THE EFFECTS OF PRIMED SOCIAL CLASS-BASED STIGMA ON

SELF-REGULATION, SELF-ESTEEM, AND SENSE OF BELONGING

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Abstract

The consequences of stigmatization, or negative evaluation based on one's social identity, have been examined for group identities ranging from race to weight. However, little research has examined social class, and no research has investigated class-based stigma consciousness. In the present study, I sought to investigate whether students of lower socioeconomic status (SES) at an elite institution would display lower self-regulatory ability, self-esteem, and sense of belonging after experiencing the threat of social stigmatization, and whether stigma consciousness would moderate this relationship. Sixty-three lower SES students were randomly assigned to view a video ostensibly made by a fellow student of either high (stigma-relevant) or ambiguous (stigma-irrelevant) SES, and were then told they would create their own video to be evaluated by others. Results indicated that participants who watched the high SES cue video displayed lower self-regulatory ability than participants who watched the ambiguous SES cue video, but only if they were also high in stigma consciousness. Additionally, stigma consciousness predicted lower self-esteem and lower sense of belonging regardless of video condition. Results indicate that while participants' reaction times on the implicit self-regulation task may have been affected by subtle cues in the stigma-relevant video, scores on the more explicit measures of self-esteem and sense of belonging were not affected by brief priming. Future research should investigate more disparate comparisons (e.g., high versus *low* SES students) to determine if a short experience of a more obvious class-based stigma threat might affect both implicit and explicit tasks.

The Effects of Primed Social Class-Based Stigma on

Self-Regulation, Self-Esteem, and Sense of Belonging

Whether in academic endeavors or social encounters, college students face a wide variety of anxieties each day. In a virally shared essay, however, a Duke University student shared a more unexpected anxiety she faced while navigating campus: revealing that she was poor. At a university predominantly populated by wealthy students, she felt shame merely exposing, let alone discussing, this fundamental component of her identity (Waldorf, 2013). Nearly 3 in 4 students at top American colleges come from families in the nation's top socioeconomic status (SES) quartile, while fewer than 1 in 25 students come from families in the lowest (Bruni, 2016). Given these disparities, this student must not be alone in her hushed experience of shame. Compared to group identities such as race and gender, however, social class as a stigmatized identity has been examined much less thoroughly. The goal of the present study was to examine whether, at a college primarily populated by higher SES students, being primed to anticipate class-based stigmatization in a social setting would negatively affect lower-SES students' self-regulatory ability, state self-esteem, and sense of belonging – particularly if lower-SES students were highly conscious of class-based stigma in their everyday lives.

Definition of Social Class

In a study of college students from a range of socioeconomic backgrounds, researchers asked which of three social identities – gender, ethnicity, or social class – played the biggest role in students' lives. Regardless of their SES, students overwhelmingly chose social class (Thomas & Azmitia, 2014). While students clearly conceptualize social class as an essential identity, it is also a vaguely-defined one. In the literature on social class, SES might be defined by income, self-drawn rank on a ladder, or self-reported membership in the "working," "middle," or "upper"

classes, to which different people attribute different definitions and meanings (DiMaggio, 2012).

To study social class as an identity, this problem must be overcome by operationalizing a

comprehensive definition of SES. Possible measurable components of social class include

material resources, self-defined rank, prestige, lifestyle, and habits (Kraus, Piff, Mendoza-

Denton, Rheinschmidt, & Keltner, 2012; Kraus, Tan, & Tannenbaum, 2013; Liu et al., 2004).

This range seems difficult to capture in one measure. However, three components – objective

SES, subjective SES, and observable characteristics/behaviors that reflect SES to others – have

been shown to capture most of what is essential to a definition of SES.

Objective SES is typically conceptualized as a combination of income, education, and

occupation that affords not only material and social resources, but an accompanying sense of

prestige (Krieger, Williams, & Moss, 1997). However, a standard measurement of objective SES

does not exist. Objective SES has been measured using only one (Johnson, Richeson, & Finkel,

2011; Stephens, Markus, & Townsend, 2007), two (Kraus, Côté, & Keltner 2010; Kraus,

Horberg, Goetz, & Keltner, 2011), or all three (Langout, 2007; Martin, 2012; Ostrove, 2007) of

its indicators of income, education, and occupation. Each of these components predicts important

outcomes for college students. Higher family income predicts greater likelihood of earning a

Bachelor's degree and greater feelings of academic fit at selective institutions (Boyce, Brown, &

Moore, 2010; Johnson et al., 2011). More prestigious parent occupation, however, predicts more

on-campus involvement and satisfaction with campus life, coursework, and instruction quality

(Martin, 2012). Higher levels of income, education, and occupation together predict greater sense

of belonging, better academic adjustment to college, and better academic performance for higher

SES compared to lower SES students (Ostrove, 2007). Clearly, objective SES predicts very

relevant outcomes. However, it does not fully measure the components of rank, prestige, lifestyle, or habits that constitute a comprehensive definition of SES.

A second measurable component of social class, subjective SES, captures people's beliefs about what an objective amount of money or job title means in their particular social context. On measures of subjective SES, people rank themselves relative to specific referent groups in terms of how they define SES. In previous research, subjective SES has been assessed via a range of measures, from an SES ladder that allows people to rank themselves relative to the "top" and "bottom" of the United States (Kraus et al., 2010; Kraus et al., 2011) to scales that measure one's perceived SES-based rank compared to others at one's college (Johnson et al., 2011). Subjective SES predicts important outcomes independent of objective SES. In a study of predictors of women's physical and psychological health, subjective SES predicted pessimism, susceptibility to depression, chronic and subjective stress, negative affect, and lower perceived control over life – whereas objective SES only predicted pessimism (Adler, Epel, Castellazzo, & Ickovics, 2000). Subjective SES may also better determine success at college. While higher objective SES predicts better academic adjustment to an elite liberal arts college, higher subjective SES predicts better social adjustment (Ostrove, 2003). Furthermore, subjective SES mediates the positive association between objective SES and academic fit at college (Johnson et al., 2011), suggesting that objective amount of material resources may be less important than how people rank themselves compared to others. Overall, subjective SES adds to a definition of social class by capturing what objective SES means to people, which predicts unique outcomes. However, even the two measures combined do not explain *how* people determine others' SES in everyday life.

The third component of a comprehensive definition of social class includes observable characteristics and behaviors that reflect social class to others. People do not typically walk around announcing their family income. However, they still signal their social class to others by alluding to their parents' jobs and people they know through those jobs, to objects or experiences they can or cannot afford, and, for example, to their subjective sense of being poorer than others. Bourdieu (1985) proposed two observable signs of SES that are independent of objective resources: social capital and cultural capital. Social capital refers to the use of relationships with powerful people to maintain or gain resources (Bourdieu, 1985; Liu et al., 2004b) – for example, getting a job through family connections. Cultural capital refers to more abstract knowledge and characteristics – for example, tastes (e.g., musical preferences or clothing choices), hobbies (e.g., athletic preferences), and habits (e.g., vacation spot preferences; Bourdieu, 1985; Liu et al., 2004b). Large ethnographic studies demonstrate that, using these cues, college students are able to infer others' social class. When a sample of Californian college students were asked when they became aware of their social class, two thirds of participants cited a situation in which they compared themselves to their peers based on observable characteristics or behaviors. Working-class and some middle-class participants reported becoming aware of their social class when making upward comparisons with friends who had access to more money, larger homes, fancier cars, and frequent vacations. In contrast, upper-class participants became class-conscious by making downward comparisons, citing being surprised that peers had to work while being in college (Thomas & Azmitia, 2014). Other interviews of college students confirm that hearing peers talk about their interests in expensive activities or their parents' prestigious jobs, eating meals at expensive off-campus restaurants, or taking long vacations signaled SES (Aries & Seider, 2005; Lehmann, 2009). Clearly, it is possible for both higher- and lower-SES college

students to pick up on signals of others' SES. In certain contexts, however, these comparisons make lower-SES students feel inferior to and excluded by others because of their social class (Aries & Seider, 2005). In order to understand why SES-based comparisons may engender these negative feelings, social class identity must be examined in the context of stigma.

Types of Stigma

Although an identity is permanent from context to context, the stigma that people may feel surrounding their identity is a context-dependent social construction. Stigma is a set of attitudes, beliefs, and stereotypes about a social identity that leads to negative evaluations of or discrimination against people with that identity (Crocker & Major, 1989). People experiencing stigma feel that their identification with a category mars or devalues their *whole* selves (Crocker & Quinn, 2000; Dovidio, Major, & Crocker, 2000; Frable, Platt, & Hoey, 1998; Smart & Wegner, 2000). However, people do not experience stigma all of the time. Stigma is socially constructed in two steps: first by the recognition of a difference based on some mark, and then via a devaluation of the person with the difference (Dovidio et al., 2000). The construction of stigma, then, depends on the interaction between a social identity and a feature in a situation that invokes the recognition of differences (Crocker & Quinn, 2000; Dovidio et al., 2000). Academic situations often feature stereotypes, whose effects have been studied extensively.

When people fear that a situation may prompt them to confirm negative stereotypes about their social identity, they experience stereotype threat – a specific type of stigma that affects their performance on a task. In the study that introduced stereotype threat as a self-fulfilling prophecy, Steele and Aronson (1995) demonstrated that because Black students are typically stereotyped as lower in intellectual ability, when a test was framed as *diagnostic* of intellectual ability, Black students performed more poorly than Whites in fear of confirming that negative stereotype.

When the test was simply framed as one examining cognitive differences, however, Black and White students' performance did not differ. Black students were only affected by the stereotype about them when it was primed in the situation (Steele & Aronson, 1995). Stereotype threat decreases women's math performance through a similar process. Women told that a test typically produced gender differences favoring men performed more poorly than men, and also performed more poorly than women in a control condition who were not primed to consider the stereotype of gender differences in math (Spencer, Steele, & Quinn, 1999). Surprisingly, stereotype threat exists even for those groups not typically stereotyped in society. For example, in one study, White men underperformed on a math test when the stereotype of Asian men's superior performance was activated (Aronson, Lustina, Good, & Keough, 1999). The social construction of stigma is clearly powerful, as situations can activate stereotypes that negatively affect people of a range of social identities – even those not typically stereotyped.

Although most stereotype threat literature focuses on race and gender, some researchers have examined the effects of academic-related stereotypes about social class. Because lower-SES students are stereotyped as intellectually inferior just as Black students are, undergraduate college students perform more poorly on GRE items framed as diagnostic of intelligence compared to higher-SES students or lower-SES students not under stereotype threat (Croizet & Claire, 1998; Spencer & Castano, 2007). The two studies just cited, however, provide conflicting evidence about how stigma surrounding SES identity is constructed. Although Croizet and Claire (1998) found no differences in test performance between those who indicated their SES before taking the test and those who did not, Spencer and Castano's (2007) sample of lower-SES students performed worse than higher-SES students only when SES was made salient – even when the test was framed as non-diagnostic (Spencer & Castano, 2007). This finding suggests

that even when a specific stereotype about underperformance is not primed, those prompted to think about their social class may fear performing poorly. Thus, it is possible that even when low SES students are in situations where stereotypes are not salient, thinking about their social class may still elicit the negative consequences of stigma.

Social identity threat is the experience of stigma that, unlike stereotype threat, relates to social situations in which specific stereotypes are not necessarily present. This threat is induced when people first sense that in a certain (typically heterogeneous) context, their group identity could be devalued, marginalized, or unfavorably compared to other groups. After identifying this possibility, people are hypervigilant to further cues that may signal their devalued identity, whether they signal devaluation overtly (e.g., people saying that one's family is lazy because of their social class status) or ambiguously (e.g., people seeming unsympathetic when one talks about not being able to afford something). However, people do not *want* to feel threatened, so they are also motivated to *resist* noticing any cues of devalued identity. As people with threatened identities are both motivated to detect and ignore evidence of any threat, they experience cognitive and emotional stress, as well as the urge to disidentify with or distance themselves from the setting (Murphy, Steele, & Gross, 2007; Steele et al., 2002). For example, a woman who notices that nearly all students in her math class are male, or a lower SES worker who notices that higher-class workers are systematically promoted to higher-ranked company jobs, might feel the threat of stigma. On a smaller scale, even cues that one may be evaluated on characteristics *potentially* related to one's social identity (e.g., being evaluated on the quality of one's clothes, which could relate to SES) may activate the threat of stigmatization (Steele et al., 2002). Cues that one may be devalued based on social class have been shown to negatively affect

three domains of interest for the current study: self-regulation, self-esteem, and sense of belongingness.

Self-Regulation

Because all of the cognitive, emotional, and behavioral consequences one may experience when coping with the threat of stigma tax executive resources, stigma impedes self-regulatory ability. Self-regulation is the ability to take volitional action – such as resisting temptation, controlling inhibitions, initiating proactive behavior, and overriding instinctive or desirable cognitive, behavioral, or emotional responses in order to attend to a task at hand (Baumeister, Bratslavsky, Muraven, & Tice, 1998). This ability is a limited resource. In the phenomenon known as ego depletion, engaging in one volitional act diminishes one's ability to succeed at another volitional act. The priming of stigma may engender ego depletion through a number of different pathways. Schmader, Johns, and Forbes (2008) propose an "integrated process model" in which stereotype threat impairs working memory (an executive resource necessary for controlled processing), increases the physiological stress response that releases cortisol to the hippocampus (responsible for memory) and the prefrontal cortex (responsible for executive functioning), and increases one's vigilance to social feedback and one's own thoughts or emotions about one's actions in the potentially stigmatizing situation. When people experience these thoughts and emotions, they typically attempt to suppress them, which only further taxes executive resources and makes cues of stigma more accessible.

Empirical evidence provides support for the process model of self-control depletion. Those who become conscious of stigma in a threatening environment experience stress, uncertainty, concerns about self-presentation, intrusive thoughts, and a desire to suppress these thoughts (Inzlicht, McKay, & Aronson, 2006). When under stereotype threat, people spend more

time per test item than those not under stereotype threat (Aronson et al., 1999; Steele & Aronson, 1995) – suggesting that this cognitive energy may necessitate spending more time on a task. Inzlicht and Kang (2010) measured women's self-regulatory ability through performance on a Stroop task – which measures reaction times when controlling instinctive responses (Stroop, 1935) – after completing a math test under stereotype threat. Women given no way to cope with the threat not only displayed poorer self-regulatory ability, but displayed more neural activity signaling anxiety. Women told to reappraise their emotions, however, displayed significantly better self-regulatory ability and anxiety levels similar to those of the men in the sample – as if they had not been under stereotype threat at all. Clearly, people under the threat of stigma experience feelings of preoccupation or anxiety that, unless redirected, significantly impair their cognitive ability.

Stigma unrelated to academics decreases self-regulatory ability just as stereotype threat does. In a study in which Black and White participants talked with a White conversation partner about campus diversity, Black participants who expected to experience stigmatization were later more impaired on a Stroop task that measured self-regulation than were Black participants who anticipated less stigmatization (Richeson, Trawalter, & Shelton, 2005). Concealable stigmas, or those not as clearly visible as racial identity (Crocker & Major, 1989), similarly decrease self-regulatory ability. Women with eating disorders (EDs) asked to role play as those without EDs (or, as the researchers conceptualized, asked to conceal their identity) showed more Stroop interference when naming the colors of ED-related words than when naming the colors of neutral words compared to those *not* told to conceal their stigmatized identities (Smart & Wegner, 1999). This finding demonstrates that self-regulatory impairments can also become evident when

examining people's ability to suppress their thoughts about the stigma-relevance of certain words to, instead, name their colors.

Research on the potentially concealable stigma of SES suggests that experiences of SES-based stigmatization may similarly decrease self-regulatory ability. Johnson et al. (2011) demonstrated that after discussing academic success and future professional outcomes, lower-SES students showed more Stroop interference than did higher-SES students. However, when discussing a stigma-irrelevant topic – preferences about where to live in the future – Stroop interference did not differ based on SES. This finding seems to suggest that discussing academics induces stigma, but discussing social life does not. However, researchers have not sufficiently examined the possibility of social stigmatization for low SES students. Topics unrelated to academics but still indicative of high SES to college students, such as those reflecting tastes or activity preferences (Aries & Seider, 2005; Thomas & Azmitia, 2014), may activate stigma related to being a lower-SES student at an elite college. Thus, it is necessary to further investigate whether SES-based stigma may influence self-regulation in these non-academic domains.

Self-Esteem

While it is generally accepted that stigma decreases self-regulatory ability, researchers have found that stigma can both increase *and* decrease self-esteem based on the type of stigmatized identity people have. Theorists once reasoned that all stigmatized groups should experience lower global self-esteem, because they had internalized others' consistently negative evaluations (Allport, 1979). However, there is a distinction between global self-esteem and state self-esteem, or one's momentary self-esteem subject to fluctuations based on the context of or experiences in a situation (Heatherton & Polivy, 1991). Crocker and Major (1989) argue that,

because stigma is constructed in one social situation, it does not have a permanent effect on global self-esteem. Instead, it can actually buffer the effects of negative feedback on self-esteem. Membership in a stigmatized group may protect self-esteem because members of that group can attribute negative evaluations to others' prejudice rather than to their own personal characteristics (Crocker & Major, 1989). However, not everyone can make this sort of attribution. Those who have internalized a stigma typically displayed towards their group, whose identities are visible, and who feel responsible for their stigma, may be unable to experience the protective effects of stigma on self-esteem (Crocker & Major, 1989).

Because visible stigmas are much more easily attributable to prejudice than invisible ones, experiences of stigma buffer against drops in self-esteem for those with visible stigmas but not for those with concealable stigmas. In a study about forming friendships, Black participants who received negative social evaluations ostensibly from a White evaluator they believed could see them – and consequently, evaluate them based on their race – were more likely to attribute feedback to prejudice and had higher self-esteem than did Black participants who believed they could not be seen by their evaluator (Crocker, Voelkl, Testa, & Major, 1991). The knowledge that the negative evaluation was based on another person's perceptions about their identity, not personal failings of their own, buffered against a drop in self-esteem. Those with concealable stigmas, however, are more inclined to experience self-esteem drops such as those experienced by Black participants who did *not* believe their race was visible.

Research also supports Crocker and Major (1989)'s theory that those with stigmas perceived as controllable may experience decreases in self-esteem. Overweight women who imagined being rejected for a job because their evaluator believed being overweight was a personal choice reported lower state self-esteem than did those whose imagined evaluator

believed being overweight was the cause of disease. Because they felt more personal

responsibility for their "choice" (Nestler & Egloff, 2013), their self-esteem decreased. These

beliefs about personal responsibility may be closely linked to American cultural ideologies.

Overweight women who endorse the Protestant work ethic – or the value of hard work, personal

responsibility, and self-discipline – have lower self-esteem than do those who show less

endorsement of this ethic (Quinn & Crocker, 1999). While overweight participants have visible

stigmas and could easily attribute negative feedback to prejudice in order to protect their self-

esteem, the perceived controllability of their stigma negates its potential self-protective effect.

Participants whose stigmatized identities may be mistaken for "internal, stable, global causes"

(Crocker & Major, 1989, p. 613) either because of their invisibility *or* their controllability, then,

do not receive the same self-protective effects of stigma on self-esteem.

Although no research has investigated the relationship between SES stigma and self-

esteem, these previous findings suggest possible trends. People may pick up on cues of social

class and negatively evaluate those of low SES because of these cues. However, because social

class is not blatantly visible, low SES students could never be entirely sure that people's negative

evaluations are due to prejudice. Due to this attributional ambiguity, low SES students may

display lower self-esteem after stigmatization. People's perceptions of SES as controllable may

have similarly negative effects on self-esteem. Cultural ideologies of social class are closely

related to concepts of individualism and personal responsibility (Ridgeway & Fisk, 2012) and

thus, social class is typically believed to result from individual choices (Cozzarelli, Wilkinson, &

Tagler, 2001). If many in our society consider SES controllable, those of a lower SES may

internalize these conceptions. Just like those overweight women who felt responsible for their

stigmatized identity because they believed it was controllable, those who consider SES

controllable may have lower self-esteem.

Sense of Belonging

Although the effects of stigma on self-esteem are unclear, past research suggests that

stigma tends to decrease sense of belonging for people of all stigmatized identities in all

situations. The need to belong – or, to have a sufficient number of high-quality, stable

interpersonal relationships – is a fundamental human motivation that can be domain-specific

(Baumeister & Leary, 1995). After experiences of stigma, however, people seem to feel they lack

these relationships in the context of that stigmatization. Women displayed this decreased sense of

belonging in computer science in a study that assessed their interest in computer science based

on environmental cues. Researchers found that when women had mock interviews in an office

filled with objects and symbols reflecting stereotypes about computer science (e.g., a Star Trek

poster, technical books, video game boxes), women were less likely to report hypothetical

interest in working for a company than when they had interviews in an office filled with non-

stereotypical items (e.g., a nature poster, general interest books, water bottles; Cheryan, Davies,

Plaut, & Steele, 2009). Viewing items that remind them of the typical computer science

candidate's interests decreased women's sense that their identity, which did not conform with

that typical identity, would be valued. Potential devaluation signaled by numerical

underrepresentation also affects sense of belonging negatively. After watching a video of a

STEM conference depicting unbalanced attendance based on gender (3 male to 1 female),

women reported a lower sense of belonging compared to men as well as to women who watched

a gender-balanced (1 male to 1 female) video (Murphy et al., 2007). As Steele and Aronson

(2002) theorized, cues that one's social identity is underrepresented in a specific environment

can activate stigma, whether those cues are of objects or of people. This threat of stigma, in turn, can decrease people's sense of belonging.

Thinking about revealing one's stigmatized social identity to others can have similar effects on sense of belonging. When primed with the idea of revealing their stigmatized identities to others, people experience a lessened sense of belonging. For example, Black participants tasked with generating a list of eight friends who would be interested in studying computer science had a decreased sense of belonging compared to those who were tasked with generating a list of two friends; White students showed no difference in sense of belonging across conditions (Walton & Cohen, 2007). This finding suggests that the task of generating a large number of friends who would be interested in a White-dominated field may activate the notion of stigma against Black students' ability to succeed in this field, and consequently decrease their belief that they would belong. This pattern holds true for concealable stigmas, too. When asked to imagine themselves acting in ways stereotypical of gay men or lesbians (e.g., participating in a gay pride parade) and stereotypical of heterosexuals, gay and lesbian participants imagined that they would experience more threats to belonging when acting consistently with their stigmatized identity (Bosson, Weaver, & Prewitt-Freilino, 2012). Consistent with this literature, people motivated to conceal their social class identity may experience this same threat to belonging. Past research has demonstrated that making upward social comparisons with higher SES peers (Aries & Seider, 2005; Ostrove & Cole, 2003) and reporting past experiences of class-based discrimination (Langhout, Rosselli, & Feinstein, 2007) predict lower sense of belonging for lower-SES students. While no research has investigated if this lower sense of belonging accumulates over an extensive period of time or occurs after one experience of stigma in the moment, past research suggests that decreases in sense of belonging could occur after just one

experience of class-based stigmatization.

Stigma Consciousness

Although researchers have typically conceptualized the negative effects of stigma as universal, some experience the consequences of stigma more strongly than others. Stigma consciousness refers to a measure of individual differences in the degree to which people anticipate being stigmatized based on their social identity (Pinel, 1999; Pinel, Warner, & Chua, 2005). Even those who do not endorse stigmas about their group or who lack a strong sense of group identity can be high in stigma consciousness, as the construct captures the degree to which people expect *others* to identify them with this group and stigmatize them accordingly. Measures of stigma consciousness assess people's endorsement of the belief that others are prejudiced against their social identity in general. In addition, they assess people's tendency to assume that others are specifically prejudiced against *them*, in interactions, because they possess this social identity (Pinel, 1999). Because stigma consciousness affects the degree to which people expect to be stigmatized, it is logical that stigma consciousness moderates the relationship between stereotype threat and poor performance. For example, only women high in stigma consciousness performed more poorly on a math test when stereotypes about their inferior math ability were primed, as only those women who anticipated evaluation on the basis of their gender felt threatened by the stereotype (Brown & Pinel, 2003). Further research investigating self-regulation, self-esteem, and sense of belonging demonstrates that stigma consciousness determines people's experiences of the consequences of non-academic-related stigma, too.

Stigma consciousness may moderate the significant relationship between stigma and poorer self-regulation (Inzlicht et al., 2006; Inzlicht & Kang, 2010; Johnson et al., 2011; Richeson et al., 2005; Smart & Wegner, 1999). Past research suggests that only those high in

stigma consciousness expend cognitive resources by being hypervigilant to the threat of stigmatization. Women high in stigma consciousness display slower reaction times to name the colors of Stroop task words that signal social identity threat (e.g., "prejudice," "chauvinist"), but not words related to the threat of illness (e.g., "virus," "infection") or neutral words (e.g., "broom," "corkscrew"), compared to their counterparts low in stigma consciousness (Kaiser, Vick, & Major 2006). While it would be logical to assume that a direct experience of stigma might exacerbate this decrease in self-regulatory ability, no studies have directly examined the potential moderating effect of stigma consciousness on self-regulatory ability after stigmatization. However, this research suggests that stigma consciousness primes people to be overly-attuned to cues of stigma, which should deplete their ability to devote executive resources to self-regulation.

While past research suggests that the visibility or controllability of a stigmatized identity determines how stigmatization affects self-esteem, stigma consciousness may also play a role in the effects of stigma. Compared to those low in stigma consciousness, women high in stigma consciousness are more likely to attribute negative evaluations – such as receiving negative personality feedback from a male interviewer or failing to get a job from a male interviewer – to prejudice (Pinel & Paulin, 2005; Wang, Stroebe, & Dovidio, 2012). People high in stigma consciousness may more easily attribute feedback to prejudice because they recognize even ambiguous cues of stigma. When explicitly told a male job interviewer was sexist, both women high and low in stigma consciousness attributed his rejection to prejudice; when his level of sexism was ambiguous, however, only those high in stigma consciousness considered him prejudiced (Wang et al., 2012). Because stigma consciousness predicts people's tendency to attribute prejudice to their stigmatized identity even in ambiguous situations, stigma

consciousness may protect self-esteem. However, other research refutes this claim. For example, Pinel, Warner, and Chua (2005) examined how changes in women's stigma consciousness from high school to college related to self-esteem found that, compared with women whose stigma consciousness rose only slightly, women whose stigma consciousness rose significantly displayed lower self-esteem (Pinel et al., 2005). The nature of the relationship between high stigma consciousness and low self-esteem, then, is not entirely clear.

Stigma consciousness may also influence students' sense of belonging. In a study that linked stigma consciousness to a construct closely resembling sense of belonging, Son and Shelton (2011) found that Asian-American college students with White roommates experienced greater perceived need to change in order to belong *and* greater feelings of anxiety than did Asian-American students with racial minority roommates, but only if they were high in stigma consciousness. This finding suggests that consistently being around dissimilar others both threatens one's sense of belonging and, consequently, is associated with greater anxiety. Prestige of occupation, one facet of SES, has also been demonstrated as a potential threat to belonging for those high in stigma consciousness. Women who worked as university staff who were high in stigma consciousness (related to being a staff worker as opposed to faculty) not only reported more intent to leave, but were significantly more likely to translate this intent, two years later, into actual departure from the university, because of their experience of lower levels of respect (Pinel & Paulin, 2005). This relationship between high stigma consciousness and low sense of belonging may be even stronger for students at an elite college, who may feel consistently threatened.

Due to these clearly-demonstrated differences in self-regulation, self-esteem, and sense of belonging based on stigma consciousness, is necessary to examine people's class-based stigma

consciousness. While Johnson et al. (2011) did purport to assess stigma consciousness as it related to class through measuring students' sensitivity to discrepancies between their SES and their peers' SES, or their sense of SES-based identity discrepancy (SSID), the SSID does not effectively measure stigma consciousness. The measure focuses on only one small component of stigma – how alike or dissimilar people feel from their peers – and does not assess the degree to which people are impacted by recognizing this discrepancy or expect to be judged in their everyday lives based on this discrepancy. Clearly, not everyone experiences a stigmatized identity to the same extent. To understand the nuances in how low SES students may be affected by their social class status, it is essential to devise a more comprehensive measure how conscious people are of class-based stigma.

Overview of the Present Study

Although there is evidence suggesting that class-based stigma impairs academic performance and spills over to impair self-regulation and feelings of academic fit, little research has investigated the effects of class-based stigma in non-academic domains directly after low SES students experience the threat of stigmatization. In addition, no research has sufficiently examined class-based stigma consciousness.

The aim of the current study was to examine how the threat of class-based stigma in a social situation affected low SES students' self-regulation, self-esteem, and sense of belonging, and whether class-based stigma consciousness moderated these relationships. To test this phenomenon, participants deemed "lower SES" based on a combination of objective and subjective SES were invited to come into the lab for a study on cognition. During a "break" in that study, participants were asked to help create stimulus videos, in which they would answer basic personal questions about themselves (e.g., about activities they did on campus), for a future

study examining how people make impressions of others in social situations. In order to get acclimated to the task, they were instructed to watch what the experimenters deemed a "good example" video from a past participant. Participants were randomly assigned to either a stigma-relevant or stigma-irrelevant condition. In the stigma-relevant condition, an actor/actress pretending to be a prior participant discussed activities, characteristics, and experiences that signaled high SES, which was intended to prompt upward social comparison for low SES students. In the stigma-irrelevant condition, the actor/actress discussed activities, characteristics, and experiences that rendered his/her SES ambiguous.

Consistent with previous research (Cheryan et al., 2009; Frable et al., 1998; Murphy et al., 2007), I anticipated that only those lower-SES participants randomly assigned to the stigma-relevant condition would feel the threat of SES-based stigma, as they would be attuned to the cues of high SES conveyed in the videos. Participants in the ambiguous SES condition would not be shown these stigma-inducing cues, and thus, would not imagine being evaluated in the context of their SES.

Furthermore, consistent with studies in which participants created audio or video recordings that they were told would be evaluated in another study (Johnson et al., 2011) or studies that used the threat of evaluation from an "other" who was not actually present (Bosson et al., 2012; Crocker et al., 1991; Nester & Egloff, 2013), I predicted that the task of recording one's own speech to later be evaluated by other students would induce the threat of class-based stigmatization. However, because only people high in stigma consciousness anticipate being evaluated based on their stigmatized identity (Pinel, 1999), I predicted that stigma induction would affect only participants high in class-based stigma consciousness.

Studies demonstrate that experiences of social stigma related to gender, race, and mental illness (Inzlicht & Kang, 2010; Richeson et al., 2005; Smart & Wegner, 1999), as well as experiences of academic stigma related to SES (Johnson et al., 2011), lessen self-regulatory ability. Consistent with this literature, I predicted that, compared with participants low in stigma consciousness or those in the ambiguous SES video condition, lower-SES individuals primed with a video that prompted upward social comparison and primed the threat of SES-based stigmatization, would show poorer self-regulatory ability as measured by reaction times on a modified Stroop task (Stroop, 1935), such that they would less quickly name the colors of stigma-relevant words compared with participants not primed to experience stigma. If participants were more attuned to the meanings of words signaling SES because of their consciousness of the stigma surrounding their SES, they should show greater response latencies when naming colors of those words.

Researchers argue that membership in a stigmatized group may boost state self-esteem if negative evaluations can be attributed to prejudice (Crocker & Major, 1989), and that high stigma consciousness heightens people's ability to attribute evaluations to prejudice (Pinel et al., 2005). However, participants were told that their videos would be evaluated in a future study. Because the evaluative criteria were vague, and they did not know who would be evaluating them, they could not decisively *know* that any future evaluations would be directly related to stigma against lower-SES individuals. Rather, they could imagine that the participants in the future study would base their (potentially negative) evaluations on personal characteristics – for example, someone rating them as "uncultured" rather than understanding they did not have enough money to travel. Thus, I predicted that lower-SES participants in the stigma-relevant condition would display lower state self-esteem – manifested as feeling more negatively about

their performance ability (e.g., intelligence) and about how others perceive them (e.g., looking foolish or seeming inferior to others) – as they would fear that the evaluation would be personal.

Similarly, I hypothesized that high stigma consciousness would moderate the relationship between condition and sense of belonging, such that participants high in stigma consciousness who were primed with the stigma-relevant video would display lower sense of belonging than those high in stigma consciousness primed with the non-stigma-relevant video, and than those low in stigma consciousness who watched either video. Because ample sociological research on lower SES students links lower sense of belonging to the tendency to make upward social comparisons (Aries & Seider, 2005; Johnson et al., 2011; Ostrove, 2003, 2007), I hypothesized that lower SES students would feel less sense of belonging when comparing themselves to a student who seemed richer. While participants in these studies reported *consistently* making upward social comparisons, the literature also shows that *one-time* exposure to cues of underrepresentation (Cheryan et al., 2009; Murphy et al., 2007) also lessen people's sense of belonging. Thus, I predicted that watching the stigma-relevant video, which would prompt upward social comparison only for a short period of time, would still engender lower sense of belonging. However, I hypothesized that this pattern would hold only for lower-SES participants high in class-based stigma consciousness, who typically anticipate feeling stigmatized based on their social class.

Pilot Test Method

Participants

An initial pilot study was conducted to determine what hobbies, activities, and life experiences best signal high SES and ambiguous SES identity to be used as discussion topics in the stigma-relevant and non-stigma-relevant videos. Fifty Hamilton College students (11 men, 39

women) enrolled in an upper-level social psychology class or who were acquaintances of the researcher participated in the study.

Materials and Procedure

Participants first read instructions that clearly defined SES as a combination of income, occupation, and education that affords certain amounts of economic resources, social resources, and prestige, and were informed that certain hobbies, activities, and life experiences could be more indicative of SES than others. Participants were then instructed to rate hobbies, activities, and life experiences particularly relevant to Hamilton College students on a ladder that represented SES.

Potential signals of high SES were determined through reading ethnographic studies of lower-income students' adjustments to college or graduate school. In those studies, participants cited becoming aware of their social class after hearing that their peers did not have to work (Lehmann, 2009; Martin, 2015), recognizing that higher class peers were better prepared for college because of their elite private high school or boarding school experiences (Lehmann, 2009), hearing about people being able to take long vacations (Aries & Seider, 2005), hearing about people's parents having prestigious jobs or having gone to the same colleges/universities as their children do now (Lehmann, 2009), hearing about people getting job opportunities through connections (Lehmann, 2009), hearing about people going out to expensive meals, and being able to afford to host or go to more parties or be in fraternities and sororities (Aries & Seider, 2005; Lehmann, 2009). All of these general categories were then specified with references relevant to the participants' college (e.g., specific extracurricular activities and restaurants around the area).

Participants rated 34 descriptions of a fictional Hamilton student's on-campus activities (e.g., "Plays squash", "Works as a departmental assistant"), hobbies and interests (e.g., "With friends, often goes out to eat at upscale restaurants", "Enjoys going to the movies"), family characteristics (e.g., "Mother is a nurse", "Had a sibling or parent go to Hamilton"), summer experiences (e.g., "Last summer, interned at a law firm", "Vacations in Europe over the summer"), and future plans (e.g., "Gets entry-level job after graduation", "Travels after graduation") on a scale representing the SES ladder that ranged from 1 ("lowest SES") to 7 ("highest SES"). Participants also rated how clearly each description signaled SES on a scale from 1 ("not at all a clear signal of SES") to 7 ("definitely a clear signal of SES").

Results

A priori, I decided that high SES cues would be those rated above 5 on the SES ladder scale. Of the 34 items, 11 had a mean higher than 5. The 11 items determined to signal high SES were having gone on a luxury safari in Kenya last summer ($M = 6.62$, $SD = 1.05$); enjoying going out to eat at upscale restaurants ($M = 6.22$, $SD = 1.02$); having gone to a boarding school ($M = 6.12$, $SD = 1.02$); having one's mother be a cardiac surgeon ($M = 6.12$, $SD = 1.04$); taking time to travel after graduation ($M = 6.04$, $SD = .95$); having played competitive squash in high school ($M = 5.80$, $SD = .90$); having interned at a prestigious law firm last summer ($M = 5.78$, $SD = 1.13$); getting a summer internship through a family friend ($M = 5.56$, $SD = .86$); having one's mother be a pediatrician ($M = 5.52$, $SD = .95$); having had sibling, parent, or grandparent go to Hamilton ($M = 5.52$, $SD = 1.02$); competing in downhill skiing ($M = 5.30$, $SD = 1.00$); feeling that one's high school prepared one well for Hamilton ($M = 5.24$, $SD = .72$); being in a fraternity or sorority ($M = 5.24$, $SD = 1.22$); going straight to graduate school after college ($M = $

5.20, $SD = 1.07$); not having an on-campus job ($M = 5.14$, $SD = 1.21$); and going downtown to bars on weekends ($M = 5.08$, $SD = .99$).

A priori, I also decided that ambiguous cues would be those rated between 1 and 3 on the clarity of representing SES scale. The 11 items that fit this criterion were working at Phonathon, an office that calls alumni asking for donations ($M = 2.96$, $SD = 1.68$), having visited extended family over the summer ($M = 2.94$, $SD = 1.69$), working as a departmental assistant ($M = 2.92$, $SD = 1.47$), working as a Career Center advisor ($M = 2.88$, $SD = 1.48$), enjoying going to the movies with friends on the weekend ($M = 2.84$, $SD = 1.65$), staying in on weekends doing homework ($M = 2.56$, $SD = 1.44$), playing club sports ($M = 2.49$, $SD = 1.57$), enjoying going to all-campus parties on the weekend ($M = 2.45$, $SD = 1.63$), being in an a cappella group ($M = 2.37$, $SD = 1.42$), and being a tour guide ($M = 2.39$, $SD = 1.48$).

Method

Participants

Sixty-nine Hamilton College students participated in the current study for extra credit in a psychology course or the chance to be entered into two $45 lotteries. Three participants were excluded from the final sample due to suspicion, and 3 were excluded due to high error rates on the Stroop task. The final sample was comprised of 63 students (11 men, 51 women, 1 transgender). Participants were predominantly White (44.4%), 31.7% Asian/Pacific Islander, 12.7% Hispanic/Latino(a), 7.9% who reported "Other," and 3.2% Black. Participants' family income ranged from less than $20,000 to $80,000-$100,000 (the most common response). Participants' subjective SES scores ($M = 5.23$, $SD = 0.96$) ranged from the midpoint to highest point on the 7-point scale.

Materials

  Objective socioeconomic status (SES). As a measure of objective SES, participants selected the income range that most appropriately described their family income from 8 categories: (1) less than $20,000, (2) $20,001 to $40,000, (3) $40,001 to $60,000, (4) $60,001 to $80,000, (5) $80,001 to $100,000, (6) $100,001 to $150,000, (7) more than $150,000, or (8) I don't know. Participants also reported both parents' highest levels of education, selecting from 6 categories: (1) Less than high school, (2) High school or GED, (3) Some college, (4) Associate degree, (5) 4 year degree (B.A. or B.S.), (5) Professional degree (e.g., M.A., M.S.), (6) Doctoral-level degree (e.g., Ph.D, M.D.). Because of difficulty in incorporating the education question to calculate SES groups (eligible and ineligible), it was ultimately not used to determine participants' objective SES.

  Sensitivity to SES-based identity discrepancy (SSID). Subjective SES was measured using the *Sensitivity to SES-based Identity Discrepancies (SSID) Scale* created by Johnson et al. (2011), adapted for Hamilton students. The scale was comprised of statements about the degree to which respondents felt similar to other Hamilton students in general (e.g., "I am similar to the typical Hamilton student"), based on life opportunities (e.g., "Most students at Hamilton have had more opportunities (for success) than I have"), and explicitly based on social class background (e.g., "Most students at Hamilton come from a more privileged background than I do"). Participants rated the extent to which they agreed with the statements on a 1 (strongly disagree) to 7 (strongly agree) scale, with higher overall scores indicating greater sensitivity to SES-based identity discrepancy (Cronbach's α = .90. The full adapted SSID Scale is presented in Appendix A.

Class-based stigma consciousness. Class-based stigma consciousness, or participants'

awareness of stigma related to SES in their everyday lives, was measured using a 10-item scale

adapted from the *Stigma Consciousness Questionnaire for Women* (Pinel, 1999). Because the

terms SES and social class were used in each item, both were clearly defined in the scale

instructions. SES was defined as a total measure of a family's social and economic status relative

to others in society, measured by combining family income, occupation, and education, that

affords people various material resources (e.g., money to spend on clothes, food, entertainment,

travel), social resources (e.g., connections with people considered powerful or knowledgeable),

and prestige (e.g., others considerations of people as important people), whereas social class was

defined as groups in society whose different SES backgrounds lead them to have different social

and cultural experiences. Items measured the degree to which participants endorsed SES-based

stigma as personally relevant (e.g., "Stereotypes about social class have not affected me

personally"), believed SES-based stigma affected their interactions with others (e.g., "My SES

does not influence how other people act with me"), were concerned about being the subject of

SES-based stigma (e.g., "I never worry that my behaviors will be viewed as stereotypical of my

SES"), and held negative beliefs about how higher SES people view lower SES people in general

(e.g., "Most people of higher SES have a lot more negative thoughts about people of lower SES

than they actually express"). Participants indicated the degree to which they agreed with these

statements on a 7-point Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree).

Higher scores on the measure indicated higher levels of stigma consciousness (Cronbach's α =

.84). The full *Class-Based Stigma Consciousness Scale* is presented in Appendix B.

SES-based stigma video manipulation. Two videos each were made for the stigma-

relevant and non-stigma relevant condition, so participants watched a video of a same-gender

"previous participant." In each video, a college-aged actor or actress from Hamilton pretended to be a past participant and answered questions about his/her on-campus activities, high school experiences, post-graduation aspirations, summer activities, and typical activities with friends. All of the answers were taken from the pilot study. In the stigma-relevant videos, an actor and an actress gave answers that signaled high SES as determined by an SES ladder ranking of above 5 on the pilot study; in the stigma-irrelevant videos, an actor and actress gave answers that signaled ambiguous SES as determined by a rating of 1, 2, or 3 on the ambiguity scale. For example, the actor/actress in the high SES cue video stated that he/she attended boarding school whose demographic makeup was very similar to Hamilton, and last summer he/she went on a luxury safari in Kenya. In contrast, the actor/actress in the ambiguous SES cue video stated that he/she attended a public high school a bit more diverse than Hamilton, and last summer he/she took a road trip to visit family. The full script of questions and answers is presented in Appendix C.

  Self-regulation and attention to stigma. Both self-regulatory ability and attention to SES stigma were assessed using a modified Stroop color-naming task (Stroop, 1935), a widely used measurement of inhibitory control. General self-regulatory ability on the Stroop is typically measured by assessing differences in response latencies for naming the font colors of color words (red, green, blue, and yellow) between congruent color trials and incongruent color trials. In incongruent color trials, the font color of a word differs from the semantic meaning of the word (e.g., the word "red" printed in green font).

  In the current version of the Stroop, participants were asked to push a button to identify the color in which SES-related words and control words were presented. Differences in length of SES words ("afford," "class," "elite," "income," "money," "poor," "power," "privilege," "rich," "splurge," "status," and "wealth") and control words ("basket," "book," "chair," "door,"

"folder," "notebook," "paper," "pen," "pencil," "table," "tissues," "window") as well as

differences in their frequency in the English language were equated using the data from the

English Lexicon Project (Balota et al. 2007) database. The length of the SES words (M = 5.67

letters, SD = 1.37) and control words (M = 5.42 letters, SD = 1.38) did not differ significantly,

$t(22)$ = 0.46, p = .660. In addition, the frequency of the SES words' use in the English language

(M = 58659.80, SD = 70538.04) and the control words' use in the English language (M =

39632.08, SD = 53487.47) did not differ significantly, $t(22)$ = 0.75, p = .464.

The order of trials was counterbalanced. Participants were first presented with a screen of

instructions, informing them that they would see a series of words displayed in different colors

and to indicate the color of the word by pressing the corresponding color button on a button box.

They were presented with an example of the word YELLOW in a red font and told that they

would press the red button when they saw it. They completed four practice trials (green, red, cat,

banana), were invited to ask the experimenter if they had any final questions, and then began the

full Stroop task. Participants named the colors of 72 words in total, 18 each from the color

congruent, color incongruent, SES-related words, and control words.

Sense of belongingness. Sense of belongingness was measured using the *Psychological*

Sense of School Membership (PSSM) Scale (Goodenow, 1993), adapted for the present study

such that references to "school" were replaced with "college," and references to "teachers" were

replaced with "professors." The adapted *PSSM Scale* consisted of 18 items, 5 of which were

reverse-worded. Participants responded to questions about their general feelings of

belongingness and acceptance at college (e.g., "I feel like a real part of Hamilton"), of being

respected by professors (e.g., "Professors here are not interested in people like me ") and general

others on campus (e.g., "People here notice when I'm good at something"), about their ability to

be themselves (e.g., "I can really be myself at this school"), inclusion in activities (e.g., "I am included in lots of activities at Hamilton"), and desire to be elsewhere (e.g., "I wish I were at a different college") on a 7-point Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree). Higher scores on the scale indicated higher levels of belongingness (Cronbach's α = .92). The full adapted *PSSM Scale* is presented in Appendix D.

   State self-esteem. State self-esteem, which reflects fluctuations in trait self-esteem levels due to everyday events, was measured using the performance and social subscales of the *State Self-Esteem Scale* (Heatherton & Polivy, 1991). Participants rated the degree to which they agreed with statements about performance (e.g., "I feel confident about my abilities") and social life (e.g., "I feel that others respect and admire me") on a scale ranging from 1 (not at all) to 5 (extremely). Each subscale had 7 items, rendering the full scale 14 items in total, with higher scores on the measure indicating higher state self-esteem (Cronbach's α = .90). The full *State Self-Esteem Scale* used is presented in Appendix E.

   Manipulation check. Manipulation checks, testing participants' ratings of the SES of the actor/actress in the videos, were added for the final 36 participants. In the first manipulation check, completed by 14 participants, participants rated if they thought the "student" depicted in the video came from an SES background: "above average relative to other Hamilton students," "average relative to other Hamilton students," or "below average relative to other Hamilton students." The second manipulation check, completed by 22 participants, broadened the question to ask participants if they thought the student depicted in the video came from a high SES background, with answer options of "yes," "no," and "unsure."

Procedure

Before coming into the lab, participants completed a pretest survey with the *Class-Based Stigma Consciousness Scale*, the objective SES measure, the *SSID*, and filler measures related to demographics (a question about what geographic region they were from and how much they liked living there) and self-efficacy (the *General Self Efficacy Scale*; Schwarzer & Jerusalem, 1995) in order to avoid arousing suspicion about the role of social class in the study. In order to recruit only lower SES participants for the in-lab portion of the study, participants' scores on the objective and subjective SES measures were analyzed. Only those participants who reported family incomes lower than $80,000-$100,000 and who reported a subjective SES score above the median (indicating lower-than-neutral subjective SES) were invited to complete the lab portion.

When participants came into the lab, they were told they would be completing a study on serial cognition, testing how cognitive performance is affected by a working memory task "warm up" and if that effect works better with a delay. Participants were also informed that because the serial cognition task required a delay, they would spend that time creating stimulus materials for a future study investigating how Hamilton students form impressions of one another.

Participants first completed a filler working memory task to bolster the serial cognition cover story. This task was a version of the single N-Back task (Jaeggi et al., 2010) with letter stimuli (as described in Ragland et al., 2002). Participants attended to a sequence of letters shown one-by-one, with a new letter appearing every 2.5 seconds, and pressed the "a" key when the previous letter matched the letter that appeared either 1 letter prior in the sequence (if they were told to complete a 1-back) or 2 letters prior in the sequence (if they were told to complete a 2-back). Participants completed 4 sets of 1-back and 2-back trials, each of which featured 10 letters.

After completing the filler task, participants were informed that they would be creating stimulus videos for the second study, and were again told that the study would assess how Hamilton students made impressions of other students in social situations. Participants were told that their through their videos, in which they would answer basic personal questions, they would be evaluated on dimensions such as how well they seemed to fit at Hamilton and whether the viewer would like to get to know them better. Then, participants were told that in order to acclimate to the task, they would watch a "good example video from a prior participant." This information about their video being watched was intended to emphasize the prospect of social evaluation, which would exacerbate the threat of stigma primed by the stigma-relevant (high SES cue) "example video" – or not primed by the non-stigma-relevant (ambiguous SES cue) video. Participants were randomly assigned to one of these two conditions. After watching the video, participants were shown a screen of the same questions answered in the video (e.g., questions about their on-campus activities, high school experiences, post-graduation aspirations, summer activities, and typical activities with friends), told to jot some bullet points down for each question, and film their own video in the style of the "prior participant's."

After participants alerted the experimenter that they were done filming, the experimenter told them that it was time to complete the second task in the serial cognition study. This task was the Stroop color-naming task, measuring attention to stigma-relevant words. After participants alerted the experimenter that they had finished the Stroop, the experimenter told them that they needed to complete a few more questionnaires assessing other individual differences potentially associated with cognitive performance. The participants then completed the *PSSM Scale* (Goodenow, 1993) and the *State Self-Esteem Scale* (Heatherton & Polivy, 1991), as well as the brief manipulation check, before being fully debriefed.

Results

Overview of Analyses

See Table 1 for descriptive statistics and correlations among variables. Before determining the internal reliability of the scales, the 7 reverse-worded items on the *Class-Based Stigma Consciousness Scale*, 5 on the *PSSM* scale, and 5 on the State Self-Esteem Scale, were reverse-coded, such that higher scores on the items corresponded to higher scores on each of the constructs. Cronbach's alpha was computed for each of the scales; values are presented along the diagonal in Table 1. Three participants who had Stroop task error rates greater than 20% were discarded from the final sample, leaving a sample size of 63.

Stigma consciousness was centered around its mean prior to entry into the regression equations predicting self-regulation, self-esteem, and sense of belonging. Latency of naming Stroop control words was also centered around its mean before it was entered into the regression equation predicting self-regulation as a covariate (Cohen, Cohen, West, & Aiken, 2003).

Table 1

Descriptive Statistics, Cronbach's Alphas, and Correlations for All Variables

	1	2	3	4	*M*	*SD*
1. Stigma Consciousness	.84	-.33*	-.37*	.24	4.27	0.94
2. State self-esteem	--	.90	.44*	-.12	3.50	0.69
3. Belonging	--	--	.92	-.05	5.01	0.99
4. Self-Regulatory Ability	--	--	--	--	517.98	88.22

Note. Stigma Consciousness and Belonging were measured on 1-7 scales; State self-esteem was measured on a 1-5 scale. Self-regulatory ability was measured as Stroop latencies for SES words in ms., controlling for control words. Cronbach's alphas are presented along the diagonal.
*p < .01.

Manipulation Checks

The two manipulation checks were combined to obtain more power. For the combined manipulation check, the "above average relative to other Hamilton students" answer from the first manipulation check and the "yes" answer from the second were coded as "high." The "average relative to other Hamilton students" or "below average relative to other Hamilton students" answers from the first manipulation check, and the "no" and "unsure" answers from the second, were coded as "ambiguous." A chi-square test of independence was performed to examine the relationship between condition and SES rating. The relationship between these variables was not significant, χ^2 (1, $N = 36$) = .11, $p = .738$, suggesting that, contrary to expectations, participants did not explicitly interpret the SES of the actor/actress in the stigma-relevant video as high or the SES of the actor/actress in the stigma-irrelevant video as ambiguous.

Self-Regulation

I conducted a multiple regression predicting latency of naming the color of SES-related Stroop words as a function of condition, stigma consciousness, and their interaction. Latency of naming control Stroop words (in *ms*), was entered into the regression as a covariate, in order to control for general differences in reaction time. Stigma consciousness was centered around its mean prior to entry into the regression equation. There was a significant main effect for condition, $t(61) = -2.50$, $p = .015$, $\beta = -.15$. However, contrary to my hypothesis, participants in the ambiguous SES prime condition took significantly longer to identify the color of SES-related words ($M = 522.90$ ms., $SD = 90.40$ ms.) than did participants in the high SES prime condition ($M = 512.57$ ms., $SD = 86.98$ ms.). However, because the condition x stigma consciousness interaction trended towards significance, $t(61) = 1.57$, $p = .122$, $\beta = .09$, I examined the

relationship between stigma consciousness and Stroop reaction time separately for people in the

ambiguous and high SES cue conditions. As illustrated in Figure 1, in the ambiguous SES

condition, stigma consciousness was not a significant predictor of Stroop interference, $t(62) =$

-0.37, $p = .716$, $\beta = -.03$. However, in the high SES condition, stigma consciousness was a

marginally significant predictor of Stroop interference, $t(62) = 1.91$, $p = .061$, $\beta = .16$, such that,

as predicted, high stigma consciousness predicted slower reaction times to naming the color of
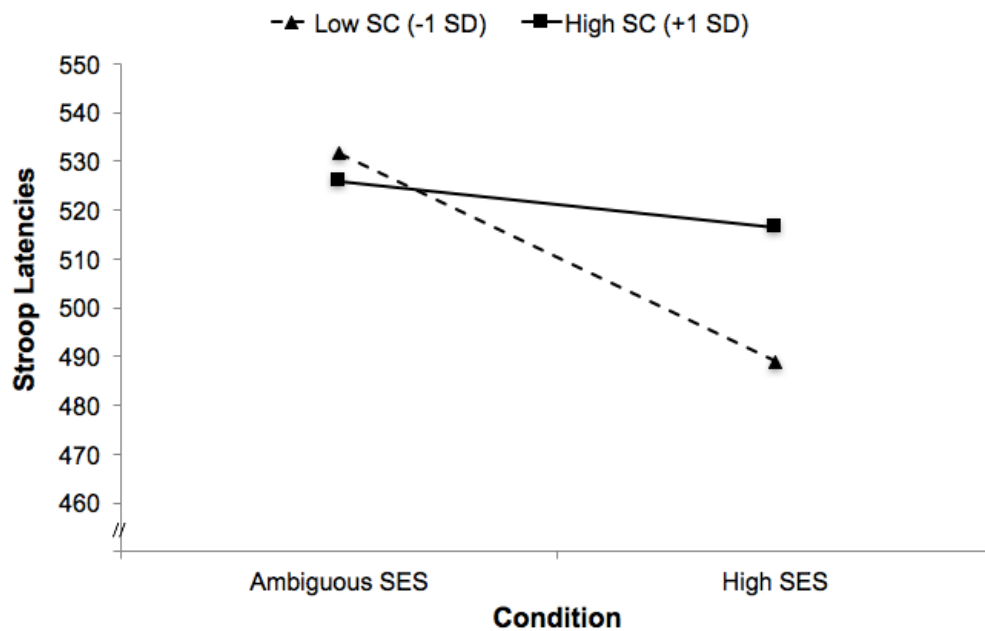
SES-related Stroop words.

Figure 1. Stroop latency for SES-related words as a function of condition and stigma
consciousness level (plotted at ±1 SD from the mean).

State Self-Esteem

I conducted a multiple regression on state self-esteem scores as a function of condition,

stigma consciousness, and their interaction. Stigma consciousness was centered around its mean

prior to entry into the regression equation. There was a significant main effect for stigma consciousness, $t(62) = -2.62$, $p = .011$, $\beta = -.33$, such that higher levels of stigma consciousness predicted lower levels of state self-esteem. No main effect for condition was found, $t(62) = 0.47$, $p = .643$, $\beta = .06$. Contrary to my hypothesis, there was also no significant condition x stigma consciousness interaction, $t(62) = -0.44$, $p = .66$, $\beta = -.06$.

Sense of Belonging

Finally, I conducted a multiple regression predicting sense of belonging from condition, stigma consciousness, and their interaction. Stigma consciousness was centered around its mean prior to entry into the regression equation. Again, there was a significant main effect for stigma consciousness, $t(62) = -2.92$, $p = .005$, $\beta = -.36$, such that higher levels of stigma consciousness predicted lower levels of sense of belonging. There was no main effect for condition, $t(62) = -0.17$, $p = .860$, $\beta = -.02$. Contrary to prediction, there was no significant condition x stigma consciousness interaction, $t(62) = -0.42$, $p = .680$, $\beta = -.05$.

Discussion

Consistent with my hypothesis, I found a marginally significant condition x stigma consciousness interaction for self-regulation. Among participants low in stigma consciousness, reaction times were similar regardless of whether they watched the ambiguous SES or high SES cue video. Among participants high in stigma consciousness, however, watching the high SES cue video seemed to predict slower reaction times compared to watching the ambiguous SES video. However, contrary to my hypothesis, I found no significant condition x stigma consciousness interaction predicting lower self-esteem or sense of belonging. For those two variables, I found only a main effect for stigma consciousness, such that participants high in stigma consciousness had lower self-esteem and lower sense of belonging than did those low in

stigma consciousness, regardless of whether they watched the stigma-relevant or stigma-irrelevant video. Importantly, the results of my manipulation check indicated that most participants believed both videos depicted a student high in SES, suggesting that my manipulation was not interpreted as intended.

The condition x stigma consciousness interaction predicting lower self-regulatory ability is consistent with past research suggesting that people who are prone to anticipating stigmatization and who are threatened with stigmatization display decreased cognitive functioning. Interestingly, most past research demonstrates that stigmatization decreases people's self-regulatory ability regardless of their stigma consciousness levels. Under academic-related stereotype threat, both women and low SES students display increased Stroop interference (Inzlicht & Kang, 2010; Johnson et al., 2011). This same pattern has been demonstrated in situations of non-academic stigma. For example, after the threat of stigmatization from a White student in a conversation about a racial issue, Black participants demonstrated increased Stroop interference (Richeson et al., 2005). The condition x stigma consciousness interaction in the present study suggests that, like those participants in the Richeson et al. study, low SES students are susceptible to cognitive impairment after a social situation in which they feel the threat of stigmatization. However, this interaction also suggests that only those students high in stigma consciousness are susceptible. The relationship between stigma consciousness and self-regulatory ability has not been thoroughly examined. The findings of the current study, though, align with past research showing that compared to women low in stigma consciousness, women high in stigma consciousness demonstrate more Stroop interference when categorizing stigma-relevant words than when categorizing control words, because they are more attuned to the meaning of the stigma-relevant word (Kaiser, Vick, & Major, 2006).

Interestingly, those participants high in stigma consciousness showed similar mean reaction times in both conditions – but those low in stigma consciousness seemed to show faster reaction times after watching the stigma-relevant video. The video was intended to prime participants to engage in upward social comparison, thinking about their SES in relation to the "student" in the video. These results suggest that perhaps the stigma-relevant video did prime participants low in stigma consciousness to prepare to see the SES-relevant words in the Stroop task. Because they were low in stigma consciousness and thus not anticipating class-based stigmatization (Pinel, 1999), the prime prepared them to more quickly name the colors of SES-relevant words, perhaps because they were able to read them quickly and then focus on the color, as opposed to being distracted by the word. Conversely, people high in stigma consciousness had stable reaction times regardless of what video they watched; their reaction times were actually slower in the stigma-relevant condition compared to those low in stigma consciousness. Because those high in stigma consciousness anticipate stigmatization constantly (Pinel, 1999), the stigma-relevant video was likely not a cognitive aid. Rather, it may have exacerbated their stigma consciousness and increased their fear of stigmatization. Thus, those high in stigma consciousness were slower to name the colors of SES-relevant words because those words were relevant to the stigmatization they feared. Had my test been more powerful, this trend may have resulted in a statistically significant interaction.

Although my failed manipulation check could discredit the claim that condition had an effect on self-regulation, its effect may have been subtler than the manipulation check could detect. While the stigma-relevant video was intended to display a high SES "student," and the stigma-irrelevant video was intended to feature one whose SES was ambiguous, participants were almost perfectly divided in their categorizations; for example, exactly half of those in the

high SES condition deemed the student of a high SES background, and exactly half deemed

him/her of an ambiguous SES background. It is possible that the videos failed in communicating

cues of SES as I intended. However, the main effect for condition and nearly-significant

condition x stigma consciousness interaction suggest that differences in condition surpassed

chance – and, perhaps, were only picked up on implicitly. Stroop task reaction times were

measured in milliseconds, whereas the manipulation check forced participants to categorize the

video actor/actress into crude categories of high or low SES. Participants may have picked up on

subtle cues of high SES that were more strongly indicated in the stigma-relevant video in the

reaction time task they completed soon after watching the video, but could not articulate them

when forced to make an explicit judgment about the student's SES at the very end of the study.

Perhaps people were concerned about making an improper judgment based on what they *may*

have picked up on implicitly. Thus, some may have assumed that because the student was a

Hamilton student, he/she was probably of a high SES background; others may have played it safe

and chosen the least extreme answer available. The presentation of a low SES student more

similar to low SES participants might have led to *increases* in self-regulatory ability, self-esteem,

and sense of belonging, clarifying the impact of stigma that may have been obscured in my

study.

  The lack of a condition x stigma consciousness interaction for either self-esteem or sense

of belonging might be explained, then, because those constructs were measured explicitly. The

literature on both self-esteem and sense of belonging suggests that the potential for

stigmatization should predict decreases in both. Both overweight women and Black students who

could not attribute negative feedback to prejudice displayed lower self-esteem after

stigmatization (Crocker et al., 1991; Nestler & Egloff, 2013; Quinn & Crocker, 1999). The

participants in my study, similarly, could not be sure that the "students" evaluating their videos would be prejudiced against their group or judge them based on some internal cause. Thus, it is logical to assume they would display lower self-esteem. Past research on sense of belonging suggests a similar effect. For example, women who watched a video depicting a large, gender-imbalanced STEM conference felt lower sense of belonging than did women who watched a video depicting the same conference with a more equal gender representation (Murphy et al., 2007). Because ample sociological research suggests that making upward social comparisons about the topics the actor/actress in the stigma-relevant video discussed (e.g., going out to meals often, taking expensive vacations) also decreases sense of belonging (Aries & Seider, 2005), I assumed the stigma prime would do the same. However, both self-esteem and sense of belonging in the current study were measured through self-report scales that required explicit answers much like those required on the manipulation check, which did not register any effects of condition. A short manipulation video would likely only affect the relatively stable constructs of self-esteem or sense of belonging if it primed stigma very explicitly. Because my video manipulation did not, it is logical that my findings were inconsistent with past research.

The main effect of stigma consciousness on self-esteem, however, does provide valuable information about how stigma consciousness may add to Crocker and Major (1989)'s theory about the self-protective properties of stigma. Previous research demonstrates that stigma consciousness is associated with a propensity to attribute feedback to prejudice; for example, women high in stigma consciousness are more likely than those low in stigma consciousness to attribute both ambiguous and negative evaluations to prejudice (Pinel & Paulin, 2005; Wang et al., 2012). If stigma consciousness is associated with prejudice attributions, and attributing negative feedback to discrimination can protect against drops in self-esteem (Crocker & Major,

1989), higher levels of stigma consciousness should predict higher levels of self-esteem. The finding that high stigma consciousness predicted *lower* self-esteem, then, is inconsistent with this finding. However, it *is* consistent with other literature showing that female college students high in stigma consciousness have lower self-esteem than those low in stigma consciousness (Pinel et al., 2005). Clearly, there is a difference in the experience of receiving negative feedback attributed to prejudice *one* time and anticipating that negative feedback *all* of the time. Perhaps, for those high in stigma consciousness, the psychological weight of constantly anticipating and perceiving stigmatization dulls the propensity for prejudice attribution to protect self-esteem. Instead, people high in stigma consciousness may begin to internalize some of the stigma they consistently face, which Crocker and Major (1989) theorize will decrease self-esteem. Although I did not manipulate stigma consciousness in the present study and thus cannot make causal claims about the effect of stigma consciousness on self-esteem, it certainly seems that the two are negatively associated.

Although the relationship between stigma consciousness and self-esteem is debated, the relationship between stigma consciousness and sense of belonging is generally regarded as consistently negative. The main effect of stigma consciousness on sense of belonging in the current study supports this finding. Past research found that only those Asian-American students high in race-based stigma consciousness felt a decreased sense of belonging at college, and that only those female college staff high in stigma consciousness about being a staff worker felt a decreased sense of belonging in their college workplace (Pinel & Paulin, 2005; Son & Shelton, 2011). Although upward social comparison through watching the high SES cue video did not decrease belonging as anticipated in the current study, high stigma consciousness did predict lower sense of belonging for all students, as in these previous studies. Again, stigma

consciousness was not manipulated in this study, so no causal claims about its relationship to

sense of belonging can be made. However, consistent with past literature, it is clearly associated

with lower sense of belonging.

Limitations and Future Research

Although these findings add valuable information to the sparse literature on class-based

stigma, the present study had some limitations that future research should address. First, the

evaluative situation may not have been meaningful for participants, as it was distant

(participants' videos would be watched "later") and its evaluative criteria were ambiguous

(participants would be rated on "many social domains"). In order to fully trigger the experience

of stigmatization, future researchers could make the threat of evaluation more meaningful – for

example, by having participants converse with a confederate in the lab (Richeson et al., 2005)

who later provides negative social feedback (Crocker et al., 1991; Nestler & Egloff, 2013). Such

a threat has greater ecological validity than the current manipulation. A second limitation was the

breadth of the objective and subjective SES cutoffs considered "low." In order to obtain an

adequate sample size, I needed to recruit participants whose family income levels were as high as

$80,000-$100,000, well above the 2015 United States median income of $55,775 (United States

Census Bureau, 2015), and whose subjective SES scores were anywhere above the median. Even

though they were of a lower SES than the majority of Hamilton students, those in my highest

income and subjective SES categories may feel that their social class is close enough to the

norm, and thus may not be affected by class-based stigma. Future research should work to recruit

a sample that is at the lower extremes of both objective and subjective SES in order to ensure

that participants are actually those who would be susceptible to class-based stigma.

To further our understanding of the psychology of social class stigmatization, future research should also address topics beyond the limitations of my study. First, researchers should more thoroughly investigate the roots of SES-related stigma. Some researchers have investigated how ideologies, from the Protestant work ethic (Quinn & Crocker, 1999) to ideas about meritocracy and social class mobility (Ostrove & Cole, 2003), may explain why people stigmatize and feel stigmatized. By extolling individual achievement and ignoring any potential environmental constrictions, these ideologies all contest that individuals are responsible for determining their social class. Future research should investigate the role of these ideologies in experiences of class-based stigma. It is possible that individual differences in the tendency to subscribe to these sorts of ideologies may moderate the relationship between stigma consciousness and the outcomes examined in the present study. For example, those high in stigma consciousness who subscribe to the Protestant work ethic might show decreased self-esteem after an experience of stigmatization, because they blame themselves for negative feedback. However, those high in stigma consciousness who do *not* subscribe to the Protestant work ethic might be protected, as Crocker and Major (1989) would theorize, because they do not feel a sense of personal responsibility for negative feedback.

Future research should also investigate strategies low SES individuals may be able to use to combat the negative consequences of stigmatization. For example, group identification has been shown to buffer against the negative effects of stigma from the dominant group (Branscombe, Schmitt, & Harvey, 1999). Because social class is such a difficult identity to define (DiMaggio, 2012), it would be interesting to understand how people might come to conceptualize their social class as a group identity, *and* if that group identification might reverse some consequences of stigmatization. Future research should also examine an opposing strategy,

one that might be potentially more effective for lower SES students who may have difficulty

recognizing their social class as a shared group identity. While identification with the group

identity being stigmatized has been shown to reverse consequences of stigmatization,

identification with a *stigmatizer* has been shown to do the same. Past research demonstrated that

while lower-class participants felt uncomfortable imagining a conversation with an upper-class

person because of their differences in class, this discomfort decreased when they could identify

with the upper-class person on another dimension – such as being from the same state (Garcia,

Hallahan, & Rosenthal, 2007). Perhaps a study aiming to investigate ways to reverse the negative

consequences of class-based stigmatization might compare these strategies, or investigate others,

in order to improve the experiences of lower SES students.

Implications and Conclusion

The present study illustrates that both upward social comparison based on SES and class-

based stigma consciousness may negatively influence low SES students' self-regulatory ability,

self-esteem, and sense of belonging. While I examined these processes after only one experience

of stigmatization, they have much longer-term influences on students' college careers. For

example, on-campus involvement – which may both affect and be affected by students' sense of

belonging and self-esteem – can significantly enhance undergraduates' cognitive and emotional

development (Ostrove, 2007). However, lower SES students are less likely to get involved on

campus (Walpole, 2003). This lack of involvement may increase loneliness, which in turn may

increase anxiety and depression (Hojat, 1982). The consequences of stigmatization might

diminish not only the quality of lower SES students' social lives, but their mental health.

Continued research on the psychology of class-based stigma, then, will not only further our

theoretical understanding. It can also help inform programs (e.g., mentorships) or avenues for

changing institutional culture (e.g., in urging students and faculty members to recognize and alter negative or erroneous assumptions they may have about social class) that may improve the everyday experiences of lower SES students at college. Ultimately, it is essential to work harder to spread the final words of the Duke University student who deemed being poor her biggest anxiety. Rather than keeping their identities hidden in fear of stigmatization, students must learn that they *can* discuss their experiences in relation to their social class identity. We must inform them that these experiences are worthy regardless of any differences between their SES backgrounds and others'. Most important, we must continually reiterate that despite any experiences of stigmatization they faced in the past or may face in the future, it is okay to be poor and attend an elite institution (Waldorf, 2013) – in fact, it is inspirational.

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Appendix A

Sensitivity to SES-Based Identity Discrepancy (SSID) Scale

Please indicate the extent to which you agree with each of the following statements.

Strongly Disagree	Moderately Disagree	Somewhat Disagree	Neither agree nor disagree	Somewhat Agree	Moderately Agree	Strongly Agree
1	2	3	4	5	6	7

1. Most students at Hamilton come from a more privileged background than I do.
2. Most students at Hamilton have had more opportunities (for success) than I have.
3. I come from a very different socioeconomic background than most Hamilton students.
4. Compared to most students at Hamilton, I have had to work hard to overcome obstacles to get to a school like Hamilton.
5. I am similar to the typical Hamilton student.
6. My family background/upbringing is similar to that of the typical Hamilton student.

Appendix B

Class-Based Stigma Consciousness Scale

Directions: In this scale, social class and socioeconomic status (SES) refer not only to the objective amount of money, level of education, or occupation your family members have, but to your perceived rank in society because of those factors.

Please indicate the extent to which you agree with each of the following statements.

Strongly Disagree	Moderately Disagree	Somewhat Disagree	Neither agree nor disagree	Somewhat Agree	Moderately Agree	Strongly Agree
1	2	3	4	5	6	7

1. Stereotypes about social class have not affected me personally.
2. I never worry that my behaviors will be viewed as stereotypical of my socioeconomic status (SES).
3. When interacting with wealthier people who know my SES, I feel like they interpret all my behaviors in terms of my SES.
4. Most people do not judge lower SES people on the basis of their SES.
5. My class status does not influence how wealthier people act with me.
6. I almost never think about my class status when I interact with people who are wealthier than I am.
7. My SES does not influence how other people act with me.
8. Most people of higher SES have a lot more negative thoughts about people of lower SES than they actually express.
9. I often think that people are unfairly accused of having negative attitudes towards people of lower SES.
10. Most people of higher SES have a problem viewing people of lower SES as equals.

Appendix C: Video Scripts

High SES Condition

1) What do you do outside of classes?

> Well, I'm in a sorority/fraternity. That takes up a lot of time during the week and more on the weekends, with volunteering and parties and other events. I don't do much else because I need to stay on top of my classes, too.

2) Talk a little bit about your high school experience. How did it prepare you for Hamilton?

> I went to a boarding school in Connecticut. I played competitive squash all through high school. It was a lot like Hamilton. We had pretty much the same amount of work – it's just more advanced here. The student body is also of a pretty similar make-up. I was also about as busy as I am here there, doing clubs like debate and newspaper and whatever.

3) What are your post-graduation aspirations and why?

> I think after I graduate I want to do some traveling before I go back to school, just to give myself a break and to go to a new place, because I think seeing new places is really important. I kind of felt pressured to go to medical school when I first got here, because both of my parents and my older sister who also went to Hamilton did – my dad's a cardiac surgeon and my mom is a pediatrician. But then last summer I had a really great internship with a lawyer who's my dad's friend, and I realized that law school is definitely a goal.

4) What do you typically do over the summer?

> Ever since I was little we've taken a family vacation for a few weeks. Last summer we went on a safari in Kenya. we stayed in nice tents at night and during the days, we went on walks or drives to look at the wildlife. But I've spent most of the past few summers at internships. Like I said, last summer I had one at a law firm. It was stressful because it's a really prestigious place, but I think I learned a lot.

5) What do you like to do with your friends?

> Most of my friends are in my fraternity/sorority, so we spend most of our time together…we do work together during the week and then on weekends we go out. We try to get off-campus every weekend or every other weekend to clear our heads and go to a nice restaurant or something. Last weekend we went to Ocean Blue, which is this really cool rooftop restaurant with great atmosphere.

Ambiguous SES Condition

1) What do you do outside of classes?

   Well, I have a job as a departmental assistant and I play club sports. That takes up a lot of time during the week and on the weekends. I don't do much else because I need to stay on top of my classes, too.

2) Talk a little bit about your high school experience. How did it prepare you for Hamilton?
   I went to a public high school in Pennsylvania. It was different from Hamilton, but not dramatically. The work was a little bit easier there. The student body was a little bit more diverse. And there are a lot more groups and activities here than there were at my high school, which I enjoy.

3) What are your post-graduation aspirations and why?

   I'm definitely going to need to take a year or two and get some sort of job –hopefully at a law office-- before I go back to school, because I think making a bit of money and getting experience is really important. But I've been interested in law when thinking about careers here, and even when talking to my guidance counselor back in high school. So law school is definitely a goal.

4) What do you typically do over the summer?

   Ever since I was little we've gone on road trips to visit extended family over the summer. I also always have a job that takes up most of my time. This summer I was a camp counselor. It was stressful sometimes, but I think I learned a lot.

5) What do you like to do with your friends?

   My close friends do a lot of hanging out in our dorm on the weekends, and sometimes we go to all-campus parties. We try to get off-campus when we can, to clear our heads, by going to the movies or something. Last week we saw a really great comedy.

Appendix D

Adapted *Psychological Sense of School Membership (PSSM) Scale* (Goodenow, 1993)

Rate the degree to which you agree or disagree with the following statements.

Strongly Disagree	Moderately Disagree	Somewhat Disagree	Neither agree nor disagree	Somewhat Agree	Moderately Agree	Strongly Agree
1	2	3	4	5	6	7

1. I feel like a real part of Hamilton.
2. People here notice when I'm good at something.
3. It is hard for people like me to be accepted here.
4. Other students at Hamilton take my opinions seriously.
5. Most professors at Hamilton are interested in me.
6. Sometimes I feel as if I don't belong here.
7. There's at least one professor or other adult at Hamilton that I can talk to if I have a problem.
8. People at Hamilton are friendly to me.
9. Professors here are not interested in people like me.
10. I am included in lots of activities at Hamilton.
11. I am treated with as much respect as other students.
12. I feel very different from most other students here.
13. I can really be myself at this college.
14. The professors here respect me.
15. People here know I can do good work.
16. I wish I went to a different college.
17. Other students here like me as I am.

Appendix E

State Self-Esteem Scale (Performance and Social Subscales; Heatherton & Polivy, 1991)

This is a questionnaire designed to measure what you are thinking at this moment. There is, of course, no right answer for any statement. The best answer is what you feel is true of yourself at this moment. Be sure to answer all of the items, even if you are not certain of the best answer. Again, **answer these questions as they are true for you RIGHT NOW.**

Not at all	A little bit	Somewhat	Very much	Extremely
1	2	3	4	5

1. I feel confident about my abilities.
2. I am worried about whether I am regarded as a success or failure.
3. I feel frustrated or rattled about my performance.
4. I feel that I have trouble understanding things that I read.
5. I feel that others respect and admire me.
6. I feel self-conscious.
7. I feel as smart as others.
8. I feel displeased with myself.
9. I am worried about what other people think of me.
10. I feel confident that I understand things.
11. I feel inferior to others at this moment.
12. I feel concerned about the impression I am making.
13. I feel that I have less scholastic ability right now than others.
14. I feel like I'm not doing well.