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# STIGMA MANAGEMENT AND COGNITIVE RESOURCES: THE EFFECTS OF VISIBILITY AND EXPERIENCE

By

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# A DISSERTATION

Submitted to Michigan State University in partial fulfillment of the requirements for the degree of

# DOCTOR OF PHILOSOPHY

Department of Psychology

# ABSTRACT

# STIGMA MANAGEMENT AND COGNITIVE RESOURCES: THE EFFECTS OF VISIBILITY AND EXPERIENCE

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In two studies, the level of cognitive resources required to engage in the process of stigma management was explored. It was hypothesized that the level of cognitive resources would differ as a function of stigma management strategy (affirming vs. negating), visibility of the stigma (visible vs. non-visible), and experience with the stigma (newly-acquired vs. long-term experience). Results did not support hypothesized differences in cognitive resources as a function of impression management strategy type, however visibility did have an effect in Study 1 with greater cognitive resources depletion occurring when the stigma was visible versus non-visible. In addition, Study 2 provided some evidence that experience reduces the level of cognitive resources required when enacting affirming strategies with a non-visible stigma. The influences of various individual difference (Study 1) and stigma experience-related (Study 2) factors on cognitive resources were also assessed. Finally, affective reactions to being stigmatized and the effectiveness of these stigma management strategies were explored. The implications and effectiveness of using these strategies for people who are stigmatized are discussed.

To James Mark Botelho, my soulmate and life partner, for being there when it seemed like no one else was. You know I could not have done this without you – Always.

### ACKNOWLEDGEMENTS

Foremost, I must express my gratitude to the co-chairs of my committee, Debbie Kashy and Isis Settles, for their guidance, support, and, especially their willingness to give me prompt feedback when I needed it most. In addition, I must thank the rest of my dissertation committee, Cheryl Kaiser, and Gwen Wittenbaum, for sharing their experience and giving me direction throughout this process. Sometimes the advice was difficult to hear, but I appreciate the honesty. I know I will be a better researcher and academic because of it.

Furthermore, I must acknowledge other Michigan State University Psychology faculty, both past and present, who have assisted me throughout my graduate career: Allen McConnell, Larry Messé, Norb Kerr, Rich Lucas, Brent Donnellan, Shira Gabriel, Tom Carr, and many others. Also, to the MSU graduate students who have offered their time, skills, and an occasional shoulder: Jeanette Renaud, Ernest Park, Joan Poulsen, Brendan Baird, Jen Pratt-Hyatt, Portia Dyrenforth, Kimdy Le, and Sian Beilock. Lastly, to all of the undergraduate assistants, without your energy and dedication, this research would never have been accomplished. All of your support, both academically and personally, has been immeasurable.

I must also thank my non-academic friends and family who have helped me through this. Your attempts at trying to keep me sane did not go unnoticed. Thank you for sticking by me when I was "too busy," "too tired," or just "stressed out."

Finally, I must thank James for his unwavering love and support and for proving to me on a daily basis that I am truly capable of loving another human being.

iv

# TABLE OF CONTENTS

LIST OF TABLES.	vii
INTRODUCTION.	1
Stigma Management	2
Stigma Management Strategies	3
Negation	4
Affirmation	5
The Use of Cognitive Resources in Impression Management	6
Factors Influencing Cognitive Resources used in Stigma Management	7
Visibility	8
Experience	9
STUDY 1	12
Individual Difference Factors	12
Affective Responses to Being Stigmatized	14
Overview	15
Research questions and hypotheses	16
Exploratory research questions.	16
Method	17
Participants	17
Measures	17
Procedure	22
Results	27
Manipulation Check and Suspicion	27
Main Hypothesis Tests	30
Individual Difference Factors	34
Affective Responses to Being Stigmatized	42
Discussion	45
STUDY 2	51
Experience with Stigma Management	51
Stigma Experience-Related Factors – Importance and Awareness	
Affective Responses to Being Stigmatized	54
Effectiveness of Stigma Management Strategies	54
Overview	56
Hypotheses and research questions	
Method – Part 1	
Participants	59
Measures	60
Procedure	63
Method – Part 2	66

Participants
Measures
Procedure
Results – Part 1
Manipulation Check and Suspicion
Main Hypothesis Tests
Stigma Experience-Related Factors
Affect Responses to the Interaction Task
Results – Part 2
Effectiveness of stigma management strategy
Discussion102
GENERAL DISCUSSION
Stigma Management and Cognitive Resources: The Effects of Experience and
Visibility
Individual Difference and Stigma Experience-Related Factors
Affective Responses of the Stigmatized and Responses from Others
Cognitive Measures111
Limitations113
Role-playing paradigm112
Different stigmas across studies112
Conclusion114
APPENDICES117
Appendix A: Demographic questionnaire
Appendix B: Self-Consciousness Scale (Fenigstein et al., 1975)
Appendix C: Self-Presentational Concern Scale (Lennox & Wolfe, 1984)121
Appendix D: Modified version of the State Self-Esteem Scale (Heatherton &
Polivy, 1991)
Appendix E: Cognitive Depletion Measure (General Mental Abilities Test; Janda,
1996)
Appendix F: Positive and Negative Affect Scale (PANAS; Watson et al.,
1988)
Appendix G: Scenarios for Study 1
Appendix H: Centrality subscale (Sellers et al., 1997)
Appendix I: Race version of the Stigma-Consciousness Questionnaire (Pinel.
1999)
Appendix J: Morgan (2002) Impression Management scale
Appendix K: Scenarios for Study 2137
REFERENCES142

# LIST OF TABLES

Table 1. Zero-order correlations of post-interaction cognitive measures for Study 131
Table 2. Means and standard deviations for the cognitive depletion measures and cognitive resource measure for Study 1
Table 3. Zero-order correlations of individual difference measures for Study 135
Table 4. Zero-order correlations of individual difference measures and performance    variables for Study 1.
Table 5. Post-interaction task cognitive measures regressed on ACT scores, public self- consciousness, impression management strategies and visibility experimental manipulations, and their interactions among participants in Study 1
Table 6. Post-interaction task cognitive measures regressed on ACT scores, performanceself-esteem, impression management strategies and visibility experimental manipulations,and their interactions among participants in Study 1
Table 7. Post-interaction task cognitive measures regressed on ACT scores, social self-esteem, impression management strategies and visibility experimental manipulations, andtheir interactions among participants in Study 1
Table 8. Means and standard deviations for the affective reactions measures for Study    1
Table 9. Zero-order correlations of post-interaction cognitive measures for Study 271
Table 10. Means and standard deviations for the cognitive depletion measures and cognitive resource measure for Study 2
Table 11. Zero-order correlations of stigma-related measures for Study 2
Table 12. Differences in stigma-related measures as a function of race in Study 277
Table 13. Post-interaction task cognitive measures regressed on ACT scores, racialcentrality, impression management strategies, visibility manipulation, race of participant,and their interactions among participants in Study 2
Table 14. Simple slope regression analyses for racial centrality, visibility, and theirinteraction predicting the number of items correct on the cognitive depletion measure forAfrican American and Caucasian participants in Study 2

Table 15. Multiple regression analyses for racial centrality, strategy, visibility, and theirinteraction predicting the number of items skipped on the cognitive depletion measure forAfrican American and Caucasian participants in Study 2
Table 16. Multiple regression analyses for racial centrality, strategy, visibility, and theirinteraction predicting the number of items attempted on the cognitive depletion measurefor African American and Caucasian participants in Study 2
Table 17. Post-interaction task cognitive measures regressed on ACT scores, stigmaconsciousness, impression management strategies, visibility manipulation, race ofparticipant, and their interactions among participants in Study 2
Table 18. Multiple regression analyses for stigma consciousness, strategy, visibility, andtheir interaction predicting the number of items correct on the cognitive depletionmeasure for African American and Caucasian participants in Study 2
Table 19. Multiple regression analyses for stigma consciousness, strategy, visibility, andtheir interaction predicting the number of items attempted on the cognitive depletionmeasure for African American and Caucasian participants in Study 2
Table 20. Post-interaction task cognitive measures regressed on ACT scores, use of affirmation stigma management strategies, impression management strategies, visibility manipulation, race of participant, and their interactions among participants in Study 289
Table 21. Multiple regression analyses for the use of affirmation stigma managementstrategies, strategy, and their interaction predicting the number of items attempted on thecognitive depletion measure for African American and Caucasian participants in Study2
Table 22. Multiple regression analyses for the use of affirmation stigma managementstrategies, visibility, and their interaction predicting the number of items skipped on thecognitive depletion measure for African American and Caucasian participants in Study2
Table 23. Means and standard deviations for the affective reactions measures and rating of interview items for Study 2
Table 24. Means and standard deviations for the ratings of participants in Study    2

### INTRODUCTION

Everyone attempts to manage the impressions that they make on others to some degree, and people use a variety of techniques in doing so (see Leary, 1996; Leary & Kowalski, 1990; Schlenker, 1980; Tice & Faber, 2001). Impression management is the process of controlling information about various aspects of the self in a social context (Schlenker & Pontari, 2000). Impression management is accomplished primarily by emphasizing positive characteristics about the self; however, for some people, impression management involves managing a characteristic that others view as negative (Crocker, Major, & Steele, 1998; Goffman, 1963; Jones, Farina, Hastorf, Markus, Miller, & Scott, 1984). The current work discusses impression management techniques utilized by individuals who are stigmatized, and explores factors that may influence the cognitive resources required to engage in these stigma management techniques.

Within social psychology, a stigma is generally defined as the "possession or perceived possession of an attribute that conveys a negatively valued social identity" (p. 505; Crocker et al., 1998). In the United States, these negative attributes include a wide variety of social categories to which one belongs (e.g., women, people of color, gays and lesbians, people with low socioeconomic status, people with eating disorders, people with mental illnesses, women who are heavyweight, and people who have a physical disability; Crocker et al., 1998; Goffman, 1965). Impression management strategies among stigmatized individuals are likely used in everyday interactions for many of the same reasons that they are used by non-stigmatized individuals (see Jones & Pittman, 1982; Leary, 1996). In general, individuals try to manage the impressions they convey to fit in with and be accepted by others (Baumeister & Leary, 1995); to maintain power or

control over another (Tice & Faber, 2001); to gain or maintain a valuable resource or obtain a desired goal (e.g., money, time, job, promotion; Leary, 1996); or to reinforce their views regarding their own self-concept and ultimately boost their self-esteem (Baumeister, 1998). However, although similar to general impression management, impression management among the stigmatized involves a unique combination of issues. The current work explored how the visibility of and the level of experience with the stigmatizing attribute affects the cognitive resources required when employing these stigma management techniques.

## Stigma Management

Stigma management is the process of strategic impression management, or selfpresentation, involving altering the negative perceptions that others may have of a person because of the negative attribute that they hold (Cain, 1991). This negative attribute may be relevant to many social interactions because it is used to simplify information in the social environment and to make sense of social experiences. The stigmatizing attribute may be seen by non-stigmatized others as an important distinguishing feature used to label and interpret the behaviors of the stigmatized individual during social interactions (Biernat & Dovidio, 2000; Fiske, 1998; Frable, Blackstone, & Scherbaum, 1990; Stryker, 1987). In addition, the negative attribute may be used by the stigmatized individual as a way of interpreting the negative and positive reactions of others in his or her social world (Crocker, Lutanen, Blaine, & Broadnax, 1994; Crocker, Lutanen, Broadnax, & Blaine, 1999). Often this socially undesirable part of one's self may become an aspect that is an important part of the stigmatized individual's self-definition (Bohan, 1996; Stryker & Serpe, 1994).

For many stigmatized individuals this negative attribute is visible to others and can have a great impact on the success of the social interaction (Jones et al., 1984). When a stigmatizing attribute is visible or somehow known to their interaction partner, the stigmatized person faces the chance of being negatively evaluated because of it (Goffman, 1965). A stigma is said to be conspicuous, or visible, when it is obvious to others (e.g., race for African Americans, person in a wheelchair); and non-visible, or concealable, when it can be easily hidden (e.g., homosexuality, possessing an eating disorder). However, regardless of whether the stigmatizing attribute is visible or nonvisible, the stigmatized individual may carry the devalued identity across many social contexts (Goffman, 1963; Jones et al., 1984; McNaught, 1993; Miller & Kaiser, 2001). As suggested by Frable et al. (1990), people who deviate from the norm (as well as their interaction partners when the stigmatizing attribute is visible) are particularly "mindful" of the stigma in social interactions. Because of this, many stigmatized individuals strategically present or withhold stigma-relevant information in an effort to minimize the negative influence of the stigma during social interactions.

# Stigma Management Strategies

Research conducted in psychology and sociology has explored impression management techniques among stigmatized groups such as racial minorities (e.g., Morgan, 2002; Roberts, Settles, Jellison, & Carswell, under review), gays and lesbians (e.g., Cain, 1991; Humphreys, 1972), heavyweight individuals (e.g., Miller & Myers, 1998), women in male-dominated professions (Roberts et al., under review; Settles, 2004), women who have had abortions (Major & Gramzow, 1999), the physicallychallenged (e.g., Braithwaite, 1991; Taub, Blinde, & Greer, 1999), and couples who have

chosen not to have children (Park, 2002). Although these researchers have used different terms to describe the stigma management techniques used by these groups, two general strategies tend to be implemented by stigmatized individuals when managing the impressions they make on non-stigmatized others (Cain, 1991; Morgan, 2002; Tajfel & Turner, 1979). In general, individuals with social stigmas, whether they are conspicuous or concealable, can deny that the stigma exists, avoid discussing it, and emphasize different, more positive attributes through a process of *negation*; or they can openly discuss the stigmatizing attribute in an attempt to emphasize the positive qualities of it and educate others about the stigma through a process of *affirmation*.

Negation. Stigmatized group members who use negation may choose to hide their stigma, avoid discussion of the negative attribute, or minimize the relevance that it has in any given social interaction. A variety of terms have been used to describe this group of strategies such as counterfeiting (Woods, 1993), passing (Humphreys, 1972), avoidance (Chrobot-Mason, Button, & DiClementi, 2001), heading off (Miller & Myers, 1998), and social recategorization (Morgan, 2002).

When one's stigma is concealable (non-visible), members of stigmatized groups may use negation in the form of trying to appear as a member of another social group. This type of stigma management may involve elaborate deception that goes as far as creating a fake life that is presented to others. It may also involve avoiding the discussion of topics that shed light on one's personal life, as might be the case for some gay and lesbian individuals who attempt to appear heterosexual among their colleagues (Troiden, 1993).

When the stigma is visible, individuals may use negation by diminishing the salience that the stigmatizing attribute has in the social interaction. For example, women in careers that are dominated by men may choose to minimize the salience of their gender by wearing less make-up or refraining from wearing clothes that would be considered "feminine" (e.g., dresses or skirts; Rafaeli, Dutton, Harquail, & Mackie-Lewis, 1997). In addition, while attempting to avoid discussing the negative attribute, members of stigmatized groups may choose to emphasize other positive qualities they possess, or social identities they belong to, that are unrelated to the stigmatizing characteristic. For example, when interacting with Caucasian students, African American college students may draw attention to school activities they share with these students in an effort to minimize racial differences.

Affirmation. Another group of strategies used by members of stigmatized individuals involves affirming one's membership in a stigmatized group by emphasizing its positive qualities, educating others, and, in so doing, demonstrating that the stigmatized group has value. A variety of terms have been used to describe affirming techniques including positive self-talk (Miller & Myers, 1998), being out (Gonsiorek, 1995), positive distinctiveness (Morgan, 2002), and integrating (Woods, 1993).

When one's stigma is not readily apparent to others, stigmatized individuals may use affirming techniques by wearing symbols or buttons that acknowledge the fact that they are group members. For example, gay men and lesbian women may choose to wear buttons or clothing containing rainbows or pink triangles in an effort to express their sexuality to others (Cain, 1991). In addition, people with concealable stigmas may

choose to verbally express and acknowledge their stigma to others during social interactions. By using these tactics, the concealable stigma is made visible.

When the stigma is visible, stigmatized individuals who use affirmation techniques do not try to hide or minimize the stigmatizing attribute. Instead, they choose to educate others about the stigma in an effort to show it in a more positive light to raise the status of the group in society (Morgan, 2002). For example, heavyweight people may choose to emphasize their value in society and educate others about being overweight (Miller & Myers, 1998) and people with physical disabilities may get involved with physical sports (Taub et al., 1999) in an effort to demonstrate that they are comfortable with their bodies and to put others at ease.

## The Use of Cognitive Resources in Impression Management

Utilizing impression management techniques involves both automatic and controlled cognitive processes (Baumeister, Hutton, & Tice, 1989; Tice & Faber, 2001). Automatic cognitive processes are those that occur outside of awareness and do not expend limited cognitive resources (Fiske & Taylor, 1991). In everyday social interactions, much impression management occurs automatically outside of the impression manager's awareness (Schlenker & Pontari, 2000) and generally involves portraying oneself in a positive light (Baumeister et al., 1989). These processes guide behaviors that are well learned and triggered by cues in one's social environment. Over time, growing up in a given culture, people learn what is appropriate for certain social interactions in both their overt behaviors and in the attributes of the self that are appropriate to disclose (Derlega, Metts, Petronio, & Margulis, 1993). Making a positive impression may involve behaviors that occur without the explicit awareness of the

individual (Schlenker & Pontari, 2000). Thus, using impression management techniques that are more automatic require the use of fewer cognitive resources during the social interaction.

Controlled processes, on the other hand, are those that people are aware of and monitor. There are times when impression management becomes more important, or people find themselves in a novel situation. This controlled management of impressions requires more cognitive resources (Baumeister et al., 1989). Controlled processes deplete limited cognitive resources because of the effort they require (Bargh, 1989). Cognitive load is the taxing and depleting of one's limited available cognitive resources. Thus, the controlled management of impressions should cause an increase in cognitive load (Schlenker & Pontari, 2000).

Impression management is especially susceptible to cognitive load when enacting a role incongruent with one's self-image (Pontari & Schlenker, 2001). When people are trying to behave in a manner different from how they feel they truly are, they need to monitor their actions to make sure that inconsistent verbal and nonverbal behavior does not "leak out" (DePaulo, 1993). In addition, they may need to monitor the behaviors of their interaction partner to be sure that the fake role is believable (Wegner & Giuliano, 1982). Enacting such an incongruent role takes up cognitive resources that shifts one's attention away from the situation, impairing one's capacity to encode and recall information about a social interaction (Baumeister et al., 1989).

# Factors Influencing Cognitive Resources Used in Stigma Management

One situation when a person may be forced to enact a role that is incongruent with his or her self-concept is when strategically managing the influence that a stigmatizing

attribute has during a social interaction. Overall, members of stigmatized groups may use negation and affirmation techniques to varying degrees. However, for some members of stigmatized groups using particular strategies may require greater cognitive resources than other strategies. There are important factors that can influence the level of cognitive resources required when strategically enacting these stigma management techniques.

*Visibility*. Although limited research has been conducted exploring how the visibility of a stigma influences the impressions that stigmatized individuals make on others, whether stigmatized individuals can conceal the stigma or not has important psychological implications for them and their social interactions. Foremost, if the stigmatizing attribute is concealable then the stigmatized individual can choose whether to disclose it to others (Crocker et al., 1998). Therefore, when the stigmatizing attribute is not visible, there are more stigma management strategies that can be used during a social interaction. By choosing to conceal a non-visible stigma, individuals can reduce the impact that this attribute has on the social interaction (Santuzzi & Ruscher, 2002). Thus, successfully concealing a negative stigma may reduce the cognitive resources needed to make a positive impression.

For visible stigmas, the influence that this "discrediting mark" has on others must be managed (Goffman, 1963). Visible stigmas are more salient than concealed (nonvisible) stigmas in social interactions and thus, people with visible stigmas are more likely to be evaluated by others in terms of the negative attribute (Braithwaite, 1991; Goffman, 1965, Jones et al., 1984). Even though stigma management may be more necessary when the stigma is visible, the utility of some strategies (e.g., some types of negation) may be limited. That is, if a stigma is visible, the stigmatized individual cannot

deny that the stigma exists, leaving downplaying the stigma as the negating option. Thus, visibility may force the stigmatized individual to use affirming techniques to reduce the negative effects of the stigma. Using these stigma management techniques to reduce the negative impact of the stigma may require a great deal of cognitive resources (Miller & Myers, 1998).

*Experience*. The level of experience with impression management techniques in general, and stigma management techniques specifically, should influence the degree to which cognitive resources are required. Stigma management strategies that are consistent with one's self-concept should place less of a demand on cognitive resources (Schlenker & Pontari, 2000). Given that those qualities that are consistent with one's self-concept should be seen as more positive, it should be easier (less cognitively taxing) to utilize strategies that reinforce positive aspects of the self (Tice & Farber, 2001).

For people with newly-acquired stigmas, the stigmatizing attribute is novel. Thus, they may see this new aspect of the self (i.e., this new stigma) as "incongruent" with their current self-image. Because stigma management should require the greatest cognitive resources when attempting to enact a role that is incongruent with one's self-image, for people with newly acquired stigmas, it may actually be easier to use negation techniques and avoid discussion of the stigmatizing attribute. Thus, for people with newly-acquired stigmas, using negating strategies may require less effort than using affirming strategies, especially when a stigmatizing attribute is non-visible, because, as long as the stigma is avoided, the effects of the stigma and the reactions of others do not need to be managed.

However, experience with stigma management may facilitate use of more diverse strategies. Even the most deliberate self-presentational strategies may become automatic

over time, thus requiring less cognitive resources (Shank & Ableson, 1977). Among stigmatized individuals, impression management techniques should be easier the longer the individual has had to cope with the stigmatizing attribute. Over time individuals may gain the skills necessary to perform these stigma management techniques, and so they should become more automatic and thus require less cognitive capacity. Once these techniques have become automatic, they can be used in more situations where cognitive resources may be limited. Thus, stigma management techniques should become easier as the individual acquires more experience (Smart & Wegner, 1999). Furthermore, in time this stigmatizing trait may actually become part of one's self-concept (Deaux & Ethier, 1998). Given that it should require less cognitive resources to manage a stigmatizing attribute that is consistent with one's self-concept, for people with more experience, using affirming techniques should require fewer cognitive resources than using negating techniques (Paulhas, Graf, & van Selst, 1989). In addition, given that they have more experience dealing with the stigma in multiple social interactions, and that they may have come to see the stigmatizing attribute as more positive, visibility should have less of an effect on the level of cognitive resources required.

In short, stigma management techniques should require varying levels of cognitive resources. In addition, the visibility of the stigma and the level of experience with the stigma should influence the amount of cognitive resources required for stigma management during a social interaction. However, little research has explored these factors among stigmatized individuals. Study 1 explored these processes among people assigned a newly-acquired stigma (i.e., being physically-challenged), and Study 2

explored these processes among people with a newly-acquired racial stigma and people with racial stigma management experience.

#### STUDY 1

The first study examined whether visibility of stigma and strategy type had an impact on the level of cognitive resources necessary for stigma management techniques for individuals with a "newly-acquired" stigma. In addition, Study 1 also explored two other research questions pertaining to those who have little experience with stigma management. The first exploratory research question addressed whether other factors that influence general impression management would have similar effects on the management of a stigma, thereby reducing the level of cognitive resources required. The second research question explored the affective reactions to using these stigma management strategies.

## Individual Difference Factors

Given that stigma management is a form of general impression management, those individual difference factors that influence impression management in general should also influence the managing of one's stigma. These factors, once they become automatic components of one's thought processes during social interactions, may influence the amount of cognitive resources required when attempting to manage a newly-acquired stigma.

People vary to the extent that they are aware of themselves as social objects (Schlenker & Weigold, 1990). Some people are chronically aware of themselves and how their actions may influence others (i.e., self-conscious). In addition, some people tend to be more anxious in social situations about whether they are making a desired impression (i.e., social anxiety). Furthermore, some people are more concerned about the impressions that they make on others and whether they are able to change the impression

that they make (i.e., concerned about self-presentation; Leary & Kowalski, 1990). Sometimes, this awareness leads to desires to create an impression that is consistent with how one views oneself (Jones & Pittman, 1982).

Being consciously aware of oneself and monitoring one's actions during a social interaction requires cognitive resources. However, for those individuals who are chronically aware of themselves as social objects, these processes should become more automatic, requiring less cognitive resources (Schlenker & Pontari, 2000). Thus, stigma management strategies should be easier (i.e., be less demanding on cognitive resources) for people who are more aware of the presence of others and who are more concerned about the impressions they are making. Furthermore, using affirming strategies (i.e., creating a positive impression) should require fewer cognitive resources for people who are more aware of how their actions influence others and are more concerned about the impression that they are making in social interactions. However, anxiety may deplete cognitive resources because of an increase in distracting thoughts (Leary, 1996). Moreover, people who are more socially anxious may be more adept at using negation strategies, because of their experience with attempting to reduce the negative tension during social interactions (Leary, 1996).

Furthermore, research has demonstrated that one's self-esteem can influence his/her ability to engage in self-presentational processes (e.g., Jones, Rhodewalt, Berglas, & Skelton, 1981). People may vary in these positive feelings depending upon the domain or skill in question (i.e., state self-esteem; Heatherton & Polivy, 1991). State self-esteem may influence one's ability to engage in self-presentational strategies because people high in self-esteem have different motives than people low in self-esteem (Baumeister et

al., 1989; Leary, 1996). Whereas people with low self-esteem may be chronically motivated to avoid being seen unfavorably, people with high self-esteem are motivated to make positive impressions to maintain self-esteem (Baumeister, 1998; Tice, 1992). Furthermore, confidence in a particular domain should increase one's ability to perform well. Given that people with high self-esteem tend to have more confidence in their selfpresentational abilities, higher self-esteem in domains related to impression management should influence one's ability to make a positive impression, especially if that impression is affirming and positive (Baumeister, 1998; Schlenker, Weigold, & Hallam, 1990). Thus, because people with high self-esteem tend to have more experience in using impression management strategies in general, using stigma management strategies that reinforce positive aspects of the self (i.e., using affirming strategies) should be less cognitively taxing for people who have higher self-esteem. The current study explored the effects of these self-presentational factors and of self-esteem on managing a newlyacquired stigma.

### Affective Responses to Being Stigmatized

Stigmatized individuals often face the negative affective responses of others (Branscombe & Ellemers, 1998; Dovidio, Kawakami & Gaertner, 2000). However, these stigmatized individuals may also experience negative affect toward their own stigmatizing state (Frable, 1993). This negative affect should be especially prevalent among individuals who are learning to cope with a newly-acquired stigma which may also influence their impression of others in a social interaction (Santuzzi & Ruscher, 2002). Visibility should also play an important role in the affect that the newlystigmatized person feels because of the likelihood that they will be negatively judged by others when the stigma is visible. The current study explored affective responses of people with a newly-acquired stigma and whether the level of negative affect varied as a function of stigma management strategy and stigma visibility.

# **Overview**

The study consisted of a 2 (Strategy: Negate, Affirm) x 2 (Visibility: Visible, Non-visible) between-subjects design. Participants, all of whom were non-stigmatized individuals, were assigned to play the role of a stigmatized person and were instructed to present themselves using one of two strategies. The role-playing aspect of this study was adapted from previous research exploring the underlying processes of stigmatization by using non-stigmatized individuals and giving them a negative attribute (e.g., Kleck & Strenta, 1980; Santuzzi & Ruscher, 2002; Smart & Wegner, 1999).

Participants completed a series of pre-experiment questionnaires that assessed individual difference factors that may influence their ability to make a positive impression in the subsequent interaction task. One to two weeks later, participants took part in the laboratory section of the experiment that consisted of a computer-mediated interaction with another participant (who was actually a confederate). During the interaction, participants played the role of a person with a physical disability (i.e., participants were instructed to sit in a wheelchair). Before engaging in the interaction task, participants read a series of scenarios about stigmatized individuals engaging in either affirming or negating stigma management techniques. These scenarios served to inform participants of various stigma management techniques to assist them during the interaction. In addition, participants believed they were either visible or non-visible to the confederate. One dependent measure assessed the level of available cognitive

resources during the interaction by asking participants to recall specific details about the interaction and the confederate. The other dependent measures assessed the level of cognitive depletion after the interview by having participants complete a difficult cognitive task. In addition to the main dependent measures, participants completed post-experiment measures to assess their mood and evaluations of the interview.

## Research questions and hypotheses:

- 1. Do some stigma management techniques require less cognitive resources than others?
  - Hypothesis 1: In this context of a newly acquired stigma (i.e., experience is low), negating stigma management techniques should require less cognitive resources than affirming stigma management techniques.
- 2. Is the level of cognitive resources required different when the stigma is visible?
  - Hypothesis 2: In this context of a newly acquired stigma, managing a visible stigma should require greater cognitive resources than managing a non-visible stigma.
- 3. Do the type of stigma management strategy and visibility of the stigma interact to influence the level of cognitive resources required?
  - Hypothesis 3: In this context of a newly acquired stigma, negating strategies should require less cognitive resources when the stigma is non-visible compared to visible; affirming strategies should require less cognitive resources when the stigma is visible compared to non-visible.

#### Exploratory research questions:

4. Do individual difference factors moderate the effects of visibility and strategy on the level of cognitive resources required?

5. What are the affective responses to using these stigma management strategies when individuals are visible versus non-visible?

#### Method

#### **Participants**

One hundred and twenty-one Caucasian psychology students who did not possess a major stigma were invited to participate in a study on interpersonal communication in exchange for course credit.<sup>1</sup> Data from 34 participants were omitted from the final analyses for the following reasons: 4 participants expressed high levels of suspicion on the open-ended questionnaire items and during the oral debriefing; 30 participants failed on the manipulation check items by either stating that they utilized a strategy different than the one they were assigned (7) or failed to correctly state whether they were visible or non-visible to their interaction partner (23).<sup>2</sup> Thus, 87 participants were used in the final analyses consisting of 63 women (72.4%) and 24 men (27.6%) with a mean age of 19.15 years (*SD*=1.70).

#### Measures

Demographics. A demographic questionnaire assessed participant's age, sex, race, and ACT total scores (M = 24.87, SD = 2.81). This measure also assessed whether participants had a major stigma. The complete demographics questionnaire is displayed in Appendix A.

<sup>&</sup>lt;sup>1</sup> Given that Study 1 was exploring the use of stigma management strategies among individuals who had a "newly-acquired" stigma, participants who possessed a major stigma, as defined by current social psychological literature, were omitted from the analyses. Participants omitted because of stigma included sexual orientation (1 gay man), racial minority (3 African American, 1 Asian American, 3 multi-racial), physical disability or deformity (2), and religious minority (3 Jewish).

<sup>&</sup>lt;sup>2</sup> Participants who failed the visibility manipulation check primarily stated that they were visible to their interaction partner, when in fact they were in the non-visible condition.

*Public Self-consciousness.* The extent that participants are aware of themselves as a social object was assessed by the public self-consciousness subscale of the Fenigstein et al. (1975) Self-Consciousness scale (5-items, e.g., I'm concerned about the way I present myself;  $\alpha = .69$ ; see Appendix B).<sup>3</sup> Participants rated how much they agreed that each item was true for them in general on a scale ranging from 1 (strongly disagree) to 5 (strongly agree). These responses were reverse-scored when appropriate and means were calculated such that greater scores reflect greater public self-consciousness.

Social Anxiety. The extent to which participants feel discomfort in the presence of others was assessed by the social anxiety subscale of the Fenigstein et al. (1975) Self-Consciousness scale (6-items, e.g., I have trouble working when someone is watching me;  $\alpha = .77$ ; see Appendix B). Participants rated how much they agreed that each item was true for them in general on a scale ranging from 1 (strongly disagree) to 5 (strongly agree). These responses were reverse-scored when appropriate and means were calculated such that greater scores reflect greater social anxiety.

Self-presentational Concern. Participants also completed the Concern subscale of the Self-Presentation Scale (Lennox & Wolfe, 1984; 5-items; e.g., I am concerned about the way I present myself;  $\alpha = .74$ ; see Appendix C) to assess their level of concern with the way they present themselves to others. Participants rated how much they agreed with each item on a scale ranging from 1 (not at all like me) to 5 (very much like me). Means were calculated such that greater scores reflect greater concern about one's self-presentation.

Self-esteem. Participants completed a modified version of the State Self-Esteem Scale (Heatherton & Polivy, 1991; see Appendix D) to measure chronic, domain specific

<sup>&</sup>lt;sup>3</sup> Two items from the public self-consciousness subscale were omitted due to poor inter-item correlations.

types of self-esteem. The State Self-Esteem Scale is a self-report measure that consists of three subscales assessing participants' level of *performance self-esteem* (7-items; e.g., I feel like I generally do not do well;  $\alpha = .76$ ), *social self-esteem* (7-items; e.g., I am worried about looking foolish most of the time;  $\alpha = .78$ ), and *appearance self-esteem* (6-items; e.g., I feel good about myself in general;  $\alpha = .82$ ). Participants rated how much they agree that each item is true for them in general on a scale ranging from 1 (strongly disagree) to 5 (strongly agree). For each of the self-esteem subscales, responses were reverse-scored when appropriate and means were calculated separately such that greater scores reflect greater levels of performance, social, and appearance self-esteem.

*Cognitive resources during interaction*. During the interview portion of the experiment, participants were given information about their partner (actually a confederate of the experimenter) and were able to view him or her via a webcam. A measure of cognitive resources (CRM) assessed whether participants recalled various details about the experimental interaction and their interaction partner. Sixteen questions included visual information about their partner (e.g., What color was the shirt that your interaction partner was wearing?), visual information about the environmental surroundings (e.g., What color was the wall behind your interaction partner on the webcam?; What was the screen name of your interaction partner?), as well as verbal (typed) information from the interaction partner (e.g., What do they like to eat?; What was the name of their pet?; What sport did they play in high school?). This measure served as the first main dependent variable for Study 1.

Cognitive depletion due to interaction. In addition, participants completed a measure to assess the extent to which the interaction was cognitively taxing and thus

limited the amount of resources available after the interaction was completed (see Appendix E). Following research conducted by Baumeister, Twenge, and Nuss (2002), participants were given 6 minutes to complete a series of items from the General Mental Abilities Test (Janda, 1996). This multiple-choice intelligence test measures verbal skills, mathematical ability, and general knowledge and served as a measure of cognitive depletion (CDM). Participants were instructed that they had 6 minutes to correctly answer as many questions as possible. Each item also had a 'skip' option that participants were instructed to use if they wished to skip over items that they were unable to answer. The number of questions correctly answered (CDM-correct), as well as the total number of questions attempted by the participants (correct and incorrect; CDMattempted), were calculated such that greater values reflect less cognitive depletion. In addition, the number of items skipped (CDM-skipped) was calculated such that greater values reflect greater cognitive depletion. These three scores served as the second set of main dependent variables for Study 1.<sup>4</sup>

Positive and Negative Affect. Participants were given the Positive And Negative Affect Scale (PANAS, Watson, Clark, & Tellegen, 1988; see Appendix F) to assess how they felt after the interview portion of the experiment. Participants rated the extent to which 10 positive moods (e.g., excited) and 10 negative moods (e.g., upset) were true for them "at this moment" on a scale ranging from 1 (very slightly or not at all) to 5 (extremely). Means for each subscale were calculated such that larger scores reflect greater levels of positive ( $\alpha = .87$ ) or negative ( $\alpha = .83$ ) affect.

<sup>&</sup>lt;sup>4</sup> A ratio of correct responses to attempted responses was also calculated. However, this measure demonstrated similar results as the other calculated cognitive depletion measures, so will not be discussed further.

Ratings of interview task. Participants also rated their experiences in the interview portion of the experiment. Participants responded to three items that assessed their level of *effectiveness* of making a positive impression (i.e., How effective were you in your ability to make a positive impression on your partner?; How much do you think your interaction partner likes you?; How well do you think you did on the task?; a = .79), two items assessing the *difficulty of the task* (i.e., How difficult was the interview task?; How difficult to perform was the strategy that you were given to use during the interview task?; a = .74), and *enjoyment of the task* (How much did you enjoy the interaction task?). Participants rated each item on a scale ranging from 1 (not at all) to 5 (extremely). For each of the subscales, responses were summed such that greater scores reflected greater endorsement.

Ratings of self and interview partner. Participants also rated themselves and their interview partner after the interview portion of the experiment. Participants responded to an item that assessed how much they liked themselves (How much do you like yourself after the interaction?) and an item that assessed how much they liked their interaction partner (How much do you like your interaction partner?). Participants rated each item on a scale ranging from 1 (not at all) to 5 (extremely). For each of the items, responses were summed separately such that greater scores reflected greater endorsement.

*Manipulation check.* One manipulation check item assessed whether participants believed that they were visible to their interaction partner (i.e., Could your interaction partner see you during the interview portion of the experiment?). In addition, participants were asked to briefly describe the type of strategy that they were instructed to use (i.e.,

Please briefly describe the type of strategy were you asked to use when interacting with your interview partner.).

#### Procedure

*Pre-experimental procedure.* Participants signed up on-line through the psychology department participation website to take part in a study on interpersonal communication. When they signed up, participants were asked to complete the demographic questionnaire, as well as other measures that may influence their ability to perform well on the interview task (i.e., hinder or facilitate their ability to manage the impression they make on others). These questionnaires included the measures of public self-consciousness, social anxiety, self-presentational concern, and self-esteem.

*Experimental procedure.* One to two weeks following the completion of the online pre-experiment measures, participants completed the laboratory portion of the experiment. Up to three individuals of the same sex participated in each session. Participants were assigned to wait at different locations and were escorted separately into one of three private computer work spaces in the lab by a male or female research assistant.<sup>5</sup> Before beginning the experiment, participants gave their informed consent. Participants were then given instructions via computer that stated they would be completing a series of tasks assessing factors that influence interpersonal communication.

Strategy familiarity task. Given that participants in Study 1 were Caucasian without a major stigma, they first completed a task that was designed to familiarize them with the impression management strategies used by stigmatized individuals. Participants read scenarios about three different physically-challenged people using stigma

<sup>&</sup>lt;sup>5</sup> Research sessions were conducted by four female and one male research assistant. Results were not qualified by the research assistant, or by gender of participant.

management strategies that were consistent with the condition to which they would be assigned (i.e., affirming or negating). These scenarios were adapted from qualitative studies on stigmatized individuals (e.g., Cain, 1991). These scenarios are displayed in Appendix G. Participants were instructed to read each story and respond to a few questions regarding the person in the story because the content of the story would be important to the second part of the study (e.g., How does the person in the story deal with their difficult situation?).

Computer-mediated interaction task. After answering the questions for the last story, participants were given instructions for the second task. They were informed that this task involved a chat-room interaction where they would be interviewed in a questionand-answer format by another participant. Participants were instructed that their goal during the interaction was to make a positive impression on their partner while taking on the role of a person who is physically disabled and has to use a wheelchair. Participants were then instructed to sit in a wheelchair and place a blanket over their legs. Participants were instructed to pretend that they had been in the wheelchair for many years and were unable to use their legs at all. Participants were also informed that their interaction partner was unaware of these instructions and that it was important to the study that they not know that the participant had been instructed to sit in the wheelchair. Participants then completed a short task to help them prepare for their role as a person in a wheelchair. Participants were instructed to type for three minutes about what it would be like to be a person who is physically disabled and is wheelchair bound. At the end of three minutes, the computer screen advanced to display information regarding the stigma management strategy manipulation.

Stigma management manipulation. Participants were instructed to present themselves to their interaction partner using one of two strategies. These strategies were consistent with the scenarios that the participants had previously read. Participants were given information about the strategy, but were allowed to enact the strategy however they felt was appropriate.

Participants in the *negate* condition were instructed to avoid any discussion of the wheelchair. They were instructed to hide the fact that they are in a wheelchair, if possible, by being careful not to disclose it to their interaction partner, or redirect the conversation to another topic and avoid discussing topics that refer to it.

Participants in the *affirm* condition were instructed to discuss the fact that they are in a wheelchair. They were instructed to openly express the fact that they are in a wheelchair, discuss it, and emphasize positive qualities about it.

Visibility manipulation. Whether the participants were visible or not to their interaction partner was manipulated. Across all conditions, participants saw their interaction "partner" (who was actually a confederate) over a computer webcam. However, whether the actual participant believed that he or she was visible to the confederate was manipulated through the use of a webcam connected to the participant's computer.

Participants in the *visible* condition were informed that they could be seen by their interaction partners. These participants were seated in front of a webcam that they believed was being transmitted to their partner's computer. They were led to believe that the wheelchair was visible to the other "participant." Participants in the visible condition were given the following information:

We would like to see how visibility influences the impressions that people make on others, so you and your interaction partner will have webcams hooked up to your computer, so each of you will be visible to each other over the webcam. You should see a webcam connected to your computer which will project an image of you sitting in the wheelchair to your interaction partner.

Participants in the *non-visible* condition did not have a webcam connected to their computer, and were led to believe that they were not visible to their interaction partner. Participants in the non-visible condition were given the following information:

We would like to see how visibility influences the impressions that people make on others, so there will be a webcam hooked up to the computer of your interaction partner, so they will be visible to you over the webcam. There is a webcam connected to their computer that will project an image of them sitting at their computer. However, your interaction partner will not have any visual information about you.

When the participant completed reading the visibility information, the experimenter entered the computer workspace and connected the participant's computer to the chatroom and webcam image of the confederate sitting at a computer workstation. The webcam image of the confederate was approximately 6in x 6in, and placed in the upper left-hand corner of the participant's computer screen. The confederate was the same sex as the participant. Three female and two male confederates were used in the experiment.<sup>6</sup>

A chatroom textbox, approximately three inches in height, appeared in the center of the right-hand side of the screen. In the visible condition, the webcam image of the participant appeared in a 2in x 2in screen in the lower left-hand corner of their screen. Before beginning the interaction, all participants were reminded of their task during the interaction and told that if they make a positive impression on their interaction partner they would be entered into a lottery to win \$100.

The confederate was trained to type a series of scripted questions and responses to the participant. It was expected that using a confederate instead of a computer program would make the procedure more believable for the participant, because the confederate could address any unexpected spontaneous responses by participants (e.g., are you really a participant?), and alleviate any suspicions that the participant may have. The questions typed in by the confederate included a broad range of topics (e.g., What is your major?), as well as specific items that address that fact that the participant is in a wheelchair (e.g., Do you play any sports?; Have you ever been treated unfairly or discriminated against?). In addition, the questions were designed to evoke responses of varying length and detail. For example, some questions required short responses to answer (e.g., How old are you?) and others required more elaboration (e.g., Describe a time when you accomplished something you are very proud of.). The chatrooms were set up such that participants were instructed by the experimenter to type a greeting (e.g., Hello, I am ready to begin) into the chatroom text box to let the other "participant" know that they were ready.

<sup>&</sup>lt;sup>6</sup> The confederate did not qualify any of the results presented and thus will not be discussed further.

The chatroom interactions lasted an average of 34.34 (SD = 9.48) minutes<sup>7</sup> and, after finishing the interaction, participants completed a post-interaction questionnaire that included the main dependent measures. Participants completed the measure of cognitive depletion immediately after the interaction, followed by the measure of cognitive resources assessing what they remembered about the interaction. These dependent measures were given via computer and were followed by the affective measures, ratings of self and interaction partner items, and the manipulation check items. Participants then were given the suspicion questions via computer (e.g., Did you find anything odd or confusing about this experiment? What do you think the purpose of this experiment is?). Participants were further probed for suspicion verbally by the research assistant and then fully debriefed. All participants received course credit and were entered into a lottery to win \$100.

### Results

### Manipulation Check and Suspicion

Responses on the visibility and strategy manipulation check items were visually inspected to verify that they were consistent with the participant's assigned experimental condition. In addition, responses to the written and verbal suspicion items, as well as the purpose of the study item were visually inspected for high levels of suspicion regarding the experimental design or the confederate. As stated in the *Participant* section above, participants who did not respond correctly to the manipulation check items or who expressed suspicion that the interaction was real were omitted from the subsequent analyses.

<sup>&</sup>lt;sup>7</sup> Chat time did not differ as a function of either the strategy manipulation, visibility manipulation, or their interaction. Furthermore, controlling for chat time did not alter any of the results presented.
Furthermore, the typed responses from all participants were coded for examples of negation and affirmation strategies. Specifically, responses to eight of the interviewer's scripted questions were coded. These questions were "Briefly describe yourself as you think a stranger would., Describe a time when you accomplished something you are very proud of., Describe a time when you feel you were unfairly criticized for your performance on a task., Do you play any sports?, Is there anything you used to be able to do that you are unable to do now?. What is the first thing that people notice about you when people meet you for the first time?, Do you think attitudes toward stereotyped groups have changed over the years?, Have you ever been treated unfairly or discriminated against?" Each response was coded as an example of affirmation if the participant responded in a way that acknowledged some value with being in a wheelchair (e.g., "I can't think of one person that... I wasn't able to change the way they thought...about people in a wheelchair"; "I like to think that since I became limited physically, I became more mentally strong"; "because of the wheelchair...people get to know me for who I am"; "I got to be involved in the Special Olympics"), attempted to educate or inform their interaction partner about what it is like to be in a wheelchair (e.g., "people treat disabled people differently than they do able-bodied people"; "it is kind of hard to date when you are in a wheelchair"; "I only wish that people would be more open in discussing my disability with me"), or acknowledged that he or she was in a wheelchair (e.g., "the first thing people notice is the wheelchair"; "I'm in a wheelchair"). In addition, each time that the participant acknowledged that they were in a wheelchair in an affirming way was calculated (e.g., in their opening comments stating they were in a wheelchair).

The response was coded as an example of negation if the participant minimized the relevance of being in a wheelchair (e.g., "being in a wheelchair is only one attribute of me"; "hopefully people don't notice anything physical but something about my personality"), stated something that obviously would not be accurate for a person that they had been assigned to play (e.g., "I figure skate"; "I can still do now pretty much everything that I did in the past"; "I am not discriminated against because I am middleclass and White"), responded in a way that avoided the topic of being in a wheelchair (e.g., "Getting into MSU was a major accomplishment"; "I know a girl on the tennis team who..."; "I think stereotypes toward women and African Americans have changed..."), attempted to change the topic (e.g., "How about you, what sports do you play?"; "Do you live in the dorms or off-campus?"; "You are only taking two classes?"), or gave a short response or completely ignored the question (e.g., "I don't think I have ever felt like that"; "No not really"; "I don't know"; "I have to tell you about a comedian I saw last night..."). In addition, each time that the participant tried to take the focus off of themselves was calculated (e.g., "So what are you going to be for Halloween?"). Examples of affirmation and negation were summed separately such that each participant had an affirmation score and a negation score.

Independent samples t-tests were conducted using the affirmation and negation scores as the dependent variables to assure that the assigned strategy was used more often during the interaction. Results demonstrated that participants in the Negation condition used significantly more negating techniques (M = 7.89, SD = 2.02) than participants in the Affirmation condition (M = 4.33, SD = 2.16), t(85) = 7.89, p < .01, and participants in

the Affirmation condition used more affirming techniques (M = 5.28, SD = 2.34) than participants in the Negation condition (M = 0.43, SD = 0.98), t(85) = -12.79, p < .01.<sup>8</sup>

Zero-order correlations were conducted to explore the relations among the dependent measures. The post experimental performance measures were significantly correlated (see Table 1). First, all of the cognitive depletion measures were related to each other in the expected direction. Furthermore, the number of items correct on the cognitive depletion measure was positively related to the cognitive resources measure, indicating that participants who had greater cognitive resources during the interaction also had greater resources after the interaction as well.

### Main Hypothesis Tests

A series of 2 (Strategy: Negate, Affirm) x 2 (Visibility: Non-Visible, Visible) between-subjects ANOVAs were conducted to test the current hypotheses using the cognitive resources score and the three cognitive depletion scores as dependent measures. Given that participants' ACT scores were strongly correlated with the total number of correct responses on the cognitive depletion measure (r = .43, p < .01), each of the

<sup>&</sup>lt;sup>8</sup> Given that responses were coded as examples of negation or affirmation regardless of experimental condition, some participants in the negate condition gave affirming responses and some participants in the affirm condition gave negating responses. For example, when visible, participants in the negate condition may have commented that they were in a wheelchair when describing themselves (presumably because they thought their interaction partner already knew this information), and, when responding to the interviewer's questions, participants in the affirm condition did not always discuss their disability. However, the overall response patterns for all of the participants in Study 1 were consistent with their assigned strategy condition. The mean number of negating strategy responses by experimental conditions are as follows: Negate Visible – M = 7.70, SD = 1.29; Negate Non-visible – M = 8.09, SD = 2.57; Affirm Visible – M = 4.72, SD = 1.87; Affirm Non-visible – M = 4.00, SD = 2.37. The mean number of affirming strategy responses by experimental conditions are as follows: Negate Visible – M = 0.57, SD = 1.04; Negate Non-visible – M = 0.30, SD = 0.93; Affirm Visible – M = 5.17, SD = 2.31; Affirm Non-visible – M = 5.36, SD = 2.42.

analyses in which the cognitive depletion measures served as outcomes included ACT scores as a covariate.<sup>9 10</sup> Means for these analyses are displayed in Table 2.

Table 1.

Zero-order correlations of post-interaction cognitive measures for Study 1.

M	easures	М	SD	1	2	3
1)	CDM-correct	16.40	5.41			
2)	CDM-skipped	8.21	5.39	32**		
3)	CDM-attempted	28.00	6.69	.65**	52**	
4)	Cognitive Resources Measure	11.25	1.91	.24*	11	.19†

*Note:* N = 87; CDM=Cognitive Depletion Measure. <sup>†</sup>p < .10, \*p < .05, \*\*p < .01.

<sup>&</sup>lt;sup>9</sup> As would be expected, ACT scores did not vary as a function of experimental conditions.

<sup>&</sup>lt;sup>10</sup> One participant did not report an ACT score and thus could not be included in these specific analyses.

Table 2.

Means and standard deviations for the cognitive depletion measures and cognitive resource measure for Study 1.

Strategy Condition

		Affirm		Neg	ate
		Mean	SD	Mean	SD
Measure	Visibility Condition				
CDM-correct*	Visible	15.31	6.07	14.77	5.36
	Non-visible	18.17	4.65	17.07	5.55
CDM-attempted*	Visible	26.15	6.57	26.43	6.23
	Non-visible	31.21	6.82	27.63	6.42
CDM-skipped*	Visible	10.02	4.47	9.47	6.27
	Non-visible	7.04	5.47	6.89	4.58
Cognitive Resources Meas	ure Visible	10.61	2.45	11.25	1.75
	Non-visible	11.32	1.55	11.70	1.89
Note: Affirm Visible $n = 1$	8. Affirm Non visible n	- 22. No	rate Vici	ble $n = 24$	Negate

Note: Affirm Visible n = 18; Affirm Non-visible n = 22; Negate Visible n = 24; Negate Non-visible n = 23; CDM=Cognitive Depletion Measure. \*Reported means controlling for ACT scores.

Hypothesis 1: Hypothesis 1 stated that in this newly acquired stigma context,

using a negating strategy would be easier than using an affirming strategy. Thus, support for Hypothesis 1 would be demonstrated by a significant main effect for strategy for each of the ANOVAs. Results indicated no significant main effects for strategy on any of the dependent measures [CRM, F(1,83) = 1.52, MSE = 3.64, p = .22; CDM-correct, F(1,81)= 0.60, MSE = 23.32, p = .44; CDM-skipped, F(1,81) = 0.09, MSE = 28.48, p = .76; CDM-attempted, F(1,81) = 1.35, MSE = 42.61, p = .25]. Thus, Hypothesis 1 was not supported in the current study.<sup>11</sup>

*Hypothesis 2:* Hypothesis 2 stated that for these individuals with newly acquired stigmas, having a visible stigma would require greater cognitive resources than having a non-visible stigma. Support for Hypothesis 2 would be demonstrated by a significant main effect for visibility, showing that participants in the visible condition had fewer cognitive resources compared to participants in the non-visible condition. Results demonstrated that, whereas no significant main effect for visibility was found for the cognitive resources measure (F(1,83) = 1.96, MSE = 3.64, p = .17), some support was found with the cognitive depletion measures. On the cognitive depletion measure, compared to participants in the visible condition, participants in the non-visible condition answered significantly more items correctly (M = 15.04, SD = 5.60; M = 17.62, SD = 5.08, respectively; F(1,81) = 6.00, MSE = 23.32, p < .05), skipped significantly fewer items (M = 9.75, SD = 5.54; M = 6.97, SD = 4.97, respectively; F(1,81) = 5.71, MSE = 28.48, p < .05), and attempted significantly more items (M = 26.29.15, SD = 6.29; M = 28.48, p < .05), and attempted significantly more items (M = 26.29.15, SD = 6.29; M = 28.48, p < .05), and attempted significantly more items (M = 26.29.15, SD = 6.29; M = 28.48, p < .05), and attempted significantly more items (M = 26.29.15, SD = 6.29; M = 28.48, p < .05), and attempted significantly more items (M = 26.29.15, SD = 6.29; M = 28.48, p < .05), and attempted significantly more items (M = 26.29.15, SD = 6.29; M = 28.48, p < .05), and attempted significantly more items (M = 26.29.15, SD = 6.29; M = 28.48, p < .05), and attempted significantly more items (M = 26.29.15, SD = 6.29; M = 28.48, p < .05), and attempted significantly more items (M = 26.29.15, SD = 6.29; M = 28.48, p < .05), and attempted significant mathematicanter items (M = 26.29.15, SD = 6.29; M = 28.48, p < .05), and attempted sig

<sup>&</sup>lt;sup>11</sup> Subsequent analyses demonstrated that stigma management substrategies (e.g., using negation by avoidance compared to negation by lying) did not influence the use of cognitive resources differently. In addition, the use of strategies or substrategies did not vary as a function of visibility. Given these results, these analyses were not conducted for Study 2.

29.42, SD = 6.78, respectively; F(1,81) = 4.83, MSE = 42.61, p < .05). Thus, partial support was found for Hypothesis 2 demonstrating that, it was easier (i.e., less cognitively-taxing) to perform these impression management techniques when one's stigmatizing attribute was non-visible compared to visible.

*Hypothesis 3:* Hypothesis 3 proposed that Hypotheses 1 and 2 would be qualified by a significant strategy by visibility interaction. Hypothesis 3 predicted that participants in the negating condition would demonstrate greater cognitive resources in the nonvisible compared to visible condition, however participants in the affirming condition would demonstrate greater cognitive resources in the visible compared to non-visible condition. Hypothesis 3 was not supported in the current study. No strategy by visibility interaction was found for the cognitive resource measure, F(1,83) = 0.10, MSE = 3.64, p= .75. In addition, the cognitive depletion main effects for visibility were not qualified by a significant interaction for number of correct responses, F(1,81) = 0.07, MSE = 23.32, p= .79, the number of items skipped, F(1,81) = 0.03, MSE = 28.48, p = .87, or the number of items attempted, F(1,81) = 1.85, MSE = 42.61, p = .18.

## Individual Difference Factors

The first exploratory research question addressed whether individual factors assist in the enactment of stigma management strategies and so reduce the amount of cognitive resources required during stigma management. Zero-order correlations were conducted to explore the relations among the pre-experiment individual difference variables (Table 3), and among the individual difference variables and performance outcomes (Table 4). As displayed in Table 3, measures tapping into self-presentational factors (i.e., public self-consciousness, social anxiety, self-presentational concern) correlated positively.

These factors were generally negatively related to the measures of self-esteem.

## Table 3.

Zero-order correlations of individual difference measures for Study 1.

M	easures	М	SD	1 2 3 4 5						
1)	Public Self-Consciousness	3.32	0.44							
2)	Social Anxiety	2.68	0.74	.43**						
3)	Self-Presentation Concern	3.37	0.67	.64** .25*						
4)	Performance Self-Esteem	3.79	0.54	1037**16						
5)	Social Self-Esteem	3.31	0.65	54**49**56** .40**						
6)	Appearance Self-Esteem	3.53	0.61	1632**19 <sup>†</sup> .49** .45**						
No	<i>Note:</i> $N = 87$ ; <sup>†</sup> $p < .10$ , * $p < .05$ , ** $p < .01$ .									

The correlations between these individual difference variables and the performance outcomes are displayed in Table 4. Participants who reported greater public self-consciousness attempted more items on the cognitive depletion measure; participants who reported greater social anxiety skipped more items on this measure. Furthermore, self-esteem was related to outcomes on the cognitive depletion measure such that participants who reported greater performance self-esteem answered significantly more items correct, and those who reported greater performance, social, and appearance selfesteem skipped significantly fewer items. Table 4.

Zero-order correlations of individual difference measures and performance variables for Study 1.

M	easures	CDM-correct	CDM-skipped	CDM-attempted	CRM
1)	Public Self-Consciousne	ss .11	.16	.21*	.07
2)	Social Anxiety	.09	.23*	03	.02
3)	Self-Presentation Concer	m10	.17	.04	.03
4)	Performance Self-Esteen	n .23 <b>*</b>	23*	.07	.08
5)	Social Self-Esteem	.00	26*	.03	03
6)	Appearance Self-Esteem	.03	36**	.04	.02

*Note:* N = 87; CDM=Cognitive Depletion Measure; CRM=Cognitive Resources Measure. <sup>†</sup>p < .10, \*p < .05, \*\*p < .01.

Multiple regression analyses were conducted to explore whether the individual difference factors moderate the effects of the strategy and visibility conditions. That is, the influence of these individual difference factors may be exacerbated under specific conditions. For example, people who are chronically aware of themselves as social objects (i.e., high in public self-consciousness) may have more experience with emphasizing the positive qualities they possess. For these individuals, engaging in affirming strategies specifically may require less cognitive resources. Dummy coding was performed on the strategy (0=negate and 1=affirm) and visibility (0=non-visible and 1=visible) variables and scores on the individual difference factors were mean-centered (Aiken & West, 1991). Each multiple regression was a factorial combination with all

main effects, two- and three-way interactions entered for each of the dependent measures (i.e., the three measures of cognitive depletion and the cognitive resource measure). For the three measures of cognitive depletion, ACT scores were entered as a control. For each statistically significant interaction involving the individual difference variable, simple slope analyses were conducted.

# Table 5.

Post-interaction task cognitive measures regressed on ACT scores, public selfconsciousness, impression management strategies and visibility experimental manipulations, and their interactions among participants in Study 1.

	Cognitive Depletion Correct			rect	Cognitive Depletion Skippe			
	В	ß	SE		В	ß	SE	
ACT Score	.75	.39**	• .19		03	02	.20	
Public Self-Consciousness	s31	24	2.32		3.81	.31	2.47	
Impression Strategy	1.39	.13	1.43		25	02	1.52	
Visibility Condition	-2.47	23	1.38		2.22	.21	1.47	
Strategy x Visibility	83	06	2.07		1.30	.10	2.20	
Strategy x Public SC	7.76	.42*	3.44		-9.56	52*	3.65	
Visibility x Public SC	3.88	.22	3.25		3.26	.18	3.45	
Strategy x Visibility x Pub	olic -3.61	13	4.81		2.13	.08	5.11	

*Note:* N = 86; Impression Strategy (Negate = 0, Affirm = 1); Visibility Condition (Non-visible = 0, Visible = 1). \*p < .05, \*\*p < .01.

Self-presentational factors. The statistically significant results for public selfconsciousness are displayed in Table 5. As displayed in panel 1, ACT scores significantly predicted the number of items that participants correctly answered on the cognitive depletion measure. As would be expected, participants with higher ACT scores answered more items correctly.<sup>12</sup> Furthermore, the strategy manipulation by public selfconsciousness interaction was also statistically significant. Simple slope analyses demonstrated that whereas public self-consciousness did not influence the number of items correctly answered on the cognitive depletion measure in the negate condition, B =-.97,  $\beta = -.08$ , SE = 1.52, p = .53, for participants in the affirm condition, as public selfconsciousness increased, so did their performance on the cognitive depletion measure after the interaction task, B = 5.26,  $\beta = .43$ , SE = 1.90, p < .01, indicating less cognitive depletion.

Similar results were found for *public self-consciousness* for the number of items skipped on the cognitive depletion measure, displayed in Table 5 panel 2. The strategy manipulation by public self-consciousness interaction was statistically significant. Simple slope analyses demonstrated that in the negate condition, as public self-consciousness increased, participants skipped more items, B = 5.47,  $\beta = .42$ , SE = 1.75, p < .01, indicating greater cognitive depletion. However, in the affirm condition, as public self-consciousness increased, participants skipped marginally fewer of the items, B = -3.35,  $\beta = -.28$ , SE = 1.96, p < .10, indicating less cognitive depletion.

No statistically significant interactions involving public self-consciousness were found for the number of items attempted on the cognitive depletion measure or on the

<sup>&</sup>lt;sup>12</sup> Given that ACT scores were always entered in Step 1, this result is similar across all of the following multiple regressions and thus will not be discussed further.

cognitive resources measure. However, the statistically significant results demonstrate that public self-consciousness reduced the level of cognitive resources required in the affirm condition, but increased the level of cognitive resources in the negate condition.

No statistically significant interactions involving *social anxiety* or *selfpresentational concern* were found on any of the cognitive depletion measures (i.e., CDM-correct, CDM-skipped, CDM-attempted) or on the cognitive resources measure.

Self-esteem factors. Multiple regression results with statistically significant interactions demonstrating the influence of participants' performance self-esteem on postinteraction cognitive task performance are displayed in Table 6. For the cognitive resources measure, the visibility by performance self-esteem interaction was statistically significant. Simple slope analyses demonstrated that whereas performance self-esteem did not significantly influence performance on the cognitive resource measure for participants in the visible condition, B = -.91,  $\beta = -.22$ , SE = .63, p = .16, for participants in the non-visible condition, as performance self-esteem increased, so did their ability to pay attention and recall details of their interaction, B = 1.10,  $\beta = .37$ , SE = .42, p < .05. No statistically significant interactions for performance self-esteem were found on any of the cognitive depletion measures (i.e., CDM-correct, CDM-skipped, CDM-attempted). The statistically significant results suggest, contrary to expectations, that performance self-esteem assisted participants in the non-visible condition by allowing them to concentrate more on the interaction.

Table 6.

Post-interaction task cognitive measures regressed on ACT scores, performance selfesteem, impression management strategies and visibility experimental manipulations, and their interactions among participants in Study 1.

	Cognitive Resources Measure					
	В	ß	SE			
Performance Self-Esteem	1.30	.37	.77			
Impression Strategy	11	03	.57			
Visibility Condition	33	09	.56			
Strategy x Visibility	45	10	.82			
Strategy x Performance SE	38	08	1.01			
Visibility x Performance SE	-2.71	50*	1.11			
Strategy x Visibility x Performance	1.46	.19	1.53			

*Note:* N = 87; Impression Strategy (Negate = 0, Affirm = 1); Visibility Condition (Nonvisible = 0, Visible = 1). \*p < .05, \*\*p < .01.

Statistically significant results for *social self-esteem* predicting performance on the post-interaction tasks are displayed in Table 7. The number of items correct on the cognitive depletion measure is displayed in panel 1. Social self-esteem interacted with strategy. Simple slope analyses demonstrated that, for participants in the affirm condition, as social self-esteem increased, the number of correct responses on the cognitive depletion measure decreased, B = -3.38,  $\beta = -.35$ , SE = 1.48, p < .05, however, this relation was not statistically significant for participants in the negate condition, B = 1.00,  $\beta = .13$ , SE = .92, p = .29. Thus, for participants in the affirm condition, having greater confidence in social situations actually depleted cognitive resources.

# Table 7.

Post-interaction task cognitive measures regressed on ACT scores, social self-esteem, impression management strategies and visibility experimental manipulations, and their interactions among participants in Study 1.

<u> </u>	CD	М-Соп	rect	CD	M-Skip	ped	CDM	I-Atten	npted
	В	ß	SE	В	ß	SE	В	ß	SE
ACT Score	.87	.45**	.18	01	01	.19	.13	.05	.25
Social Self-Esteem	2.68	.32	1.42	-1.17	14	1.54	2.08	.20	2.01
Impression Strategy	1.89	.18	1.42	52	05	1.54	4.69	.35*	2.01
Visibility Condition	-2.44	23	1.35	1.37	.13	1.47	-1.13	09	1.92
Strategy x Visibility	-1.73	13	2.05	2.28	.17	2.22	-5.42	33	<b>2.9</b> 0
Strategy x Social SE	-5.98	41*	<b>2</b> .27	4.22	.29	2.46	-6.71	38*	3.21
Visibility x Social SE	-3.32	27	1.93	-4.46	37*	2.09	-1.77	12	2.74
Strategy x Visibility x Soci	al .42	.02	3.48	1.13	.06	3.76	1.76	.06	4.92
d									

*Note:* N = 86; CDM = Cognitive Depletion Measure; Impression Strategy (Negate = 0, Affirm = 1); Visibility Condition (Non-visible = 0, Visible = 1). \*p < .05, \*\*p < .01.

The results for *social self-esteem* predicting the number of items skipped on the cognitive depletion measure are displayed in Table 7, panel 2. The visibility by social self-esteem interaction was statistically significant. Simple slope analyses demonstrated that, in the visible condition, as social self-esteem increased, the number of items skipped

on the cognitive depletion measure significantly decreased, B = -4.42,  $\beta = -.48$ , SE = 1.25, p < .01, however, in the non-visible condition, this relation was not statistically significant, B = .49,  $\beta = .06$ , SE = 1.21, p = .69. Social self-esteem assisted participants in the visible condition depleting less of their cognitive resources during the interaction task.

Social self-esteem predicting the number of items attempted on the cognitive depletion measure is displayed in Table 7, panel 3. Again, the impression management strategy by social self-esteem interaction was statistically significant, however, simple slope analyses demonstrated that neither slope attained even marginal significance (negate: B = 1.13,  $\beta = .13$ , SE = 1.32, p = .40; affirm: B = -3.01,  $\beta = -.24$ , SE = 2.06, p =.10). Nonetheless, this pattern of results does reinforce the previous finding for number of correct responses on the cognitive depletion measure. That is, in the affirm condition, as confidence in social situations increased, the task required greater cognitive resources, leaving less to complete the post-interaction task.

No statistically significant interactions involving *social self-esteem* in predicting responses on the cognitive resource measure were found. Furthermore, no statistically significant interactions involving *appearance self-esteem* were found on any of the cognitive depletion measures (i.e., CDM-correct, CDM-skipped, CDM-attempted) or on the cognitive resources measure.

## Affective Responses to Being Stigmatized

The second exploratory research question focused on the affective responses to using these various stigma management strategies for people with newly-acquired stigmas. To address this question, a series of 2 (Strategy: Negate, Affirm) x 2 (Visibility: Non-visible, Visible) between-subjects ANOVAs were conducted to explore the reactions of participants after the computer-mediated interaction. Results are displayed in Table 8.

Positive and negative affect. Although participants did not differ after the interaction in their level of positive affect as a function of the impression management strategy, visibility, or their interaction, a significant strategy by visibility interaction did demonstrate that participants differed in their level of negative affect, F(1,83) = 10.81, MSE = 25.95, p < .01. Simple effects analyses demonstrated that whereas participants in the negate-visible condition felt significantly more negative affect than participants in the negate-non-visible condition, t(83) = 2.53, p < .05, the opposite pattern was found in the affirm condition, with participants in the non-visible condition felt significants, t(83) = -2.14, p < .05. Thus, participants with a newly-acquired stigma felt worse after an interaction in which they tried to avoid discussing a visible stigma or after an interaction in which they were asked to say positive things about a stigma of which their partner may not be aware.

Ratings of interview task. Participants did not differ in their reactions toward the interaction (i.e., task effectiveness, difficulty of task, enjoyment of task) as a function of the impression management strategy or visibility manipulations (see Table 8).

Ratings of self and interview partner. Participants did not differ in how much they liked themselves after the interaction as a function of the impression management strategy or visibility manipulations (see Table 8). However, a significant strategy by visibility interaction did demonstrate that participants differed in how much they liked their interaction partner, F(1,83) = 6.36, MSE = .54, p < .05. Simple effects analyses demonstrated that whereas participants in the affirm-visible condition liked their

Table 8.

Means and standard deviations for the affective reactions measures for Study 1.

		Strategy Condition				
		Affirm		Neg	ate	
		Mean	SD	Mean	SD	
Measure Vis	bility Condition					
Positive Affect – PANAS	Visible	34.39	6.63	31.71	6.36	
	Non-visible	33.59	6.58	32.57	5.54	
Negative Affect – PANAS	Visible	14.67	4.09	17.58	6.78	
	Non-visible	18.14	5.21	13.83	3.33	
Effectiveness of Task	Visible	10.83	1.25	11.38	1.93	
	Non-visible	10.68	1.86	11.04	2.23	
Difficulty of Task	Visible	4.67	1.75	4.17	2.04	
	Non-visible	4.77	2.05	4.83	2.10	
Enjoyment of Task	Visible	3.67	0.91	3.17	1.09	
	Non-visible	3.45	0.96	3.43	1.04	
Likeability of Self after Interact	tion Visible	3.78	0.65	3.75	0.79	
	Non-visible	3.82	1.01	3.52	0.85	
Likeability of Interaction Partne	er Visible	3.89	0.58	3.50	0.93	
	Non-visible	3.50	0.80	3.91	0.51	

*Note:* Affirm Visible n = 18; Affirm Non-visible n = 22; Negate Visible n = 24; Negate

Non-visible n = 23.

interaction partner marginally more than participants in the negate-visible condition, t(83) = 1.69, p < .10, the opposite pattern was found in the non-visible condition, with participants in the negate condition stating marginally greater liking for their interaction partner than participants in the affirm condition, t(83) = -1.88, p < .07. Thus, it appears as if the negative affect felt by participants in the affirm non-visible and negate visible conditions influenced their feelings toward their partner.

## Discussion

In Study 1, the hypotheses were only partially supported. First, the amount of cognitive resources necessary to manage a newly-acquired stigma did not differ as a function of whether participants were using a negating or affirming technique. Thus, it appears that for people with newly-acquired stigmas both strategies required equal amounts of cognitive resources. Regardless of the type of strategy used, sitting in a wheelchair was a new experience for these participants. Furthermore, for them being a person who is physically challenged would be inconsistent with their self-concept. Given that simply being in this unique situation should require greater cognitive resources, it appears that both strategies may have been equally taxing. This would be due to the fact that both strategies were equally unfamiliar.

However, whether or not the stigmatizing attribute of being in a wheelchair was visible to their interaction partner did influence the amount of cognitive resources necessary to engage in the interaction task. When the newly-acquired stigma was visible, participants did not perform as well on the post-interaction cognitive task suggesting that, for people with a newly-acquired stigma, managing a visible stigma requires greater cognitive resources than managing a non-visible stigma. When a stigma is visible, it is

more salient to both the stigmatized individual and the interaction partner (Frable et al., 1990). However, when the stigma is not visible, its impact on the social interaction is greatly reduced (Santuzzi & Ruscher, 2002), and the stigmatized individual does not face the pressure of being "discredited" and having to deal with the negative reactions of others (Goffman, 1965; Quinn, Kahng, & Crocker, 2004). Therefore, when a stigma is not visible, it may be less cognitively taxing to simply conceal it (Pontari & Schlenker, 2001).

This would suggest that managing a non-visible stigma using a negating strategy would be the least cognitively taxing for people with a newly-acquired stigma. However, no support was found for the proposition that visibility would interact with the type of strategy utilized. That is, when their stigma was visible, participants demonstrated less cognitive resources after the interaction task regardless of whether they were expressing positive things about their stigma (i.e., using affirming techniques) or avoiding its discussion (i.e., using negating techniques).

The analyses exploring individual difference factors that may facilitate or hinder the use of these stigma management techniques demonstrated that the influence of these factors may depend on the visibility and the management strategy used. Specifically, being chronically aware of oneself as a social object seems to reduce the cognitive resources required when enacting stigma management strategies that are positive, but increases the level of cognitive resources when using strategies that avoid the stigma. Those who are aware of themselves in social interactions may monitor the reactions of their interaction partners to make sure they are making a positive impression (Leary, 1996). Thus, emphasizing positive personal qualities may become automatic for people

high in public self-consciousness making it less cognitively taxing to use affirming stigma management techniques.

However, no statistically significant results were found for the measures of social anxiety or self-presentational concern. Like public self-consciousness, other chronic thought processes that influence the level of cognitive resources necessary during a social interaction should also influence the level of cognitive resources required to enact these stigma management strategies. It was expected that these factors would either have increased the level of cognitive resources required or decreased the level of cognitive resources. That is, although initially these individual difference factors may be disruptive to processing information during a social interaction because they use up available cognitive resources, over time they may become more habitual and thus less disruptive to the social interaction (Schlenker & Pontari, 2000). Thus, self-presentational concern and chronic social anxiety should have decreased the level of cognitive resources required when engaging in these stigma management strategies. Conversely, these factors may have increased the level of cognitive resources required because these stigma management tasks were novel creating greater concern and anxiety (Leary, 1996). However, neither of these contentions were supported.

Furthermore, self-esteem should offer an individual confidence when performing a difficult or challenging task, yet the results for self-esteem were mixed and some were contrary to expectations. Results suggest that performance self-esteem assisted participants in the easier task condition (i.e., when they were not visible), whereas social self-esteem assisted participants in the more difficult task when the stigma was visible. It was suggested that self-esteem should assist in the enactment of these stigma

management strategies for people with newly-acquired stigmas because this confidence gained from high self-esteem may reduce the cognitive resources used up due to concern over being successful at the task. However, these results suggest that specific types of self-esteem may influence the level of cognitive resources needed depending on whether the stigma is visible versus not visible. When the stigma is not visible, impression management may involve creating a desired image that may include a fake identity. When a stigma is concealable, impression management may involve the specific task of "performing" a specific role, thus, greater confidence in this domain is beneficial. But when the stigma is visible, impression management is more about creating a positive social interaction. When managing a visible stigma, greater confidence in one's social skills is required due to the increased need to interpret the reactions of others (Goffman, 1965). In turn, cognitive resources that may be used up because of the concerns of managing a visible stigma are not as depleted when one has confidence in social interactions.

Moreover, having confidence in social interactions actually led to greater cognitive depletion when using an affirming strategy. A person may have confidence in a social interaction because they believe that they are liked for who they are. However, as previously stated, people with newly-acquired stigmas may not see this stigma as part of their self-concept. Thus, accentuating positive aspects of the newly-acquired stigma may be seen as deceptive and, when enacting an affirming strategy, they may feel they are attempting to be liked for something that they are not. Thus, for people who are confident in social interactions, concern over this deception may be distracting. This distraction may use up cognitive resources.

In addition, no significant interaction effects were found for performance selfesteem and strategy. Given that the goal of the interaction was more interpersonal than task-oriented, participants may not have had specific performance goals when engaging in the task (or at least these performance goals were more social in nature). Furthermore, no statistically significant results were found for appearance self-esteem for either visibility or strategy. It may be that people with newly-acquired stigmas may not see being in a wheelchair as part of their self-concept, thus feeling good about how one looks may not be applicable to the task. In short, the confidence that is gained from performing a challenging task well or feeling good about one's appearance may not have been as relevant to the interaction as the confidence associated with being liked and respected by others.

Finally, participants with a newly-acquired stigma displayed more negative affect after engaging in an interaction where they attempted to avoid discussing a visible stigma or affirm a non-visible stigma. In turn, this negative affect appeared to influence their feelings toward their interaction partner. These results are consistent with other research demonstrating that people with newly-acquired stigmas report an increase in negative attributions regarding the trustworthiness of their interaction partner (Santuzzi & Ruscher, 2002).

As previously stated, although it was hypothesized that engaging in negating stigma management techniques would be less cognitively-taxing than engaging in affirming stigma management techniques for people with newly-acquired stigmas, no significant differences in cognitive resources were found as a function of impression management strategy. In part, this may be because both types of stigma management

strategies were unfamiliar to the participants. The atypical experience of managing a stigma may require equal levels of cognitive resources regardless of the stigma management strategy employed. However, over time these stigma management strategies should become more familiar as the stigmatized person gains more experience with them, making these processes more automatic. Study 2 explored whether experience would in fact moderate the effects of visibility and stigma management strategy on the level of cognitive resources required during a social interaction.

## STUDY 2

#### Experience with Stigma Management

Coping with a newly-acquired stigma and having experience with using stigma management strategies in one's everyday life are almost certainly psychologically different (Miller & Myers, 1998). Although there are numerous conditions that differentiate these two groups, including the level of social support, most pertinent to the current discussion is the level of stigma management skill. People who have dealt with their stigmatizing attribute for some time (regardless if they are born with it or acquired it later in life) have had time to develop the skills necessary to compensate for the negative reactions of others (Branscombe & Ellemers, 1998; Cross & Strauss, 1998; Miller & Myers, 1998). Over time, they may have been exposed to similar others who may guide them in the development of strategies that assist in stigma management (Crocker & Major, 1989; Troiden, 1987). Because people with experience with the stigma may have gained the skills necessary to perform these stigma management techniques, using them should become more automatic and thus require less cognitive capacity.

Moreover, the effects of visibility and type of strategy may be different for people with experience with the stigma, compared to people with newly-acquired stigmas. People who have dealt with their stigma for some time may have experience with managing their stigma in a wider range of situations, including situations that may be difficult for a person with a newly-acquired stigma (such as using affirming strategies when the stigma may not be visible and using negating strategies to reduce the impact of a visible stigma). Because of this, visibility should have less of an influence on cognitive resources for people with stigma management experience.

## Stigma Experience-Related Factors – Importance and Awareness

In addition, specific factors relevant to the stigma may be more pertinent to people who have more experience with managing the stigma. Similar to the individual difference factors examined in Study 1, these stigma-related factors should influence the level of cognitive resources required to engage in various impression management tasks. Centrality is the degree to which individuals consider some attribute of the self to be important to their self-concept (Sellers, Smith, Shelton, Rowley & Chavous, 1998). When an attribute is important, it will have a greater influence on the behaviors of the stigmatized individual in a wider range of social interactions (Stryker & Serpe, 1994). If the stigmatizing attribute is important, the stigmatized individuals will be more aware of it more often and in more situations (Sellers et al., 1998; Stryker & Serpe, 1994). Thus, when a stigmatized attribute is central, the stigmatized individual would have had more opportunities to develop the skills needed for stigma management (Leary, 1996; Miller & Myers, 1998). In addition, when an identity is central the stigmatized individual may have more experience with using affirming stigma management strategies. For example, research has demonstrated that women in male-dominated science fields, who feel that their gender is important to who they are, were more likely to affirm their gender identity when interacting with their male peers than women for whom gender is not central (Roberts et al., under review). When the negative attribute is more central, stigmatized individuals are more likely to be open about it and thus would have more experience using affirming techniques (Walter & Simoni, 1993). However, for those for whom it is less important, negation techniques may be more widely used because they are less

invested in maintaining this aspect of the self (Branscombe & Ellemers, 1998; Leary & Kowalski, 1990).

In addition, if the stigmatizing attribute is not important then it will be less salient to the stigmatized individual during social interactions (Sellers et al., 1998). Thus, the stigmatized individual would be more likely to discount its relevance to the social interaction. This experience with stigma management strategies due to the stigmatizing attribute being important should influence the amount of cognitive resources necessary in enacting these various strategies. That is, for people low in centrality, using negation techniques should be more automatic (i.e., require fewer cognitive resources) than affirming techniques; however, for people high in centrality, using affirming techniques should require fewer cognitive resources, compared to using negating techniques.

In addition, some stigmatized people are more aware that others may evaluate them in terms of the stigmatizing attribute. Stigma consciousness is the extent to which members of stigmatized groups expect to be stereotyped by others (Pinel, 1998). In general, people who believe that others hold more negative attitudes toward their group should have more experience with managing their stigma during social interactions (Pinel, 1998). Experience should make using stigma management techniques more automatic, thus requiring fewer cognitive resources. People who are more aware that others may view them negatively should have more experience with using strategies that downplay the stigmatizing attribute compared to emphasizing it (Goffman, 1963; Tajfel, 1978). However, given that the use of stigma management strategy may be context dependent, it may also be the case that people who are more aware of the stigma have more experience with both types of stigma management strategy (Roberts et al., under

review). Either way, these individuals should require less cognitive resources when enacting stigma management strategies, compared to stigmatized individuals who are less aware of the negative attitudes of others.

### Affective Responses to Being Stigmatized

Study 1 demonstrated that people with newly-acquired stigmas express more negative affect when attempting to use negating strategies to manage a visible stigma or use affirming strategies to manage a non-visible stigma. Study 2 explored the affective responses from using these stigma management strategies among people who have experience with the stigma. As previously stated, the salience of the stigma to the stigmatized individual during the interaction, as well as their interaction partner if the stigma is visible, should increase the use of stigma management strategies. This increased use should increase the level of expertise in conducting these stigma management strategies (Miller & Myers, 1998). Furthermore, this increased salience should increase the level of importance that the stigmatizing attribute has in regard to the self-concept (Sellers et al., 1998). These factors should contribute to people with stigma experience expressing more positive affect toward engaging in stigma management strategies, compared to people with newly-acquired stigmas. This positive affect should be especially prevalent when utilizing affirming stigma management strategies. Study 2 explored this proposition.

## Effectiveness of Stigma Management Strategies

One issue that was not addressed in Study 1 was the degree to which participants were effective in their impression management. Stigma management can be considered effective if it reduces the negative impact that the stigma itself creates (Miller & Myers,

1998). However, these strategies may not be considered effective if it appears as if the stigmatized individual is being covert or deceptive. Cognitive load that may incur from utilizing stigma management strategies may diminish the ability to try to enact an incongruent self-image (Paulhas, Graf, & Van Selst, 1989). Inconsistent verbal and nonverbal behavior may then "leak out" and lessen the effectiveness of the impression management technique (DePaulo, 1993). As cognitive resources are used up, it should reduce the effectiveness of impression management techniques. Thus, the effectiveness of impression management should be poorest when attempting to enact a role that is incongruent with one's self-image.

However, the level of experience with impression management techniques in general, and stigma management techniques, specifically, should influence the degree to which cognitive resources are required, and, ultimately, how effective the technique is in making a positive impression. Among stigmatized individuals, impression management techniques should be easier the longer the individual has had to cope with the stigmatizing attribute. Thus, stigma management techniques should be more effective the more experience the stigmatized individual has had to manage it. Smart and Wegner (1999) found that women who were attempting to conceal an eating disorder were rated as being just as comfortable in a social interaction as women without an eating disorder, even though the eating disorder women were thinking more about the eating disorder during the social interaction. These authors suggest that women with actual eating disorders may learn in time to function in social interactions and thus are more effective in managing their stigmatizing attribute. In short, the effectiveness of the stigma management technique should vary as a function of experience, with people with newly-

acquired stigmas being more effective at using negating techniques, compared to affirming strategies, and people with stigma experience being more effective at using both of these strategies, compared to people with newly-acquired stigmas. *Overview* 

Study 2 replicated and extended Study 1 by exploring whether stigma management experience moderates the effects of stigma management strategy and visibility of the stigma on cognitive resources (Part 1). In addition, Study 2 explored whether these stigma management strategies were effective in creating a positive impression (Part 2). The design of Study 2 Part 1 was similar to that of Study 1 except Study 2 consisted of individuals with an actual social stigma (i.e., the racial stigma of African Americans) and individuals with a newly-acquired stigma (i.e., Caucasian individuals who were asked to portray themselves as African American). Study 2 Part 1 consisted of a 2 (Race of participant: Caucasian, African American) x 2 (Strategy: Negate, Affirm) x 2 (Visibility: Visible, Non-visible) between-subjects design. The main dependent measures of Study 2 were the same measures of cognitive resources and cognitive depletion used in Study 1. Study 2 also explored factors associated with stigma experience that can influence the level of cognitive resources required during social interactions. The design of Study 2 Part 2 consisted of participants rating the person in the chatroom transcripts from Part 1. Study 2 Part 2 consisted of the same betweensubjects design as Part 1 with the dependent measures of Part 2 including ratings of likeability and disclosure.

### Hypotheses and research questions:

1. Do some stigma management techniques require less cognitive resources than others?

- Hypothesis 1a: For people with newly-acquired stigmas, negating stigma management techniques should require less cognitive resources than affirming stigma management techniques.
- Hypothesis 1b: For people with experience with the stigma, using an affirming stigma management technique should require fewer cognitive resources than using a negating technique.
- 2. Is the level of cognitive resources required different when the stigma is visible?
  - Hypothesis 2a: For people with newly-acquired stigmas, managing a visible stigma should require greater cognitive resources than managing a non-visible stigma.
  - Hypothesis 2b: For people who have experience with the stigma, managing a visible stigma should require less cognitive resources than managing a non-visible stigma.
- 3. Do the type of stigma management strategy and visibility of the stigma interact to influence the level of cognitive resources required?
  - Hypothesis 3a: For people with newly-acquired stigmas, negating strategies should require less cognitive resources when the stigma is non-visible compared to visible; affirming strategies should require less cognitive resources when the stigma is visible compared to non-visible.
  - Hypothesis 3b: For people with experience with the stigma, affirming strategies should require less cognitive resources when the stigma is non-visible compared to visible; negating strategies should require less cognitive resources when the stigma is visible compared to non-visible.

- 4. For people with experience with the stigma, do stigma experience-related factors influence the level of cognitive resources used when enacting stigma management strategies?
  - Hypothesis 4a: People with experience with the stigma for whom the stigmatizing attribute is more central should require less cognitive resources when using affirming strategies than when using negating strategies; however, for people with experience with the stigma for whom the stigmatizing attribute is less central, negating strategies should require less cognitive resources, compared to affirming strategies.
  - Hypothesis 4b: People with experience with the stigma who are more aware that they are stigmatized should use greater cognitive resources when enacting affirming stigma management strategies, especially when the stigma is visible, compared to people with experience with the stigma who are less aware that they are stigmatized.
  - Hypothesis 4c: People with experience with the stigma who have more experience using negating strategies should use less cognitive resources in the negating condition compared to the affirming condition; however people with experience with the stigma who have more experience using affirming strategies should require less cognitive resources in the affirming condition compared to the negating condition.
- 5. What are the affective responses to using these various stigma management strategies for people with experience with the stigma?

- Hypothesis 5a: People with newly-acquired stigmas would feel more negative affect toward the task and their interaction partner when enacting an affirming strategy compared to a negating strategy.
- Hypothesis 5b: People who have experience with the stigma should feel more negative affect toward the task and their interaction partner when enacting a negating strategy compared to an affirming strategy.
- 6. How effective are these stigma management techniques in forming a positive impression for people with newly-acquired stigmas and people with experience with the stigma?
  - Hypothesis 6a: People with newly-acquired stigmas should be more effective when using a negating, compared to affirming strategy.
  - Hypothesis 6b: People who have experience with the stigmas should be more effective when using an affirming, compared to negating strategy.

Method – Part 1

# **Participants**

One hundred sixty-five participants (124 Caucasian, 41 African American) who did not possess a major stigma (other than race for the African American participants using the same restrictions as Study 1) were recruited through the Psychology Department Human Participants in Research website to participate in part 1 of study 2.<sup>13</sup> Participants were run in same-sex sessions as with Study 1.<sup>14</sup> Data from 28 participants

<sup>&</sup>lt;sup>13</sup> Participants omitted because of stigma included sexual orientation (1 bisexual man), racial minority (7 Asian American, 12 Hispanic), and religious minority (6 Jewish).

<sup>&</sup>lt;sup>14</sup> Again, results were not qualified by the research assistant, gender of participant, or confederate.

were omitted from the final analyses for the following reasons: 4 participants expressed that they knew that their interaction partner was a confederate on the open-ended questionnaire items and during the oral debriefing; 24 participants failed on the manipulation check items by either stating that they utilized a strategy different than the one they were assigned (8) or failed to correctly state whether they were visible or nonvisible to their interaction partner (16). Thus, 137 participants were used in the final analyses consisting of 101 Caucasian participants and 36 African American participants with a mean age of 19.61 years (SD = 2.40).

## Measures

Demographics. A demographic questionnaire assessed participant's age, sex, race, and ACT total scores (Caucasian participants: M = 25.05, SD = 3.34; African American participants: M = 20.52, SD = 3.49; All participants: M = 23.91, SD = 3.90).<sup>15</sup> This measure also assessed whether participants had a major stigma.

Participants in Part 1 of Study 2 completed several pre-experiment questionnaires specifically relevant to a racial stigma.

Racial Centrality. Participants completed a modified version of the 8-item centrality subscale of the Multidimensional Inventory of Black Identity (Sellers, Rowley, Chavous, Shelton, & Smith, 1997;  $\alpha = .84$ ; see Appendix H) which measures how important race is to the participant's sense of self. Participants rated each item (e.g., In general, being a member of my racial group is an important part of my self-image) using a scale ranging from 1 (strongly disagree) to 7 (strongly agree). Responses were reverse-

<sup>&</sup>lt;sup>15</sup> Caucasian participants reported significantly higher ACT scores than African American participants, t(129) = 6.67, p < .01, however ACT scores did not significantly differ by experimental conditions.

coded when appropriate and the mean response was calculated such that greater scores reflect a more central racial identity.

Awareness of Stigma. The extent to which participants expect to be stereotyped by others because of their race was measured by the race version of the Stigma-Consciousness Questionnaire (10-items; Pinel, 1999;  $\alpha = .85$ ; see Appendix I). Participants rated each item (e.g., Stereotypes about my race have not affected me personally) using a scale ranging from 0 (strongly disagree) to 6 (strongly agree). Responses were reverse-coded when appropriate and the mean for each scale was calculated such that greater scores reflect greater awareness of racial stigma.

*Impression Management.* To get a baseline measure of the type of race-based impression management techniques used in their everyday life, participants completed a modified version of the Morgan's (2002) Impression Management scale which assessed the frequency of affirming (5-item positive distinctiveness subscale; e.g., Try to represent people of your racial group in a positive manner;  $\alpha = .89$ ) and negating (5-item minimization/recategorization subscale; e.g., Try to avoid discussing race and racial issues;  $\alpha = .47$ ) strategies (see Appendix J). Participants indicated how frequently they tend to use each strategy on a scale from 0 (not at all) to 5 (a great deal). These responses were reverse-coded when appropriate and the subscales were summed such that greater scores reflect greater use of each strategy.

Participants in Part 1 of Study 2 completed the same post-interview items as in Study 1.

Cognitive resources during interaction. During the interview portion of the experiment, participants in Study 2 were given the same information about the

confederate as in Study 1 and answered the same questions that assessed the same visual (e.g., What color was the shirt that your interaction partner was wearing?) and verbal (typed) information (e.g., What do they like to eat?). This measure served as one dependent variable for Study 2.

Cognitive depletion due to interaction. In addition, participants completed the General Mental Abilities Test (Janda, 1996) to assess the level of cognitive depletion after the interview. The same three scores (CDM-correct, CDM-attempted, CDM-skipped) were calculated and also served as dependent variables for Study 2.

Positive and negative affect. Participants completed the Positive And Negative Affect Scale (PANAS, Watson et al., 1988). Responses were summed separately as in Study 1 such that larger scores reflect greater levels of positive affect ( $\alpha = .88$ ) and negative affect ( $\alpha = .82$ ).

Ratings of interview task. Participants also responded to the same items as in Study 1 regarding the effectiveness of the task of making a positive impression ( $\alpha = .69$ ), difficulty of the task ( $\alpha = .75$ ), and overall enjoyment of the task. For each of the subscales, responses were summed separately such that greater scores reflected greater endorsement.

Ratings of self and interview partner. Participants also responded to the same items as in Study 1 regarding participants' likeability of self after the interaction, and likeability of their interaction partner. For each of the items, responses were summed separately such that greater scores reflected greater endorsement.

Manipulation check. Participants completed the same manipulation check and suspicion items used in Study 1.

## Procedure

The procedure for Study 2 was similar to Study 1, except Study 2 involved race instead of physical disability. In addition, Study 2 involved individuals who have experience with the social stigma of race (i.e., African Americans), as well as individuals who do not (i.e., Caucasian individuals asked to take on the role of being African American). Thus, Study 2 was designed to replicate Study 1 by using Caucasian individuals with a newly-acquired racial stigma, as well as expand Study 1 by exploring how African Americans' experience with a racial stigma may moderate the results found in Study 1. Because of this change in methodology, minor changes were made to the experimental procedure and instructions given to the participants.

Pre-experimental procedure. When participants signed up to participate in Study 2 on-line, they completed stigma-related measures including racial centrality, awareness of racial stigmas, and race-based impression management strategies generally used.

*Experimental procedure*. The experimental lab procedure for Study 2 was similar to Study 1. To assist participants with newly-acquired stigmas (i.e., Caucasian participants) in understanding the stigma management strategy instructions, all participants were given similar stories to read as in Study 1, except the stories for Study 2 involved race (see Appendix K). The procedure for Study 2 was similar to Study 1, unless otherwise noted.

The following changes were made to Study 2:

Photo instead of webcam. Instead of having a webcam connected to the participants' computer and having them sit in a wheelchair, a photo was used. All participants were shown a photo of an African American of their own sex which
remained on the screen for 30 seconds. Photos of two different moderately attractive African American female and two different moderately attractive African American male college students were used.<sup>16</sup> Each person in the photo was in their late teens-early 20s. All participants were informed to "role-play that you are the person in the photograph...act as if you are the person in the photo and respond accordingly." Furthermore, all discussion of the wheelchair was removed. All participants wrote for three minutes about what it would be like to be the person in the photograph.

Impression management strategy manipulation. The instructions for the two methods were similar to those used in Study 1, except participants in the negate condition were instructed to avoid any discussion of their race and participants in the affirm condition were instructed to discuss their race by emphasizing positive qualities about it.

*Visibility manipulation.* Visibility was manipulated in Study 2 through whether participants were told that their interaction partner was shown the photograph of the African American individual or not.

Participants in the *visible* condition were informed that their interaction partner was shown the same photograph that they were shown and told it was the participant. Participants in the visible condition were given the following information:

We are also interested in how different types of visual information may affect making a positive impression, so before the interview your interaction partner will be shown the same photograph that we showed you and be told it is you (their interaction partner). Also, you will see a live webcam transmission of your

<sup>&</sup>lt;sup>16</sup> Photos were rated to be moderately attractive (M = 4.74, SD = .80; 7-point scale) and the male and female photos did not differ significantly in attractiveness.

interaction partner, and your interaction partner will be aware that you can see them.

Participants in the non-visible condition were informed that their interaction partner did not have any visual information about them or the person they were asked to portray. Participants in the non-visible condition were given the following information:

We are also interested in how different types of visual information may affect making a positive impression, so you will see a live webcam transmission of your interaction partner, and your interaction partner will be aware that you can see them. However, your interaction partner will not having any visual information about you or the person you are portraying (the person in the photo).

*Chatroom procedure.* The chatroom procedure was the same as in Study 1, and the confederate "interviewer" asked similar questions as in Study 1, except the wheelchair-oriented questions were replaced with questions relevant to race (e.g., What is your racial background). In addition, the confederates used in Study 2 were the same male and female Caucasian confederates that were used in Study 1. The chatroom interactions for Study 2 lasted an average of 24.27 (SD = 6.90) minutes (see Footnote 7).

Given that a similar post-interaction measure of cognitive resources was used in Study 2, the webcam image of the confederate was displayed on the participant's computer screen, similar to that of Study 1. Furthermore, the information given by the confederates was the same as the information given in Study 1. Finally, the post-

interaction questionnaires and debriefing were similar to those used in Study 1 with references to a physical disability or a wheelchair replaced with references to race. Again, the main dependent variables in Study 2 were the measures of cognitive resources and cognitive depletion with the measure of cognitive depletion given immediately following the interaction. All participants received course credit and were entered into a lottery to win \$100.

#### Method – Part 2

### **Participants**

140 Caucasian participants (54 men, 86 women; mean age = 20.00 years, SD = 1.82) who were recruited through the Psychology Department Human Participants in Research website and invited to participate in a study on impression formation.

## Measures

The effectiveness of the each participant from Part 1 in making a positive impression was assessed by the following measures using a 9-point scale from 1 (Not at all) to 9 (Very much). Responses were reverse-coded when appropriate and the mean response was calculated for each measure.

Ratings of individual. Participants rated each transcript on 5 characteristics that assessed how *likable* the person in the interview was (cheerful, nice, likable, friendly, warm;  $\alpha = .97$ ) and 3 characteristics that assessed how *truthful* the person in the interview appeared (truthful, secretive, sincere;  $\alpha = .89$ ). Greater scores reflect greater likablility and more truthfulness, respectively.

Ratings of effectiveness of impression management. Participants then responded to 3 items that assessed the effectiveness of the individual in the interview in forming a

positive impression (How effective was this person in making a positive impression on you?, How much do you like this person?, How much do you feel like you got to know this person?;  $\alpha = .94$ ). Greater scores reflect that the individual in the interview was more effective in forming a positive impression.

Ratings of interaction behavior. Participants then responded to 3 questions regarding the *interactive behavior* of the person in the transcript (How much did this person elaborate, fully explain his or her responses?, How much emotion did this person express?, How responsive did this person seem?;  $\alpha = .97$ ). Greater scores reflect greater displays of overt behavior.

Ratings of effectiveness of the stigma nondisclosure. Finally, participants responded to 2 questions regarding the effectiveness of not disclosing their race (How much did this person seem like he or she was concealing information?, Did this person seem to be trying to hide something about him or herself?;  $\alpha = .93$ ). Greater scores reflect greater effectiveness in not appearing secretive or non-disclosing.

#### Procedure

Participants were escorted to a private computer workstation and informed that they would be taking part in a study on impression formation. Participants were instructed to read a series of interviews that could have been written by undergraduate college students over an Internet chatroom. For each transcript, participants responded to a series of questions about the person who supposedly wrote the responses. Adapting the procedure by Kaiser and Miller (2001), each participant read and evaluated 6 transcripts with the constraint that each set of responses contained at least one transcript from both of the visibility and strategy conditions. Each transcript was evaluated by five different

raters. Participants were then probed for suspicion and debriefed. All participants in Part 2 received course credit.

Ratings from Part 2 were averaged, producing a single score on each of the dependent measures for each of the transcripts. Complete data (i.e., responses from five different raters) were collected for only 50 of the Part 1 transcripts.<sup>17</sup> Data for Part 2 included transcripts from 38 Caucasians and 12 African Americans (see Table 18 for number of transcripts per experimental condition).

### Results – Part 1

### Manipulation Check and Suspicion

Manipulation check and suspicion analyses for Study 2 were similar to analyses conducted for Study 1. Responses on the visibility and strategy manipulation check items, responses to the written and verbal suspicion items, and purpose of the study item were visually inspected. Participants who did not respond correctly to the manipulation check items or who expressed that they knew the interaction was not real were omitted from the subsequent analyses.

The typed responses from all participants were coded for examples of negation and affirmation strategies. Responses to seven of the interviewer's scripted questions were coded. These questions were "Briefly describe yourself as you think a stranger would., What is your family's racial background?, What is your earliest childhood memory?, What is your family like?, Do you think attitudes toward stereotyped groups have changed over the years?, Have you ever been treated unfairly or discriminated against?; Describe a time when you accomplished something you are very proud of." Each response was coded as an example of affirmation if the participant responded in a way that acknowledged that they were African American either directly (e.g., "I am African American," "We are a proud Black family...") or indirectly (e.g., "Both of my parents are Black"), or attempted to educate or inform their interaction partner about what it is like to be African American (e.g., "...being a minority there's always people who look down on you"). Each additional time that the participant acknowledged that they were African American in an affirming way was calculated (e.g., "I watch the African American shows on UPN like the Fresh Prince of Bel Air," "... and so I finally got my grade school to recognize MLK day..."). The response was coded as an example of negation if the participant minimized the relevance of race (e.g., "I really think everyone has experienced discrimination at one time or another," "We don't like to make a big deal out of our race"), responded in a way that avoided the fact they were African American (e.g., "Yes, I have been discriminated against because I am female," "Let's just say I am blessed to come from the family that I do"), attempted to change the topic when race was mentioned (e.g., "So what year in school are you?," "Is that important to you?"), responded in a way that did not mention race (e.g., "When my dad took me to my first baseball game," " I am a funny person who likes to crack jokes"), or gave a short response or completely ignored the question (e.g., "No not really"). Moreover, each time the participant tried to take the focus off of themselves or their race was calculated (e.g., "Did you watch the game last night?"). Examples of affirmation and negation were summed separately such that each participant had an affirmation score and a negation score.

<sup>&</sup>lt;sup>17</sup> Only transcripts that had been evaluated by five raters were included in the preliminary analyses because of the impact of extreme scores on transcript with only one or two ratings. Furthermore, only partial data

Independent samples t-tests were conducted using the affirmation and negation scores as the dependent variables to assure that the assigned strategy was used more often during the interaction. Results demonstrated that participants in the negation condition used significantly more negating techniques (M = 6.40, SD = 1.00) than participants in the affirmation condition (M = 3.95, SD = 1.38), t(126) = 11.56, p < .01, and participants in the affirmation condition used more affirming techniques (M = 3.43, SD = 1.74) than participants in the negation condition (M = 0.64, SD = 0.98), t(126) = -11.30, p < .01.<sup>18</sup>

Zero-order correlations were conducted to explore the relations among the dependent measures. As in Study 1, the cognitive depletion measures were significantly correlated in the expected direction (see Table 9). However, unlike Study 1, the cognitive depletion measures were not significantly correlated with the cognitive resource measure.

was collected for Part 2 because of the difficulty in obtaining African American participants.

<sup>&</sup>lt;sup>18</sup> The mean number of negating strategy responses by experimental conditions for Caucasian participants are as follows: Negate Visible – M = 6.35, SD = 0.98; Negate Non-visible – M = 6.52, SD = 0.92; Affirm Visible – M = 3.59, SD = 1.39; Affirm Non-visible – M = 4.33, SD = 1.37. The mean number of affirming strategy responses by experimental conditions for Caucasian participants are as follows: Negate Visible – M = 0.65, SD = 0.93; Negate Non-visible – M = 0.56, SD = 0.87; Affirm Visible – M = 3.52, SD = 1.31; Affirm Non-visible – M = 2.83, SD = 1.72. The mean number of negating strategy responses by experimental conditions for African American participants are as follows: Negate Visible – M = 6.09, SD =1.38; Negate Non-visible – M = 6.63, SD = 0.74; Affirm Visible – M = 4.13, SD = 1.36; Affirm Non-visible – M = 4.13, SD = 1.36. The mean number of affirming strategy responses by experimental conditions for African American participants are as follows: Negate Visible – M = 3.75, SD = 1.83.

Measures	М	SD	1	2	3	
1) CDM-correct	17.73	7.29				
2) CDM-skipped	8.67	6.05	31**			
3) CDM-attempted	30.96	8.71	.71**	54**		
4) Cognitive Resources Measure	10.36	1.89	.11	10	.13	

Table 9. Zero-order correlations of post-interaction cognitive measures for Study 2.

*Note:* N = 131; CDM = Cognitive Depletion Measure. \*p < .05, \*\*p < .01.

### Main Hypothesis Tests

A series of 2 (Race of participant: Caucasian, African American) x 2 (Strategy: Negate, Affirm) x 2 (Visibility: Visible, Non-visible) between-subjects ANOVAs were conducted to address the proposed hypotheses with the measures of cognitive depletion and the cognitive resource measures as dependent measures. Again, given that performance on the cognitive depletion measures were strongly related to ACT scores (r= .66, p < .01), ACT scores were included as a covariate in these analyses. Means for the main dependent measures are displayed in Table 10.<sup>19</sup>

<sup>&</sup>lt;sup>19</sup> Six participants did not report ACT scores and thus could not be used in the analyses utilizing the cognitive depletion measure. In addition, the transcripts from six participants were not saved correctly, thus their scores on the cognitive resource measure could not be calculated.

Table 10.

Means and standard deviations for the cognitive depletion measures and cognitive resource measure for Study 2.

			Strategy Condition					
			Aff	irm	Neg	ate		
			Mean	SD	Mean	SD		
Measure	Race	Visibility Condition	n					
CDM-correc	t*							
	Caucasian	Visible	19.01	(7.85)	17.46	(7.87)		
		Non-visible	17.26	(6.53)	16.94	(7.51)		
	African American	Visible	15.60	(5.85)	19.04	(4.95)		
		Non-visible	20.32	(6.27)	17.18	(5.12)		
CDM-attemp	pted*							
	Caucasian	Visible	32.49	(8.40)	29.32	(9.11)		
		Non-visible	31.98	(8.11)	29.13	(8.49)		
	African American	Visible	28.67	(9.54)	31.42	(7.94)		
		Non-visible	36.60	(13.91)	32.40	(6.99)		
CDM-skippe	ed*							
	Caucasian	Visible	7.30	(5.12)	10.0 <b>9</b>	(5.96)		
		Non-visible	7.40	(5.87)	10.64	(5.90)		
	African American	Visible	7.91	(4.88)	6.99	(5.54)		
		Non-visible	5.83	(8.58)	11.84	(8.40)		

### Table 10 (cont.)

**Cognitive Resources Measure** 

Caucasian	Visible	10.39	(2.33)	10.33	(1.83)
	Non-visible	10.37	(1.77)	10.80	(1.58)
African American	Visible	9.50	(1.51)	10.18	(2.14)
	Non-visible	11.38	(0.92)	9.00	(1.77)

*Note:* Caucasian Affirm Visible n = 29; Caucasian Affirm Non-visible n = 18; Caucasian Negate Visible n = 24; Caucasian Negate Non-visible n = 27; African American Affirm Visible n = 8; African American Affirm Non-visible n = 7; African American Negate Visible n = 10; African American Negate Non-visible n = 8; CDM=Cognitive Depletion Measure \*Reported means controlling for ACT scores.

*Hypothesis 1:* These hypotheses stated that using affirming stigma management techniques, compared to negating techniques, should require fewer cognitive resources for people with more experience with the stigma (i.e., African Americans), but that the opposite pattern would be found for people with newly-acquired stigmas (i.e., Caucasian participants). Support for Hypotheses 1a and 1b would be demonstrated by a significant race x impression management strategy interaction showing that African Americans performed better on the cognitive measures when using an affirming technique, compared to a negating technique; whereas, Caucasian participants performed better on the post-interaction tasks when using a negating technique compared to an affirming technique. Hypothesis 1 was not supported for any of the cognitive measures [CDM-correct,

F(1,122) = 0.22, MSE = 31.90, p = .64, CDM-skipped, F(1,122) = 0.04, MSE = 35.74, p = .85, or CDM-attempted, F(1,122) = 0.44, MSE = 71.90, p = .51, or for the cognitive resources measure, F(1,23) = 1.92, MSE = 3.50, p = .17].<sup>20</sup>

*Hypothesis 2:* Hypothesis 2 stated that, compared to visible stigmas, managing a non-visible stigma should be easier (requires less cognitive resources) for people with less experience; however, compared to non-visible stigmas, managing a visible stigma should require less cognitive resources for people with more experience. Thus, Hypotheses 2 would be supported by a significant race x visibility interaction. Furthermore, support for this hypothesis would be shown by planned contrasts demonstrating that African American participants performed better on the post-interaction tasks (demonstrating more cognitive resources after and during the interaction) when their interaction partner was aware of their race, compared to when their interaction partner. Hypothesis 2 was not supported by any of the cognitive measures [cognitive depletion-correct, F(1,122) = 1.23, MSE = 31.90, p = .27, skipped, F(1,122) = 0.19, MSE = 35.74, p = .67, or attempted, F(1,122) = 1.92, MSE = 71.90, p = .17, or for the cognitive resources measure, F(1,123) = .03, MSE = 3.50, p = .87].

*Hypothesis 3:* Hypothesis 3 stated that for people with a newly-acquired stigma, negating strategies should require less cognitive resources when the stigma is non-visible compared to visible, and affirming strategies should require less cognitive resources when the stigma is visible compared to non-visible; however, for people with experience with the stigma, affirming strategies should require less cognitive resources when the

<sup>&</sup>lt;sup>20</sup> A main effect for impression management strategy was found for CDM-skipped with participants in the negate condition skipping significantly more items, M = 9.89, SD = 6.19, than participants in the affirm

stigma is non-visible compared to visible; negating strategies should require less cognitive resources when the stigma is visible compared to non-visible. A significant race x strategy x visibility interaction would support Hypothesis 3. Specifically, support would be found by contrasts showing that Caucasian participants had more cognitive resources in the non-visible compared to visible condition when using negating techniques, yet more cognitive resources in the visible compared to non-visible condition when using affirming techniques. However, African Americans would have greater cognitive resources in the non-visible compared to visible condition when using affirming techniques, yet more cognitive resources in the visible compared to non-visible condition when using negating techniques. Although Hypothesis 3 was not supported for the cognitive depletion measures [cognitive depletion-correct, F(1,122) = 2.87, MSE =31.90, p < .10, skipped, F(1,122) = 1.75, MSE = 35.74, p = .19, or attempted, F(1,122) = 1.75, MSE = 35.74, p = .191.10, MSE = 71.90, p = .30], a statistically significant 3-way interaction was found for the cognitive resources measure, F(1,123) = 5.66, MSE = 3.50, p < .05. Simple effects analyses were conducted separately for Caucasian and African American participants. Performance on the cognitive resource measure did not differ for Caucasian participants as a function of visibility condition or impression management strategy ( $p_s > .30$ ). However, for African American participants, those in the affirm non-visible condition were able to recall significantly more information about the interaction and their interaction partner, compared to those in the affirm visible condition, t(31) = -2.21, p < -2.21.05, and negate non-visible condition, t(31) = -2.80, p < .01. These results partially support Hypothesis 3.

Stigma Experience-Related Factors

condition, M = 7.11, SD = 5.63; F(1,122) = 5.23, MSE = 35.74, p < .05.

Zero-order correlations were conducted to explore the relations among the stigmarelated measures (i.e., racial centrality, stigma consciousness, use of racial impression management techniques; see Table 11). Racial centrality was positively related to beliefs that one's racial group is stigmatized (i.e., stigma consciousness). Furthermore, as racial centrality and beliefs that one is stigmatized increased, so did the use of affirming impression management strategies. The use of negating and affirming impression management strategies were positively related.

## Table 11.

Zero-order correlations of stigma experience-related measures for Study 2.

Me	asures	M	SD	1	2	3
1)	Racial Centrality	3.35	1.20			
2)	Stigma Consciousness	3.63	1.10	.62**		
3)	Negation Strategies	3.60	0.73	.11	.25**	
4)	Affirmation Strategies	3.12	1.17	.52**	.50**	.43**

*Note:* N = 137; \*p < .05, \*\*p < .01.

Additional analyses were conducted to explore mean differences in the racial measures as a function of race (see Table 12). Consistent with previous research, compared to Caucasian participants, African American participants reported that their race was more important to their sense of identity and that they were more aware that their race was stigmatized. Furthermore, African American participants, compared to

Caucasian participants, reported both avoiding the discussion of race and affirming their race more often.

# Table 12.

Differences in stigma-related measures as a function of race in Study 2.

Me	easure	Race of Participant				
		Caucasian (n=101)		African Am	n=36)	
		М	SD	М	SD	<i>t</i> (135)
1)	Racial Centrality	2.97	1.00	4.41	1.09	-7.25**
2)	Stigma Consciousness	3.25	.89	4.70	.91	-8.39**
3)	Negation Strategies	3.50	.76	3.88	.58	-2.79**
4)	Affirmation Strategies	2.68	.95	4.37	.77	-9.56**

*Note:* \**p* < .05, \*\**p* < .01.

Multiple regression analyses were conducted to explore whether these racial measures influenced the participant's performance on the interaction task. Dummy coding was performed on the strategy (0=negate and 1=affirm), visibility (0=non-visible and 1=visible), and race (0=African American and 1=Caucasian) variables and scores on the stigma-related factors were mean-centered (Aiken & West, 1991). Each regression was a factorial design with all main effects and two, three, and four-way interactions entered simultaneously. For the three measures of cognitive depletion, ACT scores were entered in Step 1 as a control.

For each statistically significant interaction involving the continuous stigmarelated factor, simple slope analyses were conducted. It is important to note that in this study, interactions involving race are most sensibly followed-up separately for African-American participants and Caucasian participants. Unfortunately, the relatively small number of African-American participants in the study makes follow-up tests using only these individuals very low power tests. Thus, in some cases where the simple interactions for African-Americans are significant, none of the simple slopes attained statistical significance. In these instances, the nonsignificant simple slopes are reported below, and trends should be considered tentative.

Statistically significant multiple regression results for *racial centrality* predicting performance on the cognitive depletion measure are displayed in Table 13. Hypothesis 4a stated that, for people with experience with the stigma for whom the stigmatizing attribute is more central, fewer cognitive resources would be required when using affirming strategies, compared to negating strategies; however, the opposite pattern would be found for people for whom the stigmatizing attribute is less central. In regard to the number of correct responses on the cognitive depletion measure (panel 1), the strategy by racial centrality and race by racial centrality interactions were statistically significant, but both were qualified by a statistically significant race by strategy by racial centrality interaction. Follow-up strategy by racial centrality regressions were conducted for African American and Caucasian participants separately. These analyses, displayed in Table 14, demonstrated a statistically significant interaction for African American participants, but not for Caucasian participants. Simple slope analyses demonstrated that for African Americans in the negate condition, as racial centrality increased, the number

Table 13. Post-interaction task cognitive measures regressed on ACT scores, racial centrality, impression management strategies, visibility manipulation, race of participant, and their interactions among participants in Study 2.

<del>9. · · · · · · · · · · · · · · · · · · ·</del>	CI	ОМ-Соп	ect	CL	M-Skip	ped	CDM	I-Atter	npted	
	В	ß	SE	В	ß	SE	В	ß	SE	
ACT Score	1.30	.68**	.16	24	16	.17	.78	.35*	* .24	
Racial Centrality (RC)	-3.03	49	1.57	2.95	.58	1.70	-1.86	25	2.36	
Impression Strategy	-5.81	39	4.96	2.34	.19	5.37	-12.08	69	7.46	
Visibility Condition	3.33	.22	5.36	3.54	.29	5.81	-7.01	40	8.06	
Race	-1.52	09	2.51	.60	.04	2.72	-3.92	20	3.78	
Strategy x Visibility	41	03	7.27	-8.22	61	7.88	15.48	.80	10.94	
Race x Strategy	5.36	.35	5.32	-4.85	38	5.77	13.89	.76	8.01	
Race x Visibility	-3.70	25	5.63	-4.00	32	6.10	5.82	.33	8.47	
Race x Strategy x Visibility	2.56	.14	7.73	8.02	.55	8.38	-13.69	65	11.63	
Strategy x Racial Centrality	8.16	.94*	3.17	-7.73	-1.09*	3.45	12.56	1.23*	4.77	
Visibility x Racial Centrality	.96	.12	3.50	-7.58	-1.12*	3.80	5.27	.54	5.27	
Race x Racial Centrality	5.26	.62*	2.05	-2.42	35	2.22	5.50	.55	3.08	
Strategy x Visibility x RC	-6.47	54	4.77	12.44	1.27*	5.17	-17.71	-1.26*	7.18	
Race x Strategy x RC	-11.03	-1.00**	* 3.68	8.32	.92*	3.99	-17.01	-1.31*	5.53	
Race x Visibility x RC	-4.40	41	3.87	7.39	.85	4.20	-10.71	85	5.82	
Race x Strategy x Visibility x	RC8.99	.63	5.29	-12.59	-1.08*	5.73	22.37	1.33*	7.96	

*Note:* N = 131; Impression Strategy (Negate = 0, Affirm = 1); Visibility Condition (Non-visible = 0, Visible = 1). \*p < .05, \*\*p < .01

of correct items on the cognitive depletion measure marginally decreased, B = -1.85,  $\beta = -$ .40, SE = .91, p < .10; however, for African Americans in the affirm condition, this relation was not statistically significant, B = 1.57,  $\beta = .29$ , SE = 1.30, p = .25. African Americans whose race was more important were more cognitively taxed when required to use stigma management techniques that avoided race.

### Table 14.

Simple slope regression analyses for racial centrality, visibility, and their interaction predicting the number of items correct on the cognitive depletion measure for African American and Caucasian participants in Study 2.

	African	American (n = $33$ )	<u>Caucasian (n = 98)</u>
	В	β SE	B ß SE
ACT Score	.77	.50** .23	1.49 .66** .19
Racial Centrality	-1.85	37 1.03	.48 .06 .92
Impression Strategy	-3.79	36 2.25	.53 .04 1.26
Strategy x Racial Centrality	3.44	.58* 1.52	-1.5216 1.22

*Note:* Strategy Condition (Negate = 0, Affirm = 1). \*p < .05, \*\* p < .01.

A number of significant interactions involving *racial centrality* occurred for the number of items skipped on the cognitive depletion measure (Table 13 panel 2), the highest order of which was the race by strategy by visibility by racial centrality interaction. Follow-up strategy by visibility by racial centrality regressions were conducted for African American and Caucasian participants separately (see Table 15).

Table 15.

Multiple regression analyses for racial centrality, strategy, visibility, and their interaction predicting the number of items skipped on the cognitive depletion measure for African American and Caucasian participants in Study 2.

	African	Americ	Caucasian ( $n = 98$			
	В	ß	SE	В	ß	SE
ACT Score	.34	.17	.43	40	23	.18
Racial Centrality	2.42	.37	1.98	.37	.06	1.34
Impression Strategy	3.52	.26	6.21	272	24	2.02
Visibility Condition	27	02	7.12	57	05	1.69
Strategy x Visibility	-7.26	46	9.05	.23	.02	2.66
Strategy x Racial Centrality	-7.47	96	3.94	.60	.08	1.91
Visibility x Racial Centrality	-4.80	64	4.72	34	05	1.76
Strategy x Visibility x Racial Centrality	9.61	.90	6.21	.19	.02	2.46

*Note:* Impression Strategy (Negate = 0, Affirm = 1); Visibility Condition (Non-visible = 0, Visible = 1). \*p < .05, \*\*p < .01.

Simple slope analyses for the African American participants demonstrated that, as racial centrality increased, the less cognitively taxing the interaction task, as demonstrated by skipping fewer items, in the negate visible, B = -7.71,  $\beta = -.84$ , SE = 5.16, p = .18, affirm visible, B = -.53,  $\beta = -.13$ , SE = 1.16, p = .67, and affirm non-visible, B = -5.34,  $\beta = -.51$ , SE = 4.51, p = .30, conditions, but not in the negate non-visible, B = 3.25,  $\beta = .52$ , SE = -.52, SE

2.68, p = .28. That is, for African Americans in the negate non-visible condition, as racial centrality increased, avoiding the discussion of race became more difficult.

In regard to racial centrality predicting the number of items attempted on the cognitive depletion measure (Table 13 panel 3), the four-way interaction was again statistically significant. To understand the nature of this interaction, strategy by visibility by racial centrality regressions were conducted for African American and Caucasian participants separately. As displayed in Table 16, for the African American participants, a significant strategy by racial centrality interaction was found, however, for Caucasian participants, a visibility by racial centrality interaction was found. Simple slope analyses demonstrated, for African Americans in the affirm condition, as racial centrality increased, the less cognitively taxing the interaction task, as demonstrated by attempting more items, B = 2.55,  $\beta = .24$ , SE = 2.98, p = .41, however, in the negate condition, the opposite relation between racial centrality and number of items attempted was found, B =-.81,  $\beta = -.12$ , SE = 1.74, p = .65. For Caucasian participants in the visible condition, as racial centrality increased, the number of items attempted decreased, B = -1.46,  $\beta = -.18$ , SE = 1.09, p = .19, however in the non-visible condition, the opposite pattern was found,  $B = .91, \beta = .10, SE = 1.31, p = .49$ . In general, these results demonstrate that, for African Americans, as race became more important, using an affirming stigma management strategy was less cognitively taxing, however using a negating strategy required greater cognitive resources. However, for Caucasian participants, as race became more important, trying to manage a newly-acquired visible racial stigma required more cognitive resources. No statistically significant racial centrality interactions were

found for the cognitive resources measure, however, overall, the results for racial centrality support Hypothesis 4a.

## Table 16.

Multiple regression analyses for racial centrality, strategy, visibility, and their interaction predicting the number of items attempted on the cognitive depletion measure for African American and Caucasian participants in Study 2.

	African A	n (n = 33)	Cauca	Caucasian ( $n = 98$ )		
	В	ß	SE	В	ß	SE
ACT Score	.35	.13	.60	.92	.36**	.26
Racial Centrality (RC)	-1.45	17	2.74	3.76	.44*	1.88
Impression Strategy	-12.99	70	8.63	1.97	.12	2.84
Visibility Condition	-4.10	22	9.89	-1.10	06	2.38
Strategy x Visibility	14.75	.69	12.58	1.46	.08	3.75
Strategy x Racial Centrality	12.36	1.18*	5.48	-4.46	40	2.68
Visibility x Racial Centrality	3.15	.31	6.56	-5.33	50*	2.47
Strategy x Visibility x RC	-15.55	-1.08	8.63	4.41	.31	3.46

*Note:* Impression Strategy (Negate = 0, Affirm = 1); Visibility Condition (Non-visible = 0, Visible = 1). \*p < .05, \*\*p < .01.

Hypothesis 4b stated that people with experience with the stigma who are more aware that they are stigmatized should require greater cognitive resources when using stigma management strategies (especially when the stigma is visible), compared to Table 17.

Post-interaction task cognitive measures regressed on ACT scores, stigma consciousness, impression management strategies, visibility manipulation, race of participant, and their interactions among participants in Study 2.

	Cognitive Depletion Correct			Cognitive Depletion Attempted		
	В	β	SE	В	ß	SE
ACT Score	1.35	.71	.16	.80	.36	.23
Stigma Consciousness (SC)	-1.21	18	1.60	34	04	2.30
Impression Strategy	-3.48	23	4.98	-9.07	52	7.17
Visibility Condition	.65	.04	4.21	-8.96	51	6.06
Race	50	03	2.87	-1.12	06	4.13
Strategy x Visibility	4.87	.30	6.81	19.19	.99	9.81
Race x Strategy	3.57	.23	5.38	11.02	.60	7.74
Race x Visibility	-1.06	07	4.53	6.58	.37	6.53
Race x Strategy x Visibility	-3.30	19	7.29	-18.10	86	10.51
Strategy x Stigma Consciousness	6.23	.59	3.72	11.91	.95*	5.35
Visibility x Stigma Consciousness	1.31	.14	2.75	6.15	.56	3.96
Race x Stigma Consciousness	3.51	.37	2.13	6.21	.55*	3.07
Strategy x Visibility x SC	-11.64	79*	5.13	-23.55	-1.35*	7.37
Race x Strategy x SC	-7.24	52	4.27	-14.91	91*	6.15
Race x Visibility x SC	-2.77	23	3.25	-11.49	90*	4.69
Race x Strategy x Visibility x SC	12.39	.67*	5.79	25.92	1.19**	8.33

*Note:* N = 131; Impression Strategy (Negate = 0, Affirm = 1); Visibility Condition (Non-visible = 0, Visible = 1). \*p < .05, \*\*p < .01.

experienced people with less awareness that they are stigmatized and compared to people with newly acquired stigmas. Statistically significant multiple regression results for stigma consciousness predicting number of items correct on the cognitive depletion measure are displayed in Table 17 panel 1. The four-way interaction (race by strategy by visibility by stigma consciousness) was the highest order interaction that attained statistical significance. Follow-up strategy by visibility by racial centrality regressions were conducted for African American and Caucasian participants separately. These analyses, displayed in Table 18, demonstrated a statistically significant interactions for African American participants, but not for Caucasian participants. For African Americans, a significant strategy by stigma consciousness interaction was further qualified by a statistically significant strategy by visibility by stigma consciousness interaction. Simple slope analyses demonstrated that, for African Americans in the affirm visible condition, as stigma consciousness increased, the number of items correct on the cognitive depletion measure decreased, B = -4.41,  $\beta = -.59$ , SE = 2.51, p = .14. However, for African Americans in the negate visible, B = .18,  $\beta = .03$ , SE = 1.21, p =.89, negate non-visible, B = .65,  $\beta = .17$ , SE = 2.14, p = .77, and affirm non-visible, B = .65,  $\beta = .17$ , SE = 2.14, p = .77, and affirm non-visible, B = .65,  $\beta = .17$ , SE = 2.14, p = .77, and affirm non-visible, B = .65,  $\beta = .17$ , SE = 2.14, p = .77, and affirm non-visible, B = .65,  $\beta = .17$ , SE = 2.14, p = .77, and affirm non-visible, B = .65,  $\beta = .17$ , SE = 2.14, p = .77, and affirm non-visible, B = .17, SE = 2.14, p = .77, and SE = .17, 5.62,  $\beta = .61$ , SE = 2.73, p = .11, conditions, the opposite pattern was found. Thus, for African American participants, as awareness about being stigmatized by others increased, using strategies that emphasized positive aspects of a visible stigma required greater cognitive resources.

Table 18.

Multiple regression analyses for stigma consciousness, strategy, visibility, and their interaction predicting the number of items correct on the cognitive depletion measure for African American and Caucasian participants in Study 2.

	African	Americar	Cau	Caucasian ( $n = 98$ )		
	В	ß	SE	В	ß	SE
ACT Score	.93	.61	.28	1.46	.65**	.19
Stigma Consciousness (ST)	58	10	1.32	2.35	.28	1.46
Impression Strategy	-4.49	43	4.00	.10	.01	2.12
Visibility Condition	1.67	.16	3.40	42	03	1.77
Strategy x Visibility	5.84	.48	5.45	1.47	.09	2.74
Strategy x Stigma Consciousness	6.29	.82*	2.96	-1.17	10	2.19
Visibility x Stigma Consciousness	.45	.07	2.25	-1.37	13	1.84
Strategy x Visibility x ST	-10.65	-1.08*	4.11	.67	.04	2.83

*Note:* Impression Strategy (Negate = 0, Affirm = 1); Visibility Condition (Non-visible = 0, Visible = 1). \*p < .05, \*\*p < .01.

Results for *stigma consciousness* predicting the number of items attempted on the cognitive depletion measure are displayed in Table 17 panel 2. Again, the four-way interaction was statistically significant and follow-up analyses were conducted (see Table 19). For Caucasian participants, an unexpected visibility by stigma consciousness interaction was found. Simple slope analyses demonstrated that in the non-visible condition, as concerns about being stereotyped increased, the number of items attempted

also increased, B = 4.34,  $\beta = .43$ , SE = 1.34, p < .01; however, in the visible condition, no relation was found, B = .08,  $\beta = .01$ , SE = 1.25, p = .95. In regard to the African American participants, similar to the results for the number of items correct with a statistically significant strategy by visibility by stigma consciousness interaction. Simple slope analyses demonstrated that, in the affirm visible condition, as stigma consciousness increased, the number of items attempted on the cognitive depletion measure decreased, B = -4.71,  $\beta = -.39$ , SE = 5.42, p = .42. However, for African Americans in the negate visible, B = 5.59,  $\beta = .59$ , SE = 2.96, p = .10, negate non-visible, B = 1.37,  $\beta = .26$ , SE = .262.93, p = .66, and affirm non-visible, B = 11.56,  $\beta = .56$ , SE = 8.85, p = .26, conditions, the opposite pattern was found. No statistically significant stigma consciousness interactions were found for the number of items skipped on the cognitive depletion measure or for the cognitive resources measure. However, statistically significant results supported Hypothesis 4b. That is, for people with experience with the stigma who are more aware that they are stigmatized, it actually requires greater cognitive resources to use affirmation stigma management strategies when the stigma is visible.

# Table 19.

Multiple regression analyses for stigma consciousness, strategy, visibility, and their interaction predicting the number of items attempted on the cognitive depletion measure for African American and Caucasian participants in Study 2.

	African A	merican	Cau	Caucasian ( $n = 98$ )		
	В	ß	SE	В	ß	SE
ACT Score	.24	.09	.57	.95	.37**	.25
Stigma Consciousness (ST)	.49	.05	2.70	5.93	.61**	1.93
Impression Strategy	-10.41	56	8.16	1.96	.12	2.81
Visibility Condition	-7.62	41	6.93	-2.40	14	2.34
Strategy x Visibility	20.48	.96	11.11	.95	.05	3.63
Strategy x Stigma Consciousness	11.99	.90	6.03	-3.20	23	2.90
Visibility x Stigma Consciousness	5.00	.44	4.58	-5.22	43*	2.44
Strategy x Visibility x ST	-22.24	-1.28*	8.38	2.27	.12	3.75

*Note:* Impression Strategy (Negate = 0, Affirm = 1); Visibility Condition (Non-visible = 0, Visible = 1). \*p < .05, \*\*p < .01.

Table 20.

Post-interaction task cognitive measures regressed on ACT scores, use of affirmation stigma management strategies, impression management strategies, visibility manipulation, race of participant, and their interactions among participants in Study 2.

	Cognitive Depletion Attempted			d <u>Cognitive</u> 1	Cognitive Depletion Skipped			
	В	ß	SE	В	ß	SE		
ACT Score	.84	.37**	.24	25	16	.16		
Stigma Management - Affirm	-4.00	53	4.18	6.80	1.31	2.92		
Impression Strategy	11.65	.67	9.41	-7.09	59	6.57		
Visibility Condition	-8.36	48	6.24	3.71	.31	4.36		
Race	-6.48	32	5.82	5.51	.40	4.06		
Strategy x Visibility	-11.35	58	10.66	8.67	.65	7.44		
Race x Strategy	-10.76	59	<b>9</b> .97	5.63	.45	6.95		
Race x Visibility	3.03	.17	7.09	-3.08	25	4.95		
Race x Strategy x Visibility	16.75	.80	11.74	-8.78	60	8.20		
Strategy x Affirm	-9.45	92	9.34	2.70	.38	6.52		
Visibility x Affirm	9.07	.95	5.23	-9.06	-1.37*	3.65		
Race x Affirm	5.94	.61	4.61	-7.77	-1.16*	3.22		
Strategy x Visibility x Affirm	4.27	.34	10.44	-3.23	37	7.29		
Race x Strategy x Affirm	6.66	.57*	9.74	30	04	6.80		
Race x Visibility x Affirm	-14.76	-1.32	5.94	10.50	1.36*	4.15		
Race x Strategy x Visibility x Affirm	1.32	.09	11.13	1.93	.20	7.77		

*Note:* N = 131; Impression Strategy (Negate = 0, Affirm = 1); Visibility Condition (Non-visible = 0, Visible = 1). \*p < .05, \*\*p < .01.

Multiple regression analyses for the use of affirmation stigma management strategies in everyday life are displayed in Table 20.<sup>21</sup> Hypothesis 4c stated that for people with experience with the stigma, it should require less cognitive resources to use stigma management strategies with which they have more experience. The results for the number of items attempted on the cognitive depletion measure are displayed in Table 20 panel 1. The race by strategy by use of affirmation strategies interaction was statistically significant for the number of items attempted (panel 1). Strategy by use of affirmation strategy regressions were conducted separately for African American and Caucasian participants (see Table 21). Contrary to the hypothesis, simple slope analyses demonstrated that the more African Americans in the affirm condition tended to portray their race in a positive manner (i.e., use affirming techniques), the more difficult the interaction task was (as shown by attempting fewer items on the cognitive depletion measure, B = -3.60,  $\beta = -.22$ , SE = 5.00, p = .49). In addition, the more African Americans in the negate condition tended to portray their race in a positive manner (i.e., use affirming techniques), the easier the interaction task was (as shown by attempting more items on the cognitive depletion measure, B = 1.92,  $\beta = .22$ , SE = 2.18, p = .39).

Results for the use of *affirmation stigma management strategies* predicting the number of items skipped on the cognitive depletion measure are displayed in Table 20 panel 2. Results demonstrated statistically significant visibility by affirm and race by affirm interactions that were further qualified by a race by visibility by affirm interaction. Visibility by use of affirmation strategy regressions were conducted separately for African American and Caucasian participants demonstrating a significant interaction for

<sup>&</sup>lt;sup>21</sup> Given the poor reliability for the minimization/recategorization subscale, analyses were not conducted using this measure.

the African American participants (see Table 22). Simple slope analyses demonstrated that the more African Americans in the non-visible condition tended to portray their race in a positive manner (i.e., use affirming techniques), the more difficult the interaction task was (as shown by skipping more items on the cognitive depletion measure, B = 7.57,  $\beta = .53$ , SE = 3.58, p < .10); however, the opposite pattern was found in the visible condition, B = -1.65,  $\beta = -.28$ , SE = 1.35, p = .24. Thus, for people with experience with managing a visible stigma in an affirming manner, it requires more cognitive resources when attempting to conceal the stigma. No statistically significant stigma consciousness interactions were found for the number of correct items on the cognitive depletion measure or on the cognitive resources measure. Thus, mixed results were found in support of Hypothesis 4c. Table 21.

Multiple regression analyses for the use of affirmation stigma management strategies, strategy, and their interaction predicting the number of items attempted on the cognitive depletion measure for African American and Caucasian participants in Study 2.

	African American $(n = 33)$			Cauca	Caucasian $(n = 98)$		
	В	ß	SE	В	ß	SE	
ACT Score	12	04	.52	.88	.34*	.25	
Stigma Management – Affirm	1.94	.16	2.80	69	08	1.24	
Impression Strategy	5.04	.27	5.13	2.82	.17	2.29	
Strategy x Affirm	-5.31	34	4.81	19	02	1.74	

Note: Impression Strategy (Negate = 0, Affirm = 1). \*p < .05, \*\*p < .01.

## Table 22.

Multiple regression analyses for the use of affirmation stigma management strategies, visibility, and their interaction predicting the number of items skipped on the cognitive depletion measure for African American and Caucasian participants in Study 2.

	African American $(n = 33)$			33)	Caucasian (n = $98$ )			
	В	ß	SE		В	ß	SE	
ACT Score	.35	.18	.35		39	22*	.18	
Stigma Management – Affirm	7.23	.80*	2.77		.12	.02	.93	
Visibility Condition	5.20	.38	3.88		.41	.04	1.67	
Visibility x Affirm	-9.03	94*	3.33		.93	.14	1.28	

*Note:* N = 131; Visibility Condition (Non-visible = 0, Visible = 1). \*p < .05, \*\*p < .01.

### Affect Responses to the Interaction Task

Hypothesis 5 stated that whereas people with a newly acquired stigma would feel more negative affect when enacting an affirming strategy, compared to a negating strategy, people who have experience with the stigma would feel more negative affect when enacting a negating strategy compared to an affirming strategy. A series of 2 (Race of participant: Caucasian, African American) x 2 (Strategy: Negate, Affirm) x 2 (Visibility: Visible, Non-visible) between-subjects ANOVAs were conducted to test these hypotheses. Means are reported in Table 23.

Positive and Negative Affect. In regard to positive affect as reported by the PANAS positive subscale, a statistically significant main effect of race was found, F(1,129) = 4.48, MSE = .43, p < .05, with African American participants stating that they felt significantly more positive after the chatroom interaction, M = 3.47, SD = .58, compared to Caucasian participants, M = 3.18, SD = .69. Participants did not differ in their level of reported negative affect as a function of race, visibility, strategy condition, or their interactions.

Ratings of the interview task. Participants did not differ in how effective they thought they were in making a positive impression as a function of race, visibility, strategy condition, or their interactions. However, significant results were found for the difficulty of the task with a significant main effect for visibility condition F(1,129) =5.84, p < .05, and race, F(1,129) = 13.10, p < .01. As would be expected, participants in the visible condition stated that the task was more difficult, M = 2.57, SD = 1.15, than participants in the non-visible condition, M = 2.19, SD = 1.04. In addition, Caucasian participants stated that the task was more difficult, M = 2.58, SD = 1.03, compared to

African American participants, M = 1.88, SD = 1.17. However, these main effects were qualified by a statistically significant strategy x visibility x race interaction, F(1,129) =6.50, MSE = 1.09, p < .05. Follow-up 2 (Strategy: Negate, Affirm) x 2 (Visibility: Visible, Non-visible) between-subjects ANOVAs, conducted separately by race, demonstrated marginally significant interactions for both Caucasian participants, F(1, 97)= 3.58, MSE = 1.04, p < .10, and African American participants, F(1, 32) = 3.10, MSE =1.22, p < .10. Simple effects analyses demonstrated that Caucasian participants in the affirm visible condition found the task to be much more difficult than African American participants in the affirm visible condition, t(36) = 2.75, p < .01. However, Caucasian participants in the negate non-visible condition also found the task to be much more difficult than African American participants in the negate non-visible condition, t(33) =4.17, p < .01.

Furthermore, a statistically significant main effect for race was found for how much participants enjoyed the interaction task, F(1,129) = 5.41, MSE = .97, p < .05, with African American participants stating that they enjoyed the interaction task more, M =3.86, SD = .96, than Caucasian participants, M = 3.39, SD = 1.00.

Ratings of self and interview partner. In regard to how much participants liked themselves after the interaction, a significant main effect was found for visibility condition F(1,129) = 5.31, MSE = .61, p < .05, and race, F(1,129) = 13.87, p < .01. Participants in the non-visible condition stated that they liked themselves more, M = 4.06, SD = .88, than participants in the visible condition, M = 3.74, SD = .84. In addition, African American participants stated that they liked themselves more after the interaction, M = 4.33, SD = .72, compared to Caucasian participants, M = 3.73, SD = .87. However, these main effects were qualified by a statistically significant strategy x race interaction, F(1,129) = 4.80, p < .05, and strategy x visibility x race interaction, F(1,129)= 6.15, MSE = .61, p < .05. Follow-up 2 (Strategy: Negate, Affirm) x 2 (Visibility: Visible, Non-visible) between-subjects ANOVAs, conducted separately by race, demonstrated significant results for Caucasian participants, but not for African American participants. Caucasian participants demonstrated a statistically significant main effect for strategy F(1, 97) = 7.45, p < .01, and visibility condition, F(1, 97) = 6.37, p < .05, as well as a significant interaction, F(1, 97) = 9.17, MSE = .65, p < .01. Simple effects analyses demonstrated that Caucasian participants in the affirm non-visible condition liked themselves significantly better after the interaction than Caucasian participants in the other three conditions, t(97) = 4.44, p < .01.

A statistically significant main effect for race was also found for perceptions of liking of one's interaction partner, such that Caucasian participants stated that they liked their interaction partner more M = 3.81, SD = .70, than African American participants, M= 3.53, SD = .77, F(1,129) = 4.40, MSE = .54, p < .05.

Overall, the results of the affective measures demonstrate a main effect for race with African American participants expressing more positive emotions compared to Caucasian participants. However, overall Hypothesis 5 was not supported. Table 23.

Means and standard deviations for the affective reactions measures and rating of interview items for Study 2.

			Strategy Condition				
			Affirm		Negate		
			Mean	SD	Mean	SD	
Measure	Race	Visibility Conditi	on				
Positive Af	fect – PANAS		<u>.</u>			<u> </u>	
	Caucasian	Visible	3.18	0.57	3.04	0.72	
		Non-visible	3.47	0.75	3.11	0.71	
	African American	Visible	3.38	0.57	3.43	0.57	
		Non-visible	3.35	0.48	3.73	0.70	
Negative A	ffect – PANAS						
	Caucasian	Visible	1.66	0.48	1.69	0.65	
		Non-visible	1.42	0.45	1.67	0.41	
	African American	Visible	1.47	0.50	1.66	0.43	
		Non-visible	1.83	0.64	1.50	0.67	
Effectivene	ss of Task						
	Caucasian	Visible	3.33	0.49	3.48	0.81	
		Non-visible	3.80	0.51	3.51	0.66	
	African American	Visible	3.22	0.65	3.70	0.66	
		Non-visible	3.54	0.40	3.75	0.90	

Table 23 (cont.)

Difficulty of Task								
	Caucasian	Visible	2.86	1.13	2.54	1.02		
		Non-visible	1.72	1.02	2.63	0.89		
	African American	Visible	2.18	0.91	2.59	1.41		
		Non-visible	1.69	1.25	1.25	0.46		
Enjoyment of Task								
	Caucasian	Visible	3.55	0.78	3.36	1.11		
		Non-visible	4.45	0.67	3.44	0.80		
	African American	Visible	4.22	0.51	3.82	0.98		
		Non-visible	4.25	0.89	3.88	0.83		
Likeability of Self After Interaction								
	Caucasian	Visible	3.55	0.78	3.60	0.91		
		Non-visible	4.45	0.67	3.52	0.89		
	African American	Visible	4.22	0.51	4.18	0.75		
		Non-visible	4.25	0.89	4.75	0.46		
Likeability of Interaction Partner								
	Caucasian	Visible	3.72	0.53	3.84	0.69		
		Non-visible	3.95	0.50	3.78	0.75		
	African American	Visible	3.67	0.89	3.55	0.69		
		Non-visible	3.38	0.92	3.50	1.07		

### Table 23 (cont.)

Note: Caucasian Affirm Visible n = 29; Caucasian Affirm Non-visible n = 20; Caucasian Negate Visible n = 25; Caucasian Negate Non-visible n = 27; African American Affirm Visible n = 9; African American Affirm Non-visible n = 8; African American Negate Visible n = 11; African American Negate Non-visible n = 8.

### Results – Part 2

### Effectiveness of stigma management strategy

Hypothesis 6a stated that people with a newly acquired stigma should be more effective when using a negating strategy and Hypothesis 6b stated that people who have experience with the stigma should be more effective when using an affirming strategy. Data collected from Part 2 were used to test these hypotheses using a series of 2 (Strategy: Negate, Affirm) x 2 (Visibility: Non-visible, Visible) x 2 (Race of participant: Caucasian, African American) between-subjects ANOVAs. Thus, strategy condition, visibility condition, and race of the participant served as the independent variables and ratings of the individual, ratings of effectiveness of impression management, ratings of interaction behavior, and ratings of effectiveness of the stigma nondisclosure were the dependent variables. Means and standard deviations for the dependent measures are reported in Table 24.

Ratings of the individual. Results for likeability demonstrated a significant strategy condition x race of participant interaction, F(1, 42) = 5.55, MSE = .70, p < .05. Simple effects analyses demonstrated that Caucasian participants were rated as less likable when they were in the negate condition, M = 5.80, SD = .98, compared to the

affirm condition, M = 7.03, SD = .61; this analysis was not statistically significant for African American participants. Thus, even though raters were unaware of the actual race of the person in the transcript, Caucasian participants were liked less when they used a negation strategy with a newly-acquired racial stigma.

Results for honesty demonstrated a significant strategy condition main effect, F(1, 42) = 4.59, MSE = .60, p < .05, with respondents from Study 2 being rated more truthful when they used an affirming strategy, M = 6.73, SD = .59, compared to a negating strategy, M = 5.97, SD = .89. Thus, although raters were unaware of strategy that participants were assigned to use, it appears as if they were aware that participants in the negating condition were hiding something.

Ratings of effectiveness of impression management. Results for impression management effectiveness demonstrated a significant strategy condition main effect, F(1, 42) = 4.71, MSE = .80, p < .05, with the affirming strategy being rated more effective, M = 6.40, SD = .71, than the negating strategy, M = 5.35, SD = 1.05. This main effect was qualified by a significant strategy condition x race of participant interaction, F(1, 42) = 5.35, MSE = .80, p < .05. Simple effects analyses demonstrated that Caucasian participants were rated as less effective when they were in the negate condition, M = 5.16, SD = 1.03, compared to the affirm condition, M = 6.52, SD = .62; this analysis was not statistically significant for African American participants. Again, it appears that even though the raters were unaware of the actual race of the participant, Caucasian participants were seen as less effective when they used a negation strategy with a newlyacquired racial stigma.
Ratings of interaction behavior. Results for ratings of overt behavior

demonstrated a significant strategy condition main effect, F(1, 42) = 4.85, MSE = 1.29, p < .05, with respondents from Study 2 being rated as demonstrating more responsive behavior when they used an affirming strategy, M = 6.25, SD = .98, compared to a negating strategy, M = 5.05, SD = 1.25. Again, although the raters were unaware of the strategy that participants were assigned to use, participants in the negating condition were rated as more reserved.

Table 24.

Means and standard deviations for the ratings of participants in Study 2.

			Affirm		Negate			
			Mean	SD	Mean	SD		
Measure	Race	Visibility Conditi	on					
Ratings of i	ndividual – Likable							
	Caucasian	Visible	6.98	0.70	5.68	1.26		
		Non-visible	7.10	0.46	5.93	0.57		
	African American	Visible	6.40	0.91	6.63	0.96		
		Non-visible	6.20	0.69	6.19	0.68		

Strategy Condition

# Table 24 (cont.)

# Ratings of individual – Truthful

	Caucasian	Visible	6.79	0.60	6.08	1.03
		Non-visible	6.94	0.30	5.72	0.59
	African American	Visible	6.18	0.97	6.16	1.05
		Non-visible	6.40	0.28	6.10	1.25
Effectiveness						
	Caucasian	Visible	6.49	0.70	5.09	1.18
		Non-visible	6.58	0.48	5.24	0.87
	African American	Visible	6.34	0.73	5.77	1.39
		Non-visible	5.30	0.90	5.99	0.46
Interactive Be	havior					
	Caucasian	Visible	6.45	0.99	4.91	1.54
		Non-visible	6.10	0.87	4.84	1.04
	African American	Visible	6.69	1.00	5.55	1.16
		Non-visible	4.93	0.00	5.46	1.17
Effectiveness	of non-disclosure					
	Caucasian	Visible	3.28	0.91	4.07	1.25
		Non-visible	3.09	0.68	4.09	0.95
	African American	Visible	3.87	0.80	4.10	1.39
		Non-visible	4.20	0.71	4.13	1.49

### Table 24 (cont.)

Note: Caucasian Affirm Visible n = 12; Caucasian Affirm Non-visible n = 7; Caucasian Negate Visible n = 10; Caucasian Negate Non-visible n = 9; African American Affirm Visible n = 3; African American Affirm Non-visible n = 2; African American Negate Visible n = 4; African American Negate Non-visible n = 3.

Ratings of effectiveness of the stigma nondisclosure. Ratings of non-disclosure did not differ as a function of the experimental manipulations.

Overall these results were counter to Hypothesis 6a, and no statistically significant results were found for Hypothesis 6b. In general, Caucasian participants were rated as less effective when they were using a negating, compared to affirming, strategy. However, African American participants were not rated as more effective when they were using an affirming strategy. In addition, the use of negating strategies was rated as less effective than the use of affirming strategies.

### Discussion

In Study 2, the hypotheses that pertain to individuals who have experience in dealing with a stigma were only partially supported. That is, no differences in cognitive resources as a function of stigma management strategy were found between people who have experience with the stigma and those who have a newly-acquired stigma. In addition, no differences in cognitive resources were found as a function of visibility for either people who have experience with the stigma or people with a newly-acquired stigma (contrary to Study 1). However, partial support was found for the proposition that the effects of the interaction between strategy and visibility on cognitive resources would

vary as a function of race. Specifically, African American participants in the affirm nonvisible condition were able to recall significantly more information about their interaction partner suggesting that using this strategy in this condition was less cognitively taxing, compared to other conditions. Thus, it is suggested that, for people who have experience with their stigma, using techniques that avoid or deny this aspect of the self is contrary to the process that is more automatic. For people who have experience with dealing with their stigma, strategically downplaying this aspect of the self may take more thought, because it is incongruent with how they are used to presenting themselves (Pontari & Schlenker, 2001).

Similar to the individual difference factors among people with newly-acquired stigmas in Study 1, the stigma experience-related factors of Study 2 influenced the level of cognitive resources utilized during the interaction task for people with experience with the stigma. Specifically, African Americans high in racial centrality used more cognitive resources to enact strategies that minimized race. However, African Americans who were high in stigma consciousness used fewer resources to enact negation strategies. This suggests that when the stigma is important, the individual may have more experience using strategies that affirm the stigmatized identity. However, when one is overly concerned with the negative reactions of others, they may have more experience with strategies that downplay or avoid the stigma. In both cases, these strategies should become more automatic and thus reduce the level of cognitive resources required to enact them. In addition, results for the use of affirmation strategies suggest that when one has more experience with using affirming strategies, it may require more cognitive resources to use negation strategies.

Overall, the hypotheses for the affective responses to being stigmatized among people with a newly-acquired stigma and people with stigma experience were not supported. No statistically significant differences in positive or negative affect were found as a function of race, stigma management strategy, visibility condition, or their interactions. This result is inconsistent with Study 1. However, main effects were found for race such that Caucasian participants found the interaction task to be more difficult than the African American participants; and African American participants stated that they enjoyed the interaction task more than the Caucasian participants. However, these main effects were not qualified by stigma management strategy, visibility condition, or their interactions. Also, inconsistent with Study 1, Caucasian participants (i.e., those with a newly-acquired stigma) stated that they liked themselves more in the affirm visible condition, compared to the other experimental conditions; and they liked their interaction partner more than the African American participants. Possible reasons for these differences are discussed in the *General Discussion* section below.

Overall the results for the effectiveness of these stigma management strategies were counter to Hypothesis 6a, and no statistically significant results were found for Hypothesis 6b. In general, Caucasian participants were rated as less effective when they were using a negating, compared to affirming, strategy. However, African American participants were not rated as more effective when they were using an affirming strategy. In addition, the use of negating strategies was rated as less effective than the use of affirming strategies. People who lack experience with the stigma may be less successful at stigma management because they lack the skills necessary to do so (Miller & Myers, 1998). Paradoxically, it may be more beneficial for people with newly-acquired stigmas to use affirming techniques. This may be in part because these techniques may be similar to general impression management techniques that emphasize positive aspects of the self (Leary, 1996).

#### GENERAL DISCUSSION

Stigmatized individuals use a variety of stigma management strategies as a way of coping with and attempting to change their socially-devalued situation (Goffman, 1963; Taifel & Turner, 1979). When the stigmatizing attribute is concealable, minimizing the negative effects of one's stigmatizing attribute may involve strategically controlling the amount of information shared that could "discredit" them. When the stigmatizing attribute is visible, or if others already know of the stigmatizing attribute, strategic management may involve compensating for the impact of the stigmatizing attribute during the social interaction (Goffman, 1963; Miller & Myers, 1998). Stigmatized individuals often make conscious decisions about how they choose to strategically manage their stigmatizing attribute in these social situations. These decisions may be based, in part, on the level of experience with the stigma and whether the stigma is visible. The current set of studies explored the effects of visibility and experience on the level of cognitive resources required when engaging in affirming or negating stigma management strategies. However, in general, the proposed hypotheses were only partially supported.

### Stigma Management and Cognitive Resources: The Effects of Experience and Visibility

No evidence was found for the assertion that the type of stigma management strategy used would have an effect on the amount of cognitive resources required during the social interaction. This hypothesis was not supported for either participants with newly-acquired stigmas in Study 1 (i.e., participants taking on the stigma of being physically challenged) or in Study 2 (i.e., Caucasian participants taking on the role of an African American). Furthermore, it was not supported in Study 2 for people who have more experience in dealing with the stigma (i.e., African Americans). The lack of differences in the use of cognitive resources may be due to the fact that among participants these strategies were actually more similar than dissimilar. That is to say, for participants in Study 1 and the Caucasian participants in Study 2, the strategic enactment of both types of stigma management strategies was a unique experience. For these participants, both types of strategies may have been relatively unfamiliar. This unique experience would have activated a more controlled thought process that would have used up cognitive resources (Schlenker & Pontari, 2000). Thus, the novelty of being in this strange situation and taking on a new role, regardless of the strategy assigned, would have required additional resources. However, for people with stigma management experience, both types of strategies may be relatively more automatic, given that people with stigma management experience tend to use both affirming and negating strategies depending on the social situation (Roberts et al., under review). Thus, for both people with newly-acquired stigmas and people with stigma management experience, it may be the case that equal amounts of cognitive resources would be used regardless of strategy.

These studies also explored the effects of visibility on the level of cognitive resources required to enact affirming and negating stigma management strategies among people with newly-acquired stigmas and people who have stigma management experience. Because, people with newly-acquired stigmas may not possess the experience, knowledge, or skills to use strategies that acknowledge the stigma, it may be easier to avoid dealing with it. In addition, because the stigmatizing attribute may not be part of their self-concept, it may be easier for them to deny its existence to both themselves and others (Deaux & Ethier, 1998). Because of this, managing a non-visible

stigma, compared to a visible stigma, may be easier when it has been recently acquired. Study 1 demonstrated when the newly-acquired stigma of being in a wheelchair was visible, participants demonstrated greater cognitive depletion after the task than when the stigma was not visible. However, this result was not replicated by the Caucasian participants in Study 2. Furthermore, no evidence was found to support the proposal that, for people with experience in dealing with the stigma, it would be easier to manage a visible, compared to non-visible stigma.

It was also hypothesized that the level of cognitive resources required as a function of strategy type and visibility of stigma would vary depending upon the level of experience with the stigma. People with experience in managing the stigmatizing attribute have more experience in dealing with the stigma in a wider range of situations (Cain, 1991). Thus, people with more experience with stigma management have an opportunity to adopt the coping strategies necessary to enact other forms of stigma management (Miller & Myers, 1998). With more experience comes the ability to manage the stigmatizing attribute in more difficult social situations, such as using affirmation techniques with a stigma that is non-visible. For example, in Study 2, African American participants in the affirm non-visible condition were able to recall significantly more information about their interaction partner suggesting that using this strategy in this condition was less cognitively taxing, compared to other conditions. This demonstrates the ease of using affirmation techniques even in situations where the stigma is not readily visible. People with experience with the stigma put forth more effort to affirm the stigma in their everyday lives (Miller, Rothblum, Felicio, & Brand, 1995), thus gaining the skill of using this technique even in situations when the stigma is not readily apparent. Once a

person gains more experience with dealing with the stigma, it becomes easier to juggle the demands of managing the discredited identity. However, the proposition for people with newly-acquired stigmas that negating strategies should require less cognitive resources when the stigma is non-visible compared to visible, and that affirming strategies should require less cognitive resources when the stigma is visible compared to non-visible was not supported in either Study 1 or Study 2.

### Individual Difference and Stigma Experience-Related Factors

Although people with newly-acquired stigmas may not have experience in dealing with the stigma per se, Study 1 demonstrated that there may be other individual difference factors that may help when adjusting to managing the stigma. The analyses exploring individual difference factors that may facilitate or hinder the use of these stigma management techniques demonstrated that some of these factors may actually assist participants because they tap into chronic, automatic processes that reduce the amount of cognitive resources required. Specifically, being chronically aware of oneself as a social object seems to reduce the cognitive resources required when enacting stigma management techniques that acknowledge the stigma. In addition, although mixed, Study 1 also suggests that domain-specific self-esteem may also assist in specific stigma management situations. That is, when the stigma is newly-acquired, feeling socially confident may reduce the burden on cognitive resources.

Factors specific to the stigma may also facilitate and hinder the use of stigma management for people who have experience with the stigma. First, when the stigmatizing attribute is important to the person's self concept, people may have more experience in managing the stigma in an affirming manner (Sellers et al., 1997). In

support of this notion, Study 2 demonstrated that, when the stigmatizing attribute is more central, it was more difficult to enact stigma management strategies that downplayed or avoided the stigma. However, having a greater awareness of being stigmatized may actually use up more cognitive resources when enacting affirming stigma management strategies with a visible stigma. Thus, it appears that when the stigmatized individual is aware that they may be stereotyped by others, instead of using affirming techniques, people with more experience with the stigma may be more likely to use techniques that avoid or downplay the stigma. Finally, although results were mixed for the use of stigma management techniques among African Americans in their everyday lives, some evidence suggests that, for those who have more experience with using affirming strategies, more cognitive resources are required when attempting to conceal a stigma.

For people with experience, as the stigmatizing attribute becomes more important, the use of affirming stigma management techniques also increase. In turn, as the use of affirming strategies increases, the ability to use negating strategies becomes more cognitively taxing. Thus, even though people with stigma management experience may utilize both types of stigma management strategies depending on the social situation, over time it may become more difficult to use strategies that downplay or deny the stigmatizing attribute.

### Affective Responses of the Stigmatized and Responses from Others

Overall, people with newly-acquired stigmas felt more negative affect after the interaction task than people with experience with the stigma. Negative affect for the newly stigmatized was especially prominent when trying to avoid discussing a visible stigma or stating positive aspects about a non-visible stigma (Study 1). In addition,

although people with a newly-acquired stigma expressed negative feelings toward their able-bodied partner in these conditions when they were in a wheelchair (Study 1), Caucasian participants who were role-playing being African American expressed positive feelings about themselves and toward their Caucasian interaction partner (Study 2). People with experience with the stigma (Study 2), and for whom it is more personally relevant, more positive affect regarding the interaction task was expressed. Thus, people with newly-acquired stigmas expressed inconsistent feelings regarding people engaged in the conversation depending upon the stigmatizing attribute; however, people with stigma management experience expressed more positive feelings toward engaging in the process of stigma management.

Finally, in general, the use of negation strategies was rated as less effective than using affirming strategies. That is, raters of the transcripts from Study 2, who were unaware of the specific stigma management strategy that was being used, rated participants in the negation condition as more reserved and more secretive than participants in the affirm condition. Moreover, the ineffective use of negation strategies was especially found for the Caucasian participants (i.e., those with a newly-acquired stigma). This suggests that stigma management strategies that are utilized to reduce the negative effects of the stigma during social interactions may be less effective for people with newly-acquired stigmas, especially when negating strategies are used. That is to say, if the strategic behavior is viewed as suspicious, then the desired impression may not be achieved.

#### Cognitive Measures

Even though the measure of available cognitive resources during the interaction and the level of cognitive depletion after the interaction were related in Study 1 (but not Study 2), they did not demonstrate consistent results. One possible explanation for this inconsistency may be that, during the interaction, participants were using their available cognitive resources to either monitor the behavior of their interaction partner in an effort to make a good impression, or were trying to think of appropriate responses to the questions posed by their partner, depending upon the strategy or visibility task demands. Thus, during the interaction, they would be processing more information during the interaction, including information involving the characteristics of their partner (i.e., visual information shown over the webcam). However, once this interaction was over, they may have used up the available resources and thus did not have enough "mental energy" to perform well on the cognitive depletion task. Although this proposition remains untested, it would explain why, when visible, participants with a newly-acquired stigma performed worse on the cognitive depletion measure as a function of the interaction task, but not on the cognitive resources measure. However, given that people with actual stigmas tend to pay more attention to their interaction partners (Frable et al., 1990), the African American participants in Study 2 may have remembered more on the cognitive resources measure due to previous experience in such situations. Future research should explore this possibility by tapping into excess cognitive resources during the interaction task by using a measure unrelated to the interaction (e.g., monitoring a list of words played on a tape recorder in the background). Participants for whom the interaction is less cognitively-taxing should remember more of the words played in the background

than participants who need to use more cognitive resources in order to engage in their assigned task (Beilock & Carr, 2001).

### Limitations

*Role-playing paradigm.* Having participants take on a role allowed for the experimental manipulation of having a newly-acquired stigma, however being given a role limits the psychological relevance of the stigma to one's self-concept. Thus, although it may be difficult to try to manage a newly-acquired stigma, the consequences of stigma management are short-term. For people with actual stigmas, the desire to make a positive impression and to develop strong stigma management skills may be more personally relevant. Thus, for these individuals the motivation to perform well on the interaction task may have more long-term consequences. In addition, other psychological factors that can not be manipulated in an experimental setting are also relevant to people with newly-acquired stigmas. For example, for actual people with newly-acquired stigmas, in addition to the development of effective stigma management strategies, they must also cope with major life changes and adapt to the emotional consequences of accepting their stigma. Future research should explore the effects of visibility, experience, and stigma management strategy on cognitive resources among individuals with real stigmas (e.g., physically challenged individuals who have varying lengths of time coping with it).

Different stigmas across studies. Different stigmas were used across the two studies in an attempt to demonstrate the generalizability of these findings. However, being physically challenged and being African American may be emotionally different for able-bodied Caucasian participants playing these roles. Responses supplied by

participants during the debriefing sessions suggested that playing the role of being in a wheelchair was more "enjoyable" than role-playing being African American. In addition, Caucasian participants in Study 2 were concerned that they may appear racist because of some of their comments during the interaction. Furthermore, being physically challenged may be more context-specific than being a person of color. That is, the stigma surrounding being physically challenged may be more likely to be limited to work-related situations and be more likely to elicit the sympathy of others (Cahill & Eggleston, 1995). However, race may be more of an issue in a wider range of social and work-related interactions (Crocker et al., 1998; Frable et al., 1990). Thus, the interaction task used in the current studies may have been more relevant to managing a racial stigma, rather than a physical stigma.

### Conclusion

The current work adds to the growing body of research on stigma management by exploring the effects of visibility and experience. Much research suggests that it may be strategic for members of stigmatized groups to manage their stigma depending on the social context, such as the prejudice reactions of others (Branscombe & Ellemers, 1998; Cain, 1991; Miller et al., 1995). However, the current research also supports the contention that experience with the stigma should also be a determining factor (Chrobot-Mason et al., 2001).

Stigmatization has been described as a "predicament" of possessing an attribute that is devalued in certain social contexts (Crocker et al., 1998). However, both individuals with newly-acquired stigmas and those with stigma management experience face an additional predicament in the strategic management of their stigma. Although it

may be easier for people with newly-acquired stigmas to strategically manage the stigmatizing attribute (especially when it is not visible) by denying the stigma or downplaying its relevance, this strategy may be less successful for people who lack stigma management skills. In addition, using negating strategies may add an additional strain on their ability to function in a social interaction by reducing the level of intimacy in one's interpersonal relationships (Herek & Capitanio, 1997), as well as reducing access to social support (Frable, Wortman, & Joseph, 1997) and other benefits (e.g., medical support for people living with HIV; Herek, 1999). Thus, paradoxically, the current work suggests that among people who lack stigma management experience, using negating strategies may place less cognitive strain on them, but the use of affirming strategies may actually be conducive to interpersonal relationships by reducing the level of suspicion in these relationships.

For people who have experience with stigma management, making stigma management decisions may be very easy and somewhat automatic. However, they may also face a dilemma. The increased awareness of being stigmatized may have a paradoxical effect on the use of stigma management strategies. This increased awareness of being stigmatized should increase the salience of the stigma during social interactions. As a result of this increased awareness, the stigmatized individual should use stigma management strategies more often. The current research suggests particularly the use of negating techniques. However, when the stigma is more salient, either because of concerns over being stereotyped by others or because the stigma is visible, it may also become more central (Stryker & Serpe, 1994). In an attempt to give the situation meaning, the stigmatized individual may incorporate the stigma into their sense of self

(Cross & Strauss, 1998). In turn, as the stigmatizing attribute becomes more important, the use of affirming stigma management techniques should also increase. The current research suggests that as the use of affirming strategies increases, the ability to use negating strategies becomes more cognitively taxing. Thus, even though people with stigma management experience may utilize both types of stigma management strategies depending on the social situation, over time it may become more difficult to use strategies that downplay or deny the stigmatizing attribute. Therefore, the current work suggests that although using both forms of stigma management strategies may be available to people who have more experience, using negating strategies may actually become more difficult over time.

The process of stigma management is complicated because it involves the reactions of others, concerns over the negative reactions of others, and the abilities of the stigmatized individual (Crocker et al., 1998; Miller & Kaiser, 2001; Miller & Myers, 1998; Quinn et al., 2004). By choosing to disclose, the stigmatized face the possibility of being ostracized, harassed, and ridiculed. However, by not disclosing, they may create an environment of distrust and secrecy (Cain, 1991). It was the intent of this work to contribute to the growing body of research on stigma management by exploring the cognitive factors that influence the use of stigma management strategies. Future research should continue to explore these issues among other stigmatized groups to explore how the differences and similarities among these groups may affect one's ability to use these stigma management strategies.

APPENDICES

# Appendix A

# Demographic questionnaire

We are interes	ted in some in	formation about w	who you are. Please complete the following			
questions.						
Gender:	_Female	Male	Other: specify			
What is your a	ıge?	_				
What year are	you in school	?				
First Year		Third Year	Fifth Year			
Second Ye	ar	Fourth Year	Sixth Year and beyond			
What is your r	najor?					
What is your c	current overall	GPA in college?				
What was you	r overall SAT	score before enter	ing college?			
What is your r	acial group (p	lease choose one)	?			
White/Cau	ıcasian		Black/African-American			
Asian or P	acific Islander	-	Hispanic/Latino/Latina			
Native An	nerican/Americar	Indian				
Mulitracia	l/multiethnic (ple	ease describe):				
Other (ple	ase describe):					
What are your biological parents' racial backgrounds?						
Father			Mother			
	White/	Caucasian				
	Black/A	African-American				
	Asian o	or Pacific Islander				
	Hispan	ic/Latino/Latina				

Native American/American Indian
Mulitracial/multiethnic
Other
Were you born in the U.S.? Yes No
If no, where were you born?
At what age did you come to the U.S.? years of age
What is your religious preference?
Jewish (please specify)
ReformOrthodoxOther (describe)
Christian (please specify)
Catholic Protestant Evangelical Orthodox
New Age/Metaphysical Other (describe)
Islamic
Hindu
Eastern (e.g. Taoist, Buddhist)
No religious preference
Other (please specify):
Please check all that apply:
I consider myself to be at least 40 pounds overweight.
I am terrified of being overweight.
I am always concerned with a desire to be thinner.
I was voted homecoming king/queen in high school.
I use a wheelchair or braces to get around.
I have a physical deformity that is noticeable by others.
I consider myself to be an outstanding athlete.
Compared to other university students, I consider myself to be above average in intelligence

### Appendix B

Self-Consciousness Scale (Fenigstein et al., 1975)

- 1. I'm concerned about my style of doing things. (P)\*
- 2. It takes me time to overcome my shyness in new situations. (S)
- 3. I'm concerned about the way I present myself. (P)
- 4. I have trouble working when someone is watching me. (S)
- 5. I get embarrassed very easily. (S)
- 6. I'm self-conscious about the way I look. (P)
- 7. I don't find it hard to talk to strangers. (S)
- 8. I usually worry about making a good impression. (P)
- 9. I feel anxious when I speak in front of a group. (S)
- 10. One of the last things I do before I leave my house is look in the mirror. (P)\*
- 11. I'm concerned about what other people think of me. (P)
- 12. I'm usually aware of my appearance. (P)
- 13. Large groups make me nervous. (S)

\*Dropped Item; (P) – Public Self-Consciousness Subscale; (S) – Social Anxiety Subscale

### Appendix C

### Self-Presentational Concern Scale (Lennox & Wolfe, 1984)

- 1. I usually worry about making a good impression.
- 2. I am concerned about the way I present myself.
- 3. I am self-conscious about the way I look.
- 4. I am concerned about what other people think of me.
- 5. I am concerned about my style of doing things.

### Appendix D

Modified version of the State Self-Esteem Scale (Heatherton & Polivy, 1991)

- 1. In general, I feel confident in my abilities. (P)
- 2. In general, I am worried about whether I am regarded as a success or failure. (S)
- 3. Most of the time, I feel satisfied with the way my body looks. (A)
- 4. I generally feel frustrated or rattled when performing a task. (P)
- 5. Most of the time, I feel that I have trouble understanding things that I read. (P)
- 6. In general, I feel that others respect and admire me. (A)
- 7. In general, I feel dissatisfied with my weight. (A)
- 8. Most of the time, I feel self-conscious. (S)
- 9. Most of the time, I feel as smart as others. (P)
- 10. In general, I feel displeased with myself. (S)
- 11. In general, I feel good about myself. (A)
- 12. I am pleased with my appearance. (A)
- 13. Most of the time, I am worried about what other people think of me. (S)
- 14. Most of the time, I feel confident that I understand things. (P)
- 15. I feel inferior to others most of the time. (S)
- 16. Most of the time, I feel unattractive. (A)
- 17. Most of the time, I feel concerned about the impression I am making. (S)
- 18. I feel that I have less scholastic ability than others. (P)
- 19. Most of the time, I feel like I'm not doing well. (P)
- 20. Most of the time, I am worried about looking foolish. (S)
- \*(P) Performance Subscale; (S) Social Subscale; (A) Appearance Subscale

# Appendix E

## Cognitive Depletion Measure (General Mental Abilities Test; Janda, 1996)

## Analogies

Sc	Scant is to deficient as sedate is to						
	Serene	Moody	Frivolous	Flippant	Skip		
1.	Renounce is to ac	cept as imperfec	t is to				
	Defective	Deficient	Flawless	Scanty	Skip		
2.	Lack is surplus as	renounce is to _	·				
	Abjure	Accept	Repudiate	Abdicate	Skip		
3.	Ascertain is to lea	rn as petty is to					
	Trivial	Magnanimous	Significant	Substantial	Skip		
4.	Essential is to fun	damental as end	orse is to				
	Sanction	Condemn	Denounce	Reprove	Skip		
5.	Exile is to ostracia	ze as ethical is to	)				
	Immoral	Honorable	Promiscuous	Lecherous	Skip		
6.	Oppression is to j	ustice as obtain	is to				
	Forgo	Purchase	Procure	Acquire	Skip		
7.	Sheer is to opaque	e as parallel is to	) <u> </u>				
	Analogous	Coinciding	Divergent	Similar	Skip		
8.	Remit is to retain	as nasty is to	<u> </u>				
	Repellent	Odious	Beastly	Delightful	Skip		
9.	Bat is to human a	s whale is to					
	Frog	Bear	Bird	Carp	Skip		

10. Efface is to obliterate as general is to						
Inexact	Exact	Extinct	Specific	Skip		
11. Large is to minute	as pacific is to	·				
Bellicose	Halcyon	Tranquil	Placid	Skip		
Vocabulary						
Cabinet						
Bureau	Federal	Open	Drawer	Skip		
12. Obstacle						
Impediment	Gate	Yard	Gateway	Skip		
13. Content						
Shape	Hinder	Satisfied	Appalled	Skip		
14. Abdicate						
Appease	Suggest	Dictate	Resign	Skip		
15. Loquacious						
Parsimonious	Courageous	Verbose	Cautious	Skip		
16. Liturgy						
Livid	Angry	Ritual	Spoiled	Skip		
17. Pastoral						
Religious	Graze	Neglect	Peaceful	Skip		
18. Mope						
Stupid	Relax	Clean	Apathetic	Skip		
19. Laconic						
Concise	Intelligent	Colorful	Quiet	Skip		

20. Serpentine

	Treacherous	Frightening	Misleading	Silly	Skip		
21. Mis	creant						
	Villain	Incorrect	Ineptitude	Fortuitous	Skip		
22. Ost	entatious						
	Generous	Brilliance	Pecuniary	Pretentious	Skip		
Genera	l Information						
23. Wh	23. What is the first month of the year that has exactly 30 days?						
	January	February	March	April	Skip		
24. Wh	at planet has th	e shortest year?	•				
	Earth	Pluto	Mercury	Uranus	Skip		
25. Wh	at is the world'	s northernmost	national capita	1?			
	Stockholm	London	Reykjavik	Oslo	Skip		
26. To	the nearest day	, how long does	s it take the mo	on to revolve aro	und the Earth?		
	1 day	27 days	30 days	365 days	Skip		
27. Wh	at is the Fahrer	nheit equivalent	of 0 degrees C	celsius?			
	-32 degrees	0 degrees	32 degrees	212 degrees	Skip		
28. Hov	w many dimens	sions does a soli	id have?				
	One	Two	Three	Four	Skip		
29. Wh	o wrote the boo	ok Gone with th	e Wind?				
Sylvia	Plath So	carlett O'Hara	Gertrude S	tein Margar	et Mitchell	Skip	
30. In v	30. In what month is Groundhog Day?						
	January	February	March	May	Skip		

31. What is "The Windy City"?

	New York	Detroit	Chicago	San Francisco	Skip			
32. Hov	v many miles ar	e there in a ki	lometer?					
	.4	.6	1	1.6	Skip			
33. The	33. The two cities that were the subject of Dickens's A Tale of Two Cities were London							
and	what other city	?						
	Madrid	Paris	Berlin	New York	Skip			
Mather	natical Ability							
34. If 2:	x + y = 5, then $c$	$6\mathbf{x} + 3\mathbf{y} = ?$						
	2/5	3/9	15	18	Skip			
35. One	side of a rectar	ngle is 3 feet l	ong and the dia	igonal is 5 feet lo	ng. What is the			
area	.?							
	6	7.5	12	15	Skip			
36. Ros	anne's trail mix	uses 6 ounce	s of M&Ms for	every 9 ounces	of Hershey's Kis	sses.		
Hov	w many ounces	of M&Ms are	needed for 75	ounces of trail m	ix?			
	25	30	32.5	36	Skip			
37. The	diagonal of a r	ectangle is 5 f	eet, and one sid	le is 4 feet long.	What is the			
peri	meter?							
	12 feet	14 feet	16 feet	18 feet	Skip			
38. A c	38. A club of 60 people has 36 men. What percentage of the club is women?							
	20%	24%	40%	48%	Skip			
39. The	39. The average of 3 single-digit numbers is 7. The smallest number that one of the							
num	bers can be is:							

	0	1	2	3	Skip
40.	The hypotenuse of a r	ight triangle is	s 5 feet long, a	nd its area is 6 squ	are feet. One of
	the sides of the triang	le is:			
	1.2 feet	2 feet	2.5 feet	4 feet	Skip
41.	1/4 x 2/3 x 3/2 = ?				
	1/4	5/9	6/9	3	Skip
42.	1/4 x 3/4 divided by 4	1/5 = ?			
	7/13	15/64	15/4	12/20	Skip
43.	Which of the following	ng is the larges	at number?		
	13/24	21/40	36/70	51/100	Skip
44.	Sally is 2 years older	than her broth	er. Twelve ye	ars ago, she was tv	vice as old as he
	was. How old is Sall	y now?			
	14	16	20	32	Skip
45.	There were 16 teams	in a basketball	l tournament.	When a team lost,	it was eliminated
	from the tournament.	How many g	ames had to be	e played to determ	ine a champion?
	4	9	15	31	Skip

## Appendix F

	e	· · · ·	
intereste	ed irritable	distressed	alert
excited	ashamed	upset	inspired
strong	nervous	guilty	determined
scared	attentive	hostile	jittery
enthusia	sticactive	proud	afraid

Positive and Negative Affect Scale (PANAS; Watson et al., 1988)

### Appendix G

### Scenarios for Study 1

Affirming strategies:

- 1. Sarah has been a paraplegic her entire life. Because of a birth defect, she was born without the use of her arms. Through the use of artificial limbs, Sarah has learned to cope with this disability. However, recently she and her husband moved to a small New England town. After moving, she soon became aware that many of the townspeople were not too friendly toward her. For example, she realized that the cashier at the local grocery store would often engage others in friendly conversation, but, when Sarah was in line, she did not say anything. Sarah discussed this with her husband and the fact that she was generally viewed by others in the town as different. She and her husband figured out that the best way to deal with the townspeople was to emphasize the positive characteristics about her disability and have open discussions to try to understand the perspectives of the townspeople and help them to understand her. Sarah now feels it is important to be a role model for people with disabilities by breaking stereotypes. Now, when Sarah goes to the grocery store she engages the cashier in conversation and will share important stories with her about what it is like to wear the prosthetic arms.
- 2. Robert recently was diagnosed with a neurological disease that makes it difficult for him to get around without the use of braces or a wheelchair. Since the effects of the disease have become more noticeable, he feels out of place and different. He finds it difficult living in a culture that perpetuates ideals of perfection, especially when it comes to a person's body. He finds it particularly difficult to date because many

times he meets women who are prejudiced against him because the way he looks. He is afraid that women will reject him because he has to use a wheelchair. Because of this, when he meets a woman that he really likes, he tends to emphasize that he is content with his life. He refuses to hide the fact that he has to use a wheelchair. In fact, he realizes that he has come to appreciate more important qualities in both himself and in the women that he dates. He realizes that his experiences with his disability have made him a stronger person who values what is inside a person instead of what they look like on the outside. When he encounters the negative remarks of others, he will often challenge their negative comments and work to increase the acceptance of disabled people in this culture by emphasizing their physical capabilities.

3. When Erin was 7, she was riding with her father in the car and they got into a bad traffic accident. Erin's dad was badly injured and she was paralyzed from the waist down. Ever since she left the hospital, she has had to use a wheelchair to get around. After the accident, when she returned to school she noticed that her fellow classmates treated her differently. In fact, Erin, who is now 19 and in college, has realized over the years that many people treat her differently. When others see that she is in a wheelchair, they tend to have a negative reaction toward her. They tend to look down or look away in an effort not to stare at her and relieve their discomfort with her physical disability. Often, Erin will not get invited to parties and other social events because people are not sure what to say to her. When she does interact with people who are not like her, she tends to feel left out of the conversation because people do not know what to say. Erin has learned to cope with these reactions by getting

involved in various clubs around her school. Through these organizations, she has made many friends and has demonstrated that she still can be active and productive. In fact, she recently got involved with the Special Olympics and will share her success in sports with others. By getting involved, she tries to breakdown stereotypes about people who are in wheelchairs. Now when she gets invited to parties, she finds that people look her in the eyes because they are more comfortable with her disability.

Negating strategies:

1. Sarah has been a paraplegic her entire life. Because of a birth defect, she was born without the use of her arms. Through the use of artificial limbs, Sarah has learned to cope with this disability. However, recently she and her husband moved to a small New England town. After moving, she soon became aware that many of the townspeople were not too friendly toward her. For example, she realized that the cashier at the local grocery store would often engage others in friendly conversation, but, when Sarah was in line, she did not say anything. Sarah discussed this with her husband and the fact that she was generally viewed by others in the town as different. She figured out that the best way to deal with the townspeople that they encountered was to emphasize ways she was similar to the other townspeople and be more like them. Sarah believes it is important to minimize the fact that she is in a wheelchair and, if possible, not to discuss it. Now, when Sarah goes to the grocery store she engages the cashier in conversation about issues of the town and will share important stories with her about why she likes living in this town, but will not mention the fact that she is in a wheelchair.

- 2. Robert recently was diagnosed with a neurological disease that makes it difficult for him to get around without the use of braces or a wheelchair. Since the effects of the disease have become more noticeable, he feels out of place and different. He finds it difficult living in a culture that perpetuates ideals of perfection, especially when it comes to a person's body. He finds it particularly difficult to date because many times he meets women who are prejudiced against him because the way he looks. He is afraid that women will reject him because he has to use a wheelchair. Because of this, when he meets a woman that he really likes, he tends to try to conceal or cover up the handles, so people can not see the metal arms. When he encounters the negative remarks of others, he will often say that the disability is not that bad. When he is involved in non-face-to-face contact (e.g., on the phone or on-line) with others who do not know him, he will not mention his disability.
- 3. When Erin was 7, she was riding with her father in the car and they got into a bad traffic accident. Erin's dad was badly injured and she was paralyzed from the waist down. Ever since she left the hospital, she has had to use a wheelchair to get around. After the accident, when she returned to school she noticed that her fellow classmates treated her differently. In fact, Erin, who is now 19, has realized over the years that many people treat her differently. When others see that she is in a wheelchair, they tend to have a negative reaction toward her. They tend to look down or look away in an effort not to stare at her and relieve their discomfort with her physical disability. Often, Erin will not get invited to parties and other social events because people are not sure what to say to her. When she does interact with people who are not like her, she tends to feel left out of the conversation because people do not know what to say.

Erin has learned to cope with these reactions by trying to limit the effect that her being in a wheelchair has when dealing with others. When others ask why she is in a wheelchair, she generally avoids discussing it. Also, she tries to avoid behaviors that will draw focus to the fact that she is in a wheelchair. Now when she gets invited to parties, she finds that people look her in the eyes because they see her instead of the wheelchair.

### Appendix H

## Centrality subscale (Sellers et al., 1997)

- 1. Overall, my race has very little to do with how I feel about myself.
- 2. In general, my race is an important part of my self-image.
- 3. My destiny is tied to the destiny of other people of my race.
- 4. My race is unimportant to my sense of what kind of person I am.
- 5. I have a strong sense of belonging to people in my racial group.
- 6. I have a strong attachment to other people in my racial group.
- 7. My race is an important reflection of who I am.
- 8. Being a person of my racial group is not a major factor in my social relationships.

### Appendix I

Race version of the Stigma-Consciousness Questionnaire (Pinel, 1999)

- 1. Stereotypes about my race have not affected me personally.
- 2. I never worry that my behaviors will be viewed as stereotypical of my race.
- 3. When interacting with people of other races, I feel like they interpret all my behaviors in terms of my race.
- 4. Most people of other races do not judge people of my race on the basis of race.
- 5. My race does not influence how others act with me.
- 6. I almost never think about my race when I interact with people of other races.
- 7. My race does not influence how people act with me.
- 8. Most people of other races have a lot more racist thoughts than they actually express.
- 9. I often think that people of other races are unfairly accused of being racist.
- 10. Most people of other races have a problem viewing people of my race as equals.
# Appendix J

# Morgan (2002) Impression Management scale

How frequently do you use this strategy when interacting with people of different races than your own?

- 1. Try to be seen as an individual, rather than as a member of a racial group. (N)
- 2. Try to avoid discussing race and racial issues. (N)
- 3. Try to emphasize the experiences or beliefs you have in common with people of other races. (N)
- 4. Try to communicate your knowledge of "mainstream" culture. (N)
- 5. Try to avoid conducting yourself in ways that are considered typical of people of your race. (N)
- 6. Try to represent people of your racial group in a positive manner. (A)
- 7. Try to communicate the inaccuracy of stereotypes about people of your racial group.(A)
- 8. Try to educate people of other racial groups about the accomplishments of people of your racial group. (A)
- 9. Try to share aspects of your racial group culture with people of other races. (A)
- 10. Try to be seen as an advocate for people of your racial group. (A)
- \*(N) Negation Strategy Subscale; (A) Affirmation Strategy Subscale

## Appendix K

### Scenarios for Study 2

Affirming strategies:

- 1. Sarah is an African American woman who recently moved to a small New England town. When she and her husband moved to this town, she realized that there were not a lot of other African Americans who lived in the predominately White town. She soon became aware that many of the townspeople were not too friendly toward her and her husband. For example, she realized that the cashier at the local grocery store would often engage others in friendly conversation, but, when Sarah or her husband were in line, she did not say anything. Sarah discussed this with her husband and the fact that they were generally viewed by others in the town as different. She and her husband figured out that the best way to deal with the townspeople was to emphasize the positive characteristics about being African American and have open discussions on race to try to understand the perspectives of the townspeople and help them to understand her and her husband. Sarah now feels it is important to be a role model of the Black community by breaking stereotypes. Now, when Sarah goes to the grocery store she engages the cashier in conversation and will share important stories with her about what it is like to be an African American and the personal pride she feels.
- 2. John is a Black man who lives in a large urban area. Although he has many African American friends and a supportive family, there are times when he encounters people who do not like him because of his race. For example, there are people who he works with who have made negative comments and racist jokes. He has often overheard the punchline of derogatory racist jokes from his colleagues. Because John works for a

large corporation, there are times when he is required to attend company functions. During these functions, people often chat about their personal and social lives outside of work. For example, his boss will often discuss his achievements and the private clubs he belongs to. In these situations, John often feels that he should contribute to the conversation. When asked about his personal life, John often tells them he is involved in many Black political organizations. He will also discuss important accomplishments of other African Americans and will talk about Black culture and the accomplishments of Black people throughout American history. He feels it is important that his White colleagues see what it is like to be a Black man.

3. Erin is a young African American woman (age 19) who recently left home to go to college. Since leaving her family and community back home, she has realized that people treat her differently because she is attending a predominately White university. When others meet her for the first time they tend to have a negative reaction toward her because of her race. Those who do not have a negative attitude toward her still tend not to talk to her. Often, Erin will not get invited to parties and other social events. When she does interact with other White students, she tends to feel left out of the conversation because people do not know what to say. Erin has learned to cope with these reactions by getting involved in various clubs around her school. Through these organizations, she has met other Black friends who are involved in educating others regarding the prejudice and discrimination facing African Americans. She also spends time talking about the unique aspects of Black culture. Now when she gets invited to parties, she finds she has plenty to talk about because she can talk about things that are important to her.

Negating strategies:

- 1. Sarah is an African American woman who recently moved to a small New England town. When she and her husband moved to this town, she realized that there were not a lot of other African Americans who lived in the predominately White town. She soon became aware that many of the townspeople were not too friendly toward her and her husband. For example, she realized that the cashier at the local grocery store would often engage others in friendly conversation, but, when Sarah or her husband were in line, she did not say anything. Sarah discussed this with her husband and the fact that they were generally viewed by others in the town as different. She and her husband figured out that the best way to deal with the townspeople that they encountered was to emphasize ways they were similar to the White townspeople and to try to take the perspective of the townspeople and be more like them. Sarah now feels it is important to fit in with the other townspeople, and dress and act like them. Sarah believes it is important to minimize her race and not appear too "Black." Now, when Sarah goes to the grocery store she engages the cashier in conversation about issues of the town and will share important stories with her about why she likes living in this town.
- 2. John is a Black man who lives in a large urban area. Although he has many African American friends and a supportive family, there are times when he encounters people who do not like him because of his race. For example, there are people who he works with who have made negative comments and racist jokes. He has often overheard the punchline of derogatory racist jokes from his colleagues. Because John works for a large corporation, there are times when he is required to attend company functions.

During these functions, people often chat about their personal and social lives outside of work. For example, his boss will often discuss his achievements and the private clubs he belongs to. In these situations, John often feels that he should contribute to the conversation. When asked about his personal life, John often tends to make up stories. Even though he doesn't like lying, he feels there is no reason to say anything if he doesn't have to. Although he is heavily involved in many Black political organizations, he avoids talking about it because of the ridicule that can come from it. When he is involved in non-face-to-face contact (e.g., on the phone or on-line) with others who do not know him, he will not mention his race.

3. Erin is a young African American woman (age 19) who recently left home to go to college. Since leaving her family and community back home, she has realized that people treat her differently because she is attending a predominately White university. When others meet her for the first time they tend to have a negative reaction toward her because of her race. Those who do not have a negative attitude toward her still tend not to talk to her. Often, Erin will not get invited to parties and other social events. When she does interact with other White students, she tends to feel left out of the conversation because people do not know what to say. Erin has learned to cope with these reactions by avoiding discussing race as much as possible. She has gotten involved in many clubs on campus that are predominately White and when the discussion of race comes up, she avoids talking about it. Furthermore, when completing information about herself, she will skip over any questions that ask about her race or family. Instead, she tries to appear like any other "White" student on

campus. Now when she gets invited to parties, she finds she has plenty to talk about because she talks about topics that are important to the White students.

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