monday

Tuesday

Wednesday

Thursday

Friday

Saturday

Sunday

Thank You

If you have any questions about these studies, feel free to contact Dr. Jane Sell, Sociology Department: 845-6120

APPENDIX G

POST QUESTIONNAIRE

_____ **YOUR** first name _____ Date

We often conduct several studies at the same time. Please answer the questions below that concern the study in WHICH YOU JUST PARTICIPATED.

Did you previously know the people in your group?

No Yes Unsure

--if yes, please explain how you know them.

What did you know about people in your group?

Group member 1's First Name _____ Age _____

Has this group member participated in any of the following studies?

Personality Survey
 Clockwork Study
 Fear of Insects Study
 Unsure

Group member 2's First Name _____ Age _____

Has this group member participated in any of the following studies?

Personality Survey
 Clockwork Study
 Fear of Insects Study
 Unsure

What is the bonus each individual can earn if your group does well?

1-5 dollars
 Restaurant coupons
 Aggiebucks
 Other please specify _____

Which of the following did Dr. Sell address in the videotaped instructions?

Groups do better when group members work together.
 Groups do better when everyone works as an individual.
 It doesn't make any difference whether group members do or do not work together.

Please circle the response that best expresses your opinion for each question below.

How successful do you feel your group was in the task today?

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
 extremely extremely
 unsuccessful successful

How cooperative do you feel your group was in the task today?

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
 extremely extremely
 uncooperative cooperative

How efficient do you feel your group was in the task today?

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
 extremely extremely
 efficient inefficient

How competent do you feel YOU were in today's task?

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
 extremely extremely
 Incompetent competent

How competent do you feel the group saw YOU to be in today's task?

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
 extremely extremely
 incompetent competent

Please circle the number below that best represents your feeling about **your** performance in today's task.

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
 pleased displeased

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
 happy unhappy

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
 satisfied not satisfied

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
 content discontent

Please evaluate each of your teammates using the following scales:

Group member 1 / Person's first name _____

How competent do you feel this group member was in today's task?

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
 extremely incompetent extremely competent

How much did you like working with this group member?

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
 Really disliked Really liked

I would like to work with this group member in the future.

No [] Yes [] Unsure []

Please circle the number below that best represents your feeling about this group member's performance in today's task.

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
 pleased displeased

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
 happy unhappy

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
 satisfied not satisfied

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
 content discontent

In your opinion, how friendly is this person?

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
 extremely unfriendly extremely friendly

In your opinion, how agreeable is this person?

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
 extremely unagreeable extremely agreeable

In your opinion, how outgoing or extroverted is this person?

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
 not outgoing at all extremely outgoing

In your opinion how sincere is this person?

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
 extremely insincere extremely sincere

Group member 2 / Person's first name _____

How competent do you feel this group member was in today's task?

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
 extremely incompetent extremely competent

How much did you like working with this group member?

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
Really disliked Really liked

I would like to work with this group member in the future.

No [] Yes [] Unsure []

Please circle the number below that best represents your feeling about this group member's performance in today's task.

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
pleased displeased

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
happy unhappy

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
satisfied not satisfied

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
content discontent

In your opinion, how friendly is this person?

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
extremely unfriendly extremely friendly

In your opinion, how agreeable is this person?

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
extremely unagreeable extremely agreeable

In your opinion, how outgoing or extroverted is this person?

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
not outgoing at all extremely outgoing

In your opinion how sincere is this person?

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
extremely insincere extremely sincere

How do you feel the group liked working **with you** in today's task?

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
really disliked really liked

If there was an opportunity to work on more group tasks, how much would you like to work with the same group members that you worked with today?

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
I would NOT like to work I would like to work
with the same members with the same members

Please circle the number below that best represents your feeling about the group interaction that you just completed.

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
 pleased displeased

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
 happy unhappy

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
 satisfied not satisfied

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
 contented discontented

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
 joyful not joyful

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
 unenthusiastic enthusiastic

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
 excited bored

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
 energetic tired

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
 motivated unmotivated

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
 interested not interested

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
 distant close

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
 conflictual cooperative

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
 fragmenting integrating

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
 fragile solid

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
 divisive cohesive

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
 diverging converging

1-----2-----3-----4-----5-----6-----7-----8-----9-----10
 self oriented team oriented

Feel free to make any comments or raise any questions about the below.

The researcher who conducted the study. _____

The setting or physical arrangements _____

The clarity of instructions _____

Other _____

THANK YOU!

APPENDIX H
INDIVIDUAL SUBJECT INTERVIEW

1. What else did you know about people in your group?

2. Did you have any information about other studies that people may have been in?

3. Did you happen to read the extra scheduling sheets that I mistakenly provided to you?
Because I made a mistake, it's just important for us to know.

APPENDIX I

DEBRIEF

The Generation and Effects of a Stigma in Small Groups: A Formal Theory and Test

Thank you for your participation today. The study in which you participated in today is a study of group interaction—and specifically when there is one group member who has been stigmatized. Stigmas are labels that are attached to individuals that are concerned with negatively deviant behavior. Were there any stigmas that you thought were involved in today’s study? (group discussion and discovery of stigma)

Stigmas are important because they develop in many different situations and can significantly change our interactions with those around us, whether we are stigmatized or interacting with someone who is stigmatized. So, for example, suppose a person cheats in their math class and is labeled a “cheater” by the professor or school. How would this then effect our interactions with this person if we had to work with them at a later time on a fundraising project for a school organization or at a future job? Likewise, how would the stigmatized person’s behavior change? This is sociologically interesting because it shows how we can create inequalities based on behavior, a perceived behavior, or on one instance of behavior that can have long lasting effects on an individual or group (based on the label of deviant action and NOT on the person or their history as a whole).

We are interested in how people behave when they become stigmatized and how the others will then treat them and how this will then affect the group as a whole. So, in today’s study, we labeled one of the group members as “disruptive” and then allowed the other two group members to know about the label. I know in some ways this seems “mean.” And, actually, in some ways it is because, as we indicated above, it wasn’t real. But we had to mislead you, because, we are interested in how people react to the LABEL not the actual behavior, the person, or even whether it is true or not.

So, we did this to see how the information would affect your behavior. In fact, no one in the group was disruptive or has been disruptive in our experiments. But this is important for you to realize that the information given to you at the beginning of the study about one of you being disruptive in the past is not real. Again, we do this to gauge the impact of this information on your behavior during the group interaction situation.

We know that people do not always act the same in situations when they know exactly what we are studying. As a result, we did use deception in today’s study—as we explained, no one in the group has been disruptive in past experiments. Also, it is important that people not have specific expectations about what exactly we are studying. Because of all of these factors, we would like to ask you not to talk about all the specifics of today’s study, at least until we finish all the studies (which will be by the end of Summer). Of course, you can talk about the general kinds of things that you did, but we would really appreciate it if you didn’t talk about the specific features of the study. Once again, we thank you for your help.

Are there any questions?
We can pay you now.

APPENDIX J

CODING AND EXPLANATIONS

Directive (Dir): The offering of an idea or contribution to task/discussion

Ex: I put water, Its our greatest danger

Qualifier (Qual): Limits or makes less strong or positive the endorsement.

Ex: Maybe it's just me, but..., I'm not really sure but, I think...

Directive-Reiteration (DR): A statement that reaffirms a response/comment.

Ex. Its water./ Its water because... What about water?

Expertise Claim (Exp): Especially strong reinforcement that draws on past experience or authority.

Ex: My family has a fallout shelter and..., I use to work with radiation and...

Agreement (Agr): To give consent or assent to a directive. Also, note who is agreeing to whom.

Ex. Ok, that's fine, let's do that, I agree.

Agreement Behavior (AB): To motion that you agree

Ex. To nod yes or no.

Disagreement (Dis): To oppose or differ on a directive

Ex. I disagree., I didn't put that. I still think it is...

Organizing (Org): To coordinate a task, may also mediate suggestions to move past disagreements and accomplish task.

Ex. Let's move on, What do y'all want to do here?, Lets talk about this first.

Question: Seeking knowledge or clarification (**QK**), may also be for coordinating (**QC**).

Ex. What's a Geiger counter?, How long will we be here? What did you say?

Laughing (Ha): An expression or appearance of merriment or amusement.

Ex. Ha ha or Ha, ha, ha, giggle ha, and so on.

Interruption (Int): To break in on a statement.

Ex: I was thinking that/

Different from trailing off (indicate by "...") and do not code as anything.

Ex. I think we should...

Negatives (Neg): An especially strong directive about a person or the group, a put down.

Ex. That's dumb, I can't believe you said that, Only an idiot would say that.

Remember it is also important to note who is speaking to whom. For example, is the directive, question, or agreement to the group or a particular person? Also, make sure to note if someone trails off in their statements (...) or if they are interrupted (/) as transcribers won't be deciding this.

No codes: talking to self,

APPENDIX K

Table K1. Average coding tallies

	Obs #	1	2	3	4	5	6	7
	Group #	G01A	G02A	G03A	G04A	G05A	G06A	G07A
Directive	L	51.5	54.5	38.5	48	34	21.5	66
	M	35.5	31	19	33	40.5	14.5	52.5
	R	39	68.5	44.5	42.5	51	29.5	43.5
Directive-Reinforcement	L	2.5	8.5	8	9	2.5	1.5	7
	M	8.5	1	0	4.5	11	0.5	9.5
	R	7.5	9	8.5	4.5	7.5	7	3
Qualifier	L	4	9	1.5	2	0.5	0	2
	M	0.5	2.5	1.5	4	4	1	2
	R	1	2	2	3.5	1.5	1	0
Expert	L	0	3	0	0	0	0	0
	M	0	0	0	0	0	0	0
	R	0	0	0	0	1	0	0
Agree To	L	9.5	8	13.5	5.5	10	6.5	4.5
	M	8.5	12	8.5	14	4.5	8	7
	R	14	4.5	8	14.5	3.5	3	2.5
Disagree With	L	0.5	10	0.5	5	0	0	1
	M	0	1	0	1.5	3.5	0	0
	R	0	7	0	1	1	0	1
Organize	L	6	4	32.5	11	2.5	3	2
	M	0	0.5	0.5	1.5	21	7.5	2.5
	R	9	13.5	1.5	2	2.5	1	3
Question-Knowledge	L	7.5	3.5	13.5	7	2.5	3.5	4.5
	M	5.5	7	1	4.5	6	1.5	2.5
	R	12.5	13	0	2	2	2.5	2.5
Question-Coordination	L	14	4	37	15.5	5.5	11.5	8
	M	4.5	1.5	0	1.5	21	16	16
	R	12.5	22	1.5	2	2	4	10.5
Interrupted By	L	21	2.5	11	7	3	0	0
	M	9.5	0.5	3.5	10	9	0	0
	R	14.5	0	12	4.5	12.5	0	0
Laugh	L	11.5	1.5	5.5	6	5	0	1
	M	5.5	3	5.5	7.5	6.5	0	1
	R	4	4	0.5	10	5	0	1
Negative	L	0	0	0	0	0	0	0
	M	0	0	0	0	0	0	0
	R	0	0	0	0	0	0	0
Behavior (+)	L	0	0.5	6.5	0	0	0	0
	M	2	0	7.5	5	2	0	0
	R	0	0	7	2	0.5	0	0
Behavior (-)	L	0	0.5	0	0	0	0	0
	M	0	0	0.5	1.5	1	0	0
	R	0	1.5	0	0	0	0	0
Organizer	L	20	8	69.5	26.5	8	14.5	10
	M	4.5	2	0.5	3	42	23.5	18.5
	R	21.5	35.5	3	4	4.5	5	13.5

Table K1. continued

	Obs #	8	9	10	11	12	13	14
	Group #	G08A	G09A	G10A	G11A	G12A	G13A	G14A
Directive	L	50	56.5	44.5	53	26	29.5	54
	M	42	34	51	54.5	33.5	55.5	49
	R	38	25	44	45.5	21.5	49	44.5
Directive-Reinforcement	L	7	8.5	1.5	1.5	8.5	3	9.5
	M	3	6	3	1.5	3	4	6
	R	2	5.5	4.5	1	1.5	2.5	5
Qualifier	L	7	1	4.5	5.5	1.5	0.5	2
	M	0	0	3.5	2.5	2.5	29	0
	R	0	1	1	4	0	2	0
Expert	L	0	0	0	0.5	0	0	0.5
	M	0	0	0	0	0	0.5	1
	R	0	0	0.5	0	0	0.5	0
Agree To	L	7	3.5	9.5	6	2.5	4	3.5
	M	2.5	4.5	8	8	3	6	3.5
	R	2.5	1.5	7	8.5	1	7.5	6.5
Disagree With	L	0	1	0.5	0	2.5	0.5	2
	M	0.5	0.5	0	0	1	1	3.5
	R	0	2	0	0	0	0	0.5
Organize	L	6.5	3.5	10.5	2.5	3.5	1	3
	M	0	5	2	6	2	2	6.5
	R	1.5	1.5	2	5	0	8	1
Question-Knowledge	L	9.5	2	14.5	7.5	1.5	3	6.5
	M	0	2	6.5	5	0.5	4	3.5
	R	1	5	3.5	5.5	0	5	1.5
Question-Coordination	L	20.5	14	20.5	6.5	9	2.5	6
	M	1.5	17	8	9.5	14	10.5	6
	R	7.5	6	4	18	0	16	6.5
Interrupted By	L	0	1	1.5	0	0	0	0
	M	0	1	0	0.5	0	0	3
	R	0	1	1.5	0.5	0	1	1
Laugh	L	1	1	3	1	0	0.5	0
	M	1	1.5	3	0.5	0	0.5	0
	R	1	1	3	0.5	0	0.5	0
Negative	L	0	0	0.5	0	0	0	0
	M	0	0	0	0	0	0	0
	R	0	0	0	0	0	0	0.5
Behavior (+)	L	0	0	0	1	0	0	0
	M	0	0	0	0	0	0.5	0
	R	0	0	0	0	0	0.5	0
Behavior (-)	L	0	0	0	0	0	0	0
	M	0	0	0	0	0	0	0
	R	0	0	0	0	0	0	0
Organizer	L	27	17.5	31	9	12.5	3.5	9
	M	1.5	22	10	15.5	16	12.5	12.5
	R	9	7.5	6	23	0	24	7.5

Table K1. continued

	Obs #	15	16	17	18	19	20	21
	Group #	G17A	G18A	G20A	G21A	G22A	G23A	G24A
Directive	L	25.5	28	36	34.5	23.5	54.5	41.5
	M	47.5	29.5	36.5	43.5	37.5	39.5	24
	R	39.5	54.5	36.5	25	40.5	50.5	53
Directive-Reinforcement	L	2.5	5	2	1.5	3.5	4	5
	M	8.5	2	3	4	5.5	4.5	3.5
	R	9	16.5	3.5	1	5	5.5	4
Qualifier	L	0	1	2	1	0.5	1	0
	M	1.5	3	3.5	3.5	1	0.5	0
	R	0	1	1.5	1	0	1	0
Expert	L	0	0	0	0	0	0	0.5
	M	0	0	0	0	0	0	0.5
	R	0	0	0	0	0	0	0
Agree To	L	7	6	1.5	3.5	1	4.5	1.5
	M	2	8	1	4	2	3	3
	R	6	2	3.5	4	1.5	2	0
Disagree With	L	2	0	0	0.5	0.5	0	0
	M	0	0	0	0	0	0	0
	R	1	0	0	0	1	0	0
Organize	L	1.5	1	2.5	0.5	0	1.5	0
	M	2	3.5	7	3.5	2.5	0	0
	R	7	14.5	0.5	0	0	3	3
Question-Knowledge	L	1	3.5	3.5	3	2	2	2.5
	M	4	0	3	4	1.5	3	1
	R	1.5	6	0.5	2	4	0.5	10
Question-Coordination	L	6.5	4.5	9	7	1	6.5	4
	M	15	10	10.5	19.5	19	14.5	2.5
	R	29	35	4	1	7.5	11.5	23.5
Interrupted By	L	5	2.5	0	0.5	0.5	0	1
	M	11	6	0	0	0	0	1.5
	R	7.5	4.5	0	0	0	0	0
Laugh	L	1	1	1	0	0	0	0
	M	4	4.5	1	0	0.5	0	0
	R	4.5	4.5	1	0	0.5	0	0
Negative	L	0	0	0	0	0	0	0
	M	0	0	0	0	0	0	0
	R	0	0	0	0	0	0	0
Behavior (+)	L	4	0	0	0	0	0	0
	M	1	0	0	0.5	0	0	0
	R	1	0	0.5	0	0	0	0
Behavior (-)	L	0	0	0	0	0	0	0
	M	0	0	0	0	0.5	0	0
	R	0	0	0	0	0.5	0	0.5
Organizer	L	8	5.5	11.5	7.5	1	8	4
	M	17	13.5	17.5	23	21.5	14.5	2.5
	R	36	49.5	4.5	1	7.5	14.5	26.5

Table K1. continued

	Obs #	22	23	24	25	26	27	28
	Group #	G25A	G28A	G29A	G31A	G32A	G33A	G34A
Directive	L	37.5	10.5	26	19.5	12.5	20.5	54.5
	M	47	23	35.5	41.5	17.5	20.5	52.5
	R	33	24	32	62	15	25	62
Directive-Reinforcement	L	8	5.5	2	1	0	2	2.5
	M	7	4.5	5.5	6	10.5	0.5	2
	R	4	1	5.5	14	0.5	2.5	4
Qualifier	L	0	1.5	1	0	0	2	4
	M	0.5	0	4	2	1	1.5	1
	R	0	0.5	4	0	0	1.5	2.5
Expert	L	0	0	0	0	0	0	0
	M	0	0	0	0	0	0	0
	R	0	0	0.5	0	0	0	0
Agree To	L	2.5	3.5	3.5	0	4	0.5	7.5
	M	2	6	5	2.5	0	0.5	13.5
	R	3.5	4	3	1.5	3.5	5	15.5
Disagree With	L	0	0	0	0	0	1.5	0
	M	1.5	0.5	0	0.5	0	1.5	0
	R	0	1.5	0.5	0	0	0	0.5
Organize	L	1	2	0	3.5	0	1.5	5
	M	2	0.5	2	0.5	4	4	1
	R	3.5	1.5	3	9	0	1	4
Question-Knowledge	L	2	0	2.5	2.5	0	6.5	4.5
	M	2	1.5	2	1.5	1	6.5	3.5
	R	1	3	4.5	2.5	2	3.5	4
Question-Coordination	L	2.5	5.5	4.5	10.5	0	1	7
	M	7.5	3	4.5	6	14.5	11	5.5
	R	11	3.5	19.5	19.5	3.5	9.5	13.5
Interrupted By	L	0	0	0	0	0	0	21
	M	0	0	0	0.5	0	1	21
	R	0	1	0	1	0	0	21
Laugh	L	0	0	0	0	0	0	2
	M	0	0	0	0	0	0	3.5
	R	0	0	0	0	0	0	3.5
Negative	L	0	0	0	0	0	0	0
	M	0	0	0	0	0	0	0
	R	0	0	0	0	0	0	0
Behavior (+)	L	0	0	0	0	0	0	1.5
	M	0	0	0	0	0	0	0
	R	0	0	0	0	0	0	1
Behavior (-)	L	0	0	0	0	0	0.5	0
	M	0	1	0	0	0	0	0.5
	R	0	0	0	0	0	0	0
Organizer	L	3.5	7.5	4.5	14	0	2.5	12
	M	9.5	3.5	6.5	6.5	18.5	15	6.5
	R	14.5	5	22.5	28.5	3.5	10.5	17.5

Table K1. continued

	Obs #	29	30	31	32	33	34	35
	Group #	G35A	G36A	G37A	G38A	G39A	G40A	G41A
Directive	L	41	47	39	36	30	54	32
	M	17.5	59	59	24.5	41.5	73	39.5
	R	36	76	90.5	28.5	38	26	29.5
Directive-Reinforcement	L	5	2.5	4	1.5	1	3.5	6
	M	7	3	2	2	6	8.5	2.5
	R	1	10	11	0	2	2	6
Qualifier	L	2.5	1.5	6	2	0	3.5	0.5
	M	0	3	1.5	0	2.5	4	2
	R	1.5	4.5	3.5	5	0.5	2	1
Expert	L	0	1	0	0	0	0	0
	M	0	0	0	0	0	1	0
	R	1	0	0	2	0	0	0
Agree To	L	1	9	13	6.5	16.5	15	4.5
	M	4.5	17	16.5	9	14.5	7.5	5.5
	R	10	9.5	24.5	7.5	15.5	10.5	5.5
Disagree With	L	0	2.5	1	0.5	0	1	4
	M	0.5	1	0.5	0.5	0	1	0.5
	R	3	1.5	2	0	1	0.5	2
Organize	L	4.5	1	5.5	4.5	2	6	1
	M	0	5	1	2.5	6.5	8	3.5
	R	2	12.5	5	6.5	3	3.5	7
Question-Knowledge	L	3.5	0	6	12	0	4	1
	M	4	1	7.5	1	1.5	1.5	2.5
	R	1.5	10	4	6.5	0.5	6.5	2.5
Question-Coordination	L	11.5	1.5	16	9	4.5	12.5	12
	M	11.5	16	2	2.5	10	16.5	6.5
	R	5	33	10	23	6.5	16	22
Interrupted By	L	16.5	8	34.5	18.5	13	37	6
	M	11.5	14.5	31.5	11.5	15	32	4.5
	R	14	19.5	55.5	38	13.5	17.5	4.5
Laugh	L	2	2.5	9	5	4	28.5	2.5
	M	1	12	11.5	8.5	6.5	6.5	0.5
	R	5	7.5	5.5	7.5	4	11.5	6.5
Negative	L	0	0	0	0	0	0	0
	M	0	0	0	0	0	0	0
	R	0	0	0	0	0	0	0
Behavior (+)	L	0	0.5	1.5	0.5	0	2.5	1.5
	M	0	4.5	1	1	0	1	1.5
	R	0	1.5	0.5	2	1.5	3	1.5
Behavior (-)	L	0	0	0	0	0	0	0
	M	0	0	1.5	0	0	0.5	0
	R	1	0	0	0	0	0	0
Organizer	L	16	2.5	21.5	13.5	6.5	18.5	13
	M	11.5	21	3	5	16.5	24.5	10
	R	7	45.5	15	29.5	9.5	19.5	29

Table K1. continued

	Obs #	36	37	38	39	40
	Group #	G42A	G43A	G44A	G45A	G46A
Directive	L	52.5	74.5	49	16	20.5
	M	32.5	67.5	73	21	51
	R	33.5	68	30	40.5	43.5
Directive-Reinforcement	L	3	6	5	2.5	1
	M	2.5	2.5	5	1.5	4.5
	R	2.5	4	4	5.5	3
Qualifier	L	2.5	8.5	1	2	1
	M	5	6	2	1.5	3.5
	R	2	4.5	5	4	1
Expert	L	0	0	2.5	0	0
	M	0	0	0	1	0
	R	0	0	0	0	0
Agree To	L	7.5	9.5	13	5.5	13
	M	8	11.5	6.5	13.5	17
	R	8	6.5	15	6.5	15
Disagree With	L	0	1.5	1.5	0	1
	M	0.5	1.5	3	1	1.5
	R	0	0.5	0	2.5	1.5
Organize	L	0.5	8	3.5	1	3
	M	2.5	6	1.5	2	0
	R	0	6.5	1	7.5	1.5
Question-Knowledge	L	2	8	6.5	0	2
	M	0.5	5.5	6.5	1.5	1
	R	1	2	0	1	1.5
Question-Coordination	L	8	14	24.5	9	11
	M	19	17	19.5	9.5	9
	R	5.5	22.5	13	14	7.5
Interrupted By	L	12	13.5	15	0	2
	M	8.5	17.5	12	2	8
	R	5.5	9	7.5	6.5	1
Laugh	L	6	7.5	2.5	1	3
	M	2	6.5	0	1	2.5
	R	2.5	7.5	5.5	4	5
Negative	L	0	0	0	0	0
	M	0	0	0	0	0
	R	0	0	0	0	0
Behavior (+)	L	3	1.5	0	2	0
	M	1	2	0	0	0
	R	1	1.5	1	0	1
Behavior (-)	L	0	0	1	0	0
	M	0	0	0	0	0
	R	0	0	0	0.5	0.5
Organizer	L	8.5	22	28	10	14
	M	21.5	23	21	11.5	9
	R	5.5	29	14	21.5	9

Table K2. Means and Standard Deviations of Group Interactions and Affect by Condition

	<i>Control</i>		<i>Stigmatized</i>	
	Mean	Std Dev	Mean	Std Dev
Observable Power and Prestige				
Directive	41.70	12.97	38.68	17.34
Reiteration	4.55	3.30	4.34	2.84
Qualifier*	2.41	3.99	1.93	1.74
Expert*	0.12	0.34	0.18	0.55
Agreement	6.63	4.64	7.88	5.44
Disagreement	0.46	0.78	1.22	1.75
Organize	4.23	5.21	3.07	3.15
Question-Knowledge	3.51	3.14	3.54	3.03
Question-Coordination	10.77	7.66	10.38	7.53
Interruption	4.23	6.95	8.71	11.45
Laugh	2.18	2.54	3.48	4.78
Negative*	0.02	0.09	0.03	0.19
Positive Behavior	0.68	1.61	0.72	1.16
Negative Behavior*	0.03	0.14	0.2	0.4
Word Count	788.73	385.73	717.62	392.73
Organizer	14.99	12.14	13.64	9.99
Affect Indexes				
Unhappy with Own Performance	31.20	3.75	29.73	5.95
Unhappy with Group	32.40	4.39	31.32	4.81
Bored with Group	18.27	7.69	22.07	9.09
Group Cohesion	40.35	7.40	39.15	6.96
Commitment				
Same Group	8.60	1.33	7.98	1.83
Fall Out Shelter Score				
Individual Score	31.63	15.60	31.8	18.92
Group Score	52.10	8.64	52.8	8.4

* Low Inter-Coder Reliability

Table K3. Factor loadings, unique variances, and alpha levels

Group Interaction Variable	Factor 1	Factor 2	Factor 3	Uniqueness
Displeased	0.380	-0.237	0.797*	0.165
Unhappy	0.349	-0.347	0.731*	0.234
Not Satisfied	0.335	-0.131	0.860*	0.132
Discontent	0.325	-0.151	0.871*	0.114
Not Joyful	-0.296	0.517*	-0.412	0.476
Unenthusiastic	-0.437	0.507*	-0.276	0.476
Bored	-0.237	0.733*	-0.076	0.401
Tired	-0.256	0.760*	-0.151	0.335
Unmotivated	-0.107	0.881*	-0.186	0.177
Not Interested	-0.021	0.852*	-0.221	0.225
Close	0.496*	-0.520	0.089	0.476
Cooperative	0.674*	-0.202	0.430	0.320
Integrated	0.753*	-0.266	0.371	0.225
Solid	0.683*	-0.225	0.354	0.357
Cohesive	0.751*	-0.114	0.230	0.370
Convergent	0.787*	-0.180	0.378	0.205
Team Oriented	0.474	-0.301	0.439	0.492
Scale reliability alpha	0.92	0.90	0.95	
Independent chi2(136)	1793.72		p-value	0.00
Factor chi2(88)	184.88		p-value	0.00

* Represents abs (loading) > .5 and theoretically consistent

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