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Students' Awareness of Gender Dynamics in the College Classroom

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Students' Awareness of Gender Dynamics in the College Classroom

by

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Students' Awareness of Gender Dynamics in the College Classroom
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Abstract

Since Hall and Sandler's 1982 assessment of the "chilly climate for women" in the college classroom, studies of gender dynamics have identified how gendered patterns of behavior in the classroom disadvantage women. Through qualitative analysis (classroom observations and interviews) of undergraduate students and classes at a private, coeducational research university, this research establishes existing gendered patterns of classroom behavior along with student awareness and interpretations of these patterns.

The findings assert that despite student adherence to the belief that those who participate are the ones who "have something to say," student participation is impacted by gendered expectations. This translates into classroom behavior for female students that reflects an overt conscientiousness while male student behavior appears effortless. Students accept these gendered patterns unaware of exactly how or why they exist, and students contribute to the reproduction of these patterns unaware of the potential influence of students' own individual agency.

Introduction

Classroom dynamics at the college level are representative of the larger gendered patterns that operate in the professional world. Women are differentiated from men on the basis of their sex and gender with the tendency that men are perceived as the norm and women as "others" (Valian 1998). Consequently, women in higher education have held traditionally disadvantaged position as "others" participating in a system designed around the needs and practices of men.

In 1982 Hall and Sandler captioned the college classroom as a "chilly" climate for women. Since then, research on the classroom environment has addressed the influence of professors, students, and other social context factors on the climate for women. Focusing largely on education in the United States, research shows that there are distinct approaches, preferences, and ways of knowing that are associated with gender. For women who view the world from a different perspective, the traditionally masculine approaches in higher education present a challenge to their learning styles. Additionally, through gender schemas – beliefs and hypotheses about others' behavior based on their gender – individuals hold unequal perceptions of men and women (and their accomplishments) further lowering women's position Valian (1998, 2004). In higher education as in the professional world, these perceived differences translate into an environment entrenched with gendered behaviors and gendered expectations that are unacknowledged and largely disadvantage women. Research on the college classroom addresses these underlying issues, identifying ways in which these gendered expectations manifest in the classroom through the actions of professors and students themselves.

Within the research on gender dynamics in the college classroom, there is limited information on students' own understanding of the classroom. In addition to establishing existing gendered patterns of classroom behavior, my research candidly engages students themselves in the discussion of behavior patterns and identifies students' own understanding of the classroom.

Over the course of one academic year, I gathered data through classroom observations and interviews of undergraduate students themselves. In this research, I explore existing patterns of behavior in the college classroom identifying how these patterns follow or diverge from those identified in earlier classroom research. I investigate student understanding of the contemporary classroom and their own contributions to existing patterns.

My research suggests that consistent with past research, college students engage in gendered patterns of behavior in the classroom. While specific behaviors for female students in the contemporary classroom may have evolved, they still mirror the behaviors of women from earlier studies and reflect gendered expectations existent within society. In this research I explore how the identified gendered patterns and expectations are embedded in accepted student behavior, maintained and reproduced by students, and often remain unacknowledged to the students themselves.

Literature Review

Even as the social norms surrounding gender slowly change towards gender equity, there is still evidence of differential treatment towards women. This review of relevant literature will look first at the history of women in higher education and the development of a classroom climate that is unfavorable towards women. Further exploration will include a background of developmental theories, focusing on the unique differences related to women's and female college students' development. Next, this review will address the substantial amount of research on classroom climate and student participation. Drawing from the work of Paulo Freire and from theorists in psychology, the importance of student voice in the learning process will be addressed. Women's classroom participation centers around their voices, their silence and the conflicts they face in balancing masculine and feminine traits.

Although college students are persuaded by the structural influence of higher education, some research argues that students contribute to the shaping of the classroom environment and that these contributions are often overlooked. While research examines students' perception of the classroom, there is limited research focusing on students' understanding of the gendered patterns of behavior or on students' awareness of their own influence. As this review will demonstrate, the structural influence of higher education impacts students' behavior and students' learning. Importantly, women's advancement and the gendered patterns of behavior in the classroom are mirrored in the experiences of women in professional settings, particularly female professors in higher

education. Yet with critical consciousness, students themselves are influential in establishing and maintaining classroom behavior.

History of Women in Higher Education

Women's involvement in higher education has historically been a second-class experience. Women's entry into higher education is linked with social and economic factors (industrialization, decline in fertility rates, and formal schooling); women were needed in areas other than the home (as teachers and workers) (Solomon 1985; Arlton, Lewellen and Grissett 1999). In colonial America, women's roles evolved to include nurturing the intellectual development of their children, thus a woman herself needed education to be enlightened (Sadker and Sadker 1994). Significantly, in the post-Civil War era with the Morrill Land Grant Acts (which promoted the creation of state universities and programs in agriculture and applied sciences) the need for women to work outside the home increased (Solomon 1985). With the increased support and demand for public education, women were needed to work as teachers. Oberlin College was the first coeducational institution in the United States, accepting women since 1837, and the mid-1800s saw the beginning of many women's institutions in the country.

Women who entered institutions of higher education were met with prejudice and sexism, held to lower academic standards than men, faced close supervision and segregation from male students, and overall were faced with the notion that educating men was more valuable than educating women. In the 1800s into the 1900s, the few women who entered coeducational colleges and universities faced challenges of male dominance, fraternity culture, prejudiced professors and administrators and a "divided

campus" (Sadker and Sadker 1994: 163). Women chose academic majors like literature, health, liberal arts and education, joined sororities and other women's organizations (which lacked the prestige that men's organizations had). Into the twentieth century, men expressed opposition to the inclusion of women in higher education, largely because education was devalued as women were included. Those who opposed education for women argued that women's biological make-up – their brains and ovaries – inhibited their abilities as serious students. (Sadker and Sadker 1994).

Solomon (1985) identifies the 1972 educational amendment, Title IX, as a key game-changer in women's education. Title IX prohibits sexual discrimination by schools that receive federal financial assistance; women must receive the same opportunities as men. Although the amendment's benefits have been slow to take effect, institutions are legally obligated to support women in the same ways that they support men. In terms of students' knowledge and perceptions, the effects of Title IX are not readily apparent. Reflecting on the students she teaches in her college courses, Dube (2004) comments on how students take the college women's softball team for granted and fail to understand it as a result of legislation.

While women have been included in higher education since the 1800s, women's involvement has not been equal to that of men. Even today women may have equal opportunities, but they are not always equitable.

Chilly Climate

In their 1982 report on the status and education of women, Roberta Hall and Bernice Sandler brought attention to the college classroom's "chilly climate" for female

students. Hall and Sandler (1982) identified subtle yet meaningful differences – everyday inequities – in the treatment of female students and the expectations faculty held of them. Based on their review of qualitative and quantitative studies and anecdotal evidence from the classroom, Hall and Sandler posit that women are disadvantaged in college because of professors' differential treatment of students by gender. The authors note that both male and female instructors may inadvertently treat students differently based on gender and may communicate "limiting preconceptions about appropriate and expected behaviors, abilities, career directions and personal goals which are based on sex rather than on individual interest and ability" (Hall and Sandler 1982: 2).

Hall and Sandler (1982) identify more than 30 different ways that instructors treat women differently in classroom, among them are behaviors such as asking male students higher order thinking questions and asking women questions that only require factual information, responding more extensively to men's comments than to the comments of women, and waiting longer for men to answer a question before moving to another student. These forms of differential treatment are examples of everyday inequities. Hall and Sandler (1982) describe these inequities as the small differences in everyday behavior, namely the instructor's behavior, towards students of different genders. In her expansive work, *Why So Slow?,* Virginia Valian (1998), reflects on women's advancement positing that discrepancies between men's and women's achievement are the result of series of small differences in treatment. Each behavior is minor, but altogether they amount to a real difference between the treatment of men and women (Valian 2004). This form of sexism is subtle and difficult to recognize because its acceptance is so ingrained in the culture (Sadker and Sadker 1994).

Not only do students experience different treatment dependent upon their gender, but these differences are inhibiting and discouraging to women, their ambitions and levels of self-esteem (Heller, Puff and Mills 1985). Studies conducted at the primary and secondary school levels reveal similar patterns of differential treatment of boys and girls (AAUW 1992; Sadker and Sadker 1994). Research conducted by the American Association of University Women (1992) suggests that the difference in teachers' evaluations of male and female students leads girls to develop a learned helplessness – a lack of perseverance and loss of self-confidence – when faced with academic challenges. Women's absence from textbooks and the default use of masculine pronouns illustrates how men are centrally located within the classroom and women are seen as marginal others (Rich 1979b; Sadker and Sadker 1994).

Although it has its drawbacks, the Hall and Sandler report on the classroom climate has been influential to the contemporary understanding of the college classroom. The authors raised society's consciousness of the issues of socialization, professors' differential treatment, and gendered expectations on college students' classroom experiences (Heller, Puff, and Mills 1985; Canada and Pringle 1995). The report sparked further classroom research responding to the issues addressed. Fassinger (1996) claims that most classroom interaction research has been in response to Hall and Sandler's article. Building on the original report, Sandler, Silverberg and Hall (1996) published a second report making further recommendations for the improvement of education for women.

Criticisms of Hall and Sandler

Some studies argue that evidence of the differential treatment of women is limited or has become outdated (Constantinople, 1988; Atkinson, Buck, and Hunt 2009). Some believe that discrimination against women was not as prevalent at their institutions (Constantinople et al. 1988). Others argue that Hall and Sandler do not provide enough direct empirical data to support their arguments; most of their evidence comes from related studies or from anecdotal evidence (Heller et al. 1985; Constantinople et al. 1988).

A significant criticism of Hall and Sandler is the focus on the professor as the most influential factor in shaping the classroom climate. Subsequent research illustrates the influence of other factors arguing that the classroom climate is jointly constructed by instructors and students (Constantinople, Cornelius, and Gray 1988; Fassinger 1995, 1996, 1997). Still, the original report is relevant and central to research conducted through the beginning of the twenty-first century (Allan and Madden 2006). What the Hall and Sandler report highlights are the key issues in the study of the college classroom, largely that there are very real – if not easily identifiable – differences in the treatment of male and female students.

Gender Schema

Hall and Sandler (1982) identify differences in the treatment of male and female students, but they offer little information on the reasons behind the difference. By looking at gender schemas, one can see how people of different genders are held to different expectations thus affecting how they are treated in environments such as the college classroom. Gender schemas are the cognitive frameworks used to make judgments about

others based on gender, typically to men's benefit and women's disadvantage (Valian 1998). West and Zimmerman (1987) explain the concept of "doing gender": the socialized creation of differences between women and men that are not biological or essential, and then using those differences to reinforce the "essentialness" of gender (137). We generally expect men to be more assertive and capable of independent action, and we expect women to be more nurturing and expressive; it is these expectations that affect our judgments of others' competence, ability and worth (Sandler et al. 1996; Valian 2004). To clarify, sex is based on biological differences; gender describes psychological and social conceptions of what it means to be a member of sex-based categories (West and Zimmerman 1987). Based on what people see and expect, they form hypotheses or gender schemas about men and women, treating men and women according to those expectations (Valian 1998).

Valian (1998) uses the term "gender schema" as a more inclusive term than gender stereotypes. A stereotype is one type of hypothesis; schemas include all hypotheses. Gender schemas are intuitive hypotheses about the behaviors, traits, and preferences of men and women that are developed based on unacknowledged beliefs about gender differences and serve to guide an individual's perception and expectations about others' future actions (Bem 1981; Valian 1998). Other researchers discuss the influence of gender role expectations in the classroom even if not explicitly labeling them gender schemas (Sadker and Sadker 1994; Sandler, Silverberg and Hall 1996).

To distinguish people as male and female is a universal organizing principle (Bem 1981). To develop a gender schema is to unconsciously interpret (and potentially misinterpret) the behaviors and motives of others (Valian 1998). But gender schemas, as

unconscious processes, lead to judgments about both sexes, which are typically positive for men but negative for women. Gender dichotomy affects all aspects of social life, gender schemas are the most important above all other schemas even though they are the most resistant to change (Bem 1981; Epstein 2007).

One of the underlying and unacknowledged patterns is to attribute male's success – academic or otherwise – to skill, ability, or other internal factors while women's success is often attributed to luck (Hall and Sandler 1982; Sadker and Sadker 1994; Sandler et al. 1996; Valian 1998). With gender schemas, men are less likely to see how they benefit from their gender, and those men who are aware are still likely to attribute their success to their competence (Valian 1998). Gender schemas represent men as more capable than women, likely overestimating men's qualifications and abilities and underestimating women's (Sandler et al. 1996; Valian 1998, 2004; Miller and Chamberlin 2000). In a study of the perception of male and female instructors in the same college classroom, Moore (1997) found that while instructors of both genders made essentially the same arguments, students valued and were more receptive to what the male professor said (even though the women used evidence and the male professor did not). In a very real sense, men's and women's voices are not valued or perceived in the same way.

Women's Cognitive, Intellectual, and Identity Development

Research in the fields of psychology, sociology, and social psychology provide insight into students' development during college. Although gendered patterns do not always apply to members of each sex, theorists have identified some distinguishing

differences between the developmental patterns of men and women. Evident in theories specifically related to women's development, the power of a woman's voice – her way to express her ideas, her intelligence, and her way to claim authority in the world – gains strength.

A key theme in many theories is the notion of separation and connectedness as first addressed in Nancy Chodorow's concept of gender-related response to female caregivers: boys distinguish and separate themselves from their mothers, while girls are defined by connection and attachment to their mothers (Gilligan 1982; Belenky, Clinchy, Goldberger, and Tarule 1986). Males define themselves through separation, and females define themselves through attachment. Gilligan (1982) argues that intimacy threatens male gender identity and that female gender identity is threatened by separation.

Gilligan's "Different Voice"

Building off of Lawrence Kohlberg's research on moral reasoning, Carol Gilligan (1982) challenged the psychology canon by arguing that there exists a "different voice." Based on the findings of three separate studies, Gilligan (1982) identifies a voice of care, distinct from the voice of justice and equality previously accepted as the only voice. Kohlberg's previous studies on moral reasoning found a pattern of psychological development concerned with justice. The voice of justice is, as Gilligan (1982) argues, based on research using most male participants and therefore neglects the alternate voice of care in the approach to moral reasoning. Kohlberg's theory is assumed to be sexually neutral but instead is dependent upon an observational bias "implicitly adopting the male life as the norm" (Gilligan 1982: 6).

To be clear, this different voice is associated with gender, but it is not exclusively determined by gender. The voice of care can be identified in both men and women but is largely associated with female points of view. These different ways of reasoning guide ways of making moral judgments. Men's reasoning is typically based on justice and a woman's based on care and responsibility. The different approaches are gender-related but not gender-specific.

The importance of Gilligan's work extends beyond its application to moral reasoning. Gilligan's idea of different voice and connected learning put into words the learning behaviors teachers had seen in girls for years (DeBare 2005). Gilligan captioned a difference in the ways men and women approached the world. To repeat the caveat that differences are gender related but not determined by gender, Gilligan's different voice introduces the notion that not everyone views the world in the same manner. It is important to listen to both voices because otherwise the focus is on one to the exclusion of the other (Desjardins 1989). Gilligan's research called into question all research that used only male subjects to construct theories of behavior intended to apply to both men and women. Importantly, Gilligan's work led to other critical looks at gender equity in the classroom and concerns about girls' loss of self-esteem and academic success during adolescence (AAUW 1992; Sadker and Sadker 1994; DeBare 2005). While moral reasoning is just one part of a student's development, the identification of a distinct, separate voice (typically) of women is a relevant component in education and had essentially been neglected.

Women's Ways of Knowing

Belenky, Clinchy, Goldberger, and Tarule (1986) also support the existence of a unique approach for women, specifically in education. The authors used their findings from interviews and case studies of 135 women to identify women's ways of knowing – five perspectives from which women learn about and understand the world. According to Belenky et al. (1986), "voice" is a reflection of a woman's intellectual and ethical self, a representation of the union of her voice, mind and self. Voice and quest for self are central to the transformations women undergo in women's ways of knowing.

The five perspectives from which women know and view the world are: silence, received knowledge, subjective knowledge, procedural knowledge, and constructed knowledge. From the standpoint of silence, women are voiceless, essentially powerless and remain unaware of their own intellectual capabilities (Belenky et al. 1986). As women progress through the stages of received knowledge and subjective knowledge the voices of others are still powerful, appearing to the individual as an external authority holding truth; women's sense of self is embedded in external defined roles. As women learn that there is a multiplicity of viewpoints, truths, and authority, the individual's inner voice gains strength as she discovers personal authority in her own voice. Baxter Magolda (1992), known for establishing the Epistemological Reflection Model in student development, notes that a student's voice grows stronger when it is confirmed and when "the sense that authorities are all-knowing" is deflated (274). As the power of authorities is contradicted and students understand authorities are not all knowing, then a voice can further develop.

Moving into the procedural knowledge and constructed knowledge of Belenky et al.'s (1986) women's ways of knowing, the individual learns to see the world through

others' points of view eventually integrating the authority of others with the authority of her own inner voice. The final stage of constructed knowledge is when women integrate knowledge in complex ways understanding that "all knowledge is constructed, and the knower is an intimate part of the known" (Belenky et al. 1986: 137). For Belenky et al. (1986), women progress from silence (a state of having no voice) to a state of constructed knowledge where the individual can understand that her own voice is powerful and the voices of others hold varying levels of authority. The authors argue that education as an institution is not sensitive women's approach to learning (Oakley 2000).

Belenky et al. (1986) do not claim there is a biological link to these learning patterns but that gender socialization has produced varied patterns in the experiences of men and women. Critics of Belenky et al. and Gilligan argue that separate ways of knowing reinforce beliefs that women are in a separate sphere compared to men and in some way deficient in terms of ability to learn (Case 1990; Sadker and Sadker 1994). Other critics contend that there is not enough data to support the relationship of moral reasoning patterns and gender (Valian 1998; Pascarella and Terenzini 2005). Many critics, however, fail to understand the concept of distinct voices, not voices exclusively related to gender.

Perry's Scheme of Intellectual Development

Although a large majority of his research subjects were male (and therefore generalizability to both male and female students is questionable), William Perry's (1970) research was significant to the understanding of students' intellectual

development. His original work is what Belenky et al. (1986) and Baxter Magolda (1992) build from to explore intellectual development in women.

Perry (1970) describes nine positions which students move through in their intellectual development. Beginning with basic duality (seeing the world in terms of right versus wrong), students move through multiplicity and relativism through the stage of developing commitments in relativism. In the final stage of developing commitments, the student comes to understand that there are multiple legitimate perspectives, that commitment to identity is ongoing, and that context is influential to understanding multiple perspectives (Perry 1970; Pascarella and Terenzini 2005).

Baxter Magolda's Epistemological Reflection Model

Building off of both Perry's research and the work of Belenky et al., Baxter Magolda (1992) explores the gendered differences in the nature of knowledge by studying the cognitive and intellectual development of male and female college students. Her Epistemological Reflection Model – developed from her five-year longitudinal research of students at Miami University – is comprised of four stages: absolute knowing, transitional knowing, independent knowing, and contextual knowing.

Somewhat parallel to Perry's positions, Baxter Magolda's model progresses from absolute knowing (akin to Perry's basic duality) through contextual knowing (in line with Perry's commitments in relativism). At the first stage of absolute knowing, knowledge is viewed as certain; instructors are authorities with answers. Moving towards the final stage of contextual knowing students come to accept that knowledge is uncertain and contextual, and as a consequence students' own voices gain authority as they realize that

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teachers are not absolute authorities.

What distinguishes Baxter Magolda's research is the identification of parallel lines of reasoning within three of the four stages. Similar to Gilligan's concept of a different voice, Baxter Magolda (1992) finds two distinct ways of thinking that are associated with students' gender, both equally complex in their ways of making meaning. One key distinction is found at the third stage (independent knowing) where female students often are involved in *interindividual learning*, where one values both her own ideas and the ideas of others, and male students tend to use *individual knowing*, where the interchange with peers and instructors is valued but more attention is given to the individual's thinking. Like Belenky et al.'s (1986) concepts of separate and connected knowers, Baxter Magolda's patterns reflect different ways of knowing and understanding the world that relate to, but are not dictated by gender.

Overall, these theories illustrate the ways in which women are more inclined towards connectedness with others. For Gilligan, women are concerned with care for others, and they approach the world thinking about relationships and connections. For Belenky et al. women come to understand their own voices in connection with others. For Baxter Magolda, women reflect on the world in ways that are interpersonal and connected. To these theorists, not only are students differentiated by which stage of knowing they are in, but there are distinct approaches associated with women's gender.

Similarities Between Men and Women

Baxter Magolda (1982) does emphasize the similarities between men and women and their ways of knowing over their differences. Patterns are related to, but not dictated

by gender, and variability exists among members of each gender. Valian (1998) supports the similarities between genders over differences when it comes to abilities. She does not deny intrinsic differences based on biology, but Valian aims to clarify that biological characteristics are not destiny. Although it is difficult to determine the extent of biological and social influences, the evidence that social environments influence biological traits is found in the variability of traits and behaviors both within an individual and across individuals (Valian 1998).

Meritocracy and Gender Equity

Higher education, especially in the United States, is understood to be a meritocratic institution recognizing students on the basis of their individual merit. In their research on social reproduction, Bourdieu and Passeron (1977) found the French education system to be biased towards those of higher social class and aided in conserving social hierarchies. Instead of individual talent and academic meritocracy, students' successes and life chances were more closely associated with their social class, bourgeois culture and educational credentials (Bourdieu and Passeron 1977).

Looking at gender rather than class, different underlying expectations based on gender lead to the belief that work done by men is more valuable than work done by women (Hall and Sandler 1982; Sandler et al. 1996; Moore 1997; Valian 1998, 2004; Miller and Chamberlin 2000). By believing that individual merit is what leads students to succeed, society fails to notice the underlying patterns of difference between men and women. Valian (1998) shows that since some women do advance to top careers, society accepts that women are capable of those achievements and evaluations of women must be

fair. "We fail to see just how often the rule – that we inappropriately judge women more negatively than men – operates" (Valian 1998: 143). People are unaware of the schemas they hold for others. Coupled with the fact that many people value meritocracy and believe that people succeed based on merit, it can be hard for them to see that different perceptions, values, and expectations of the different genders can be part of the equation (Valian 2004).

When women have not only the same opportunities as men but equitable opportunities with equal chances of success, only then can that be considered gender equity. Gender equity involves women being judged based on their merit, not their sex or gender. In the classroom and in the workplace, women are still evaluated differently than men because of their gender. "Gender-fairness refers to personal and institutional beliefs, values, attitudes, views, judgments, policies, practices, and programs that reflect and promote acknowledgement of, respect for, and inclusion of the ideas, customs, traditions, norms, and practices of both women and men in the day-to-day function of a social unit" (Miller, Miller and Schroth 1999: 39). Valian (2004) argues that gender schemas and the accumulation of advantage are explanations for current problems of gender equity.

Gender schemas leave women at a disadvantage, making it harder for them to succeed than men (2004). These schemas play a central role in shaping men's and women's professional lives, and they are slow to change (Valian 1998). In order to achieve gender equity Valian (1998) argues that the goal is to learn about the development, function, and maintenance of gender schemas and to understand how they influence aspirations and expectations and how they hinder women's success. Valian (1998) says that "only by recognizing how our perceptions are skewed by nonconscious

beliefs can we learn to see others, and ourselves, accurately" (3).

Gender Dynamics in the Classroom

        Differences between women and men are evident in the developmental theories previously described, and the research on gender schemas shows that gender differences lead to different expectations and treatment. In the classroom, the interaction patterns between teachers and students, as well how women use their own voices in the classroom reflect gender-based differences often to the disadvantage of women.

Teacher Behaviors

        Male students tend to receive more attention from professors than do female students (Hall and Sandler 1982; Constantinople et al. 1988; Sadker and Sadker 1994; Sandler et al. 1996). According to observational research, the treatment male students receive includes more nonverbal attention (such as eye contact, waiting for answers, remembering male students' names), receiving more substantive feedback, being asked more higher order thinking questions, not being reprimanded for calling out or interrupting other students (Sadker and Sadker 1994), having their comments acknowledged or being asked further questions by the instructor (Constantinople et al. 1988). Based on their research and observations of both secondary and postsecondary classrooms, Sadker and Sadker (1994) found that teachers responded more frequently to boys, and when girls do call out, they are more likely to be reprimanded.

        Female students, on the other hand, receive less attention, less help, and fewer challenges (Sadker and Sadker 1994). Women are subject to devaluation, particularly

when it comes to their academic work (Hall and Sandler 1982). According to Sandler et al. (1996) behaviors that communicate lower expectations for women students consist of asking easier questions of women than of men; using examples that reflect stereotypes, reinforcing social and sexual roles by calling women "honey", "sweetie" etc.; judging women by their physical appearance; excluding women from class participation by interrupting them or ignoring them; treating men and women differently when their behavior and achievements are the same; giving women less attention and intellectual encouragement such as waiting longer for men to respond to questions or giving men more critical feedback; defining women by their sexuality; and expressing overt hostility towards women. Educators may look at female students and judge them as women instead of as students or learners (Hall and Sandler 1982).

Several studies note that teacher expectations are influential in students' achievements. Teachers who held high expectations of individual students encouraged them with almost unconscious behaviors that convey faith in the student: smiles, positive comments, extra attention, etc. Students live up to what their teachers expect (Sadker and Sadker 1994). Bandura (1997) stresses the value of teachers in building students' self-efficacy.

How the professor structures the classroom and helps to maintain classroom norms is influential to students. Teachers are responsible for manipulating the teaching setting, establishing the classroom environment, and determining the topics covered (Tyler 1992; Sandler et al. 1996). Fassinger (1995) found that the ways in which professors designed their courses were far more influential than professors' interpersonal styles. The rules of participation and behavior in the college classroom are typically

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anchored in masculine norms and male-oriented approaches to learning (Thorne, as cited in Baxter Magolda 1992; Duke University 2003). Women may feel inadequate in a classroom that follows a debate-like or competitive format; women tend to thrive on connections rather than conflict. In a climate that is inhospitable, women may become silent or assimilate to the climate in order to participate and be heard (Sandler et al. 1996). Because they have the power to structure the classroom and maintain classroom norm, professors – by accepting women's silence (and men's participation) – perpetuate the status quo (Sandler et al. 1996; Miller et al. 1999).

Students' Participation

Fassinger (1995) asserts that student gender is a significant component in class participation. According to studies on student behavior in the classroom, the trend is that male students participate more than female students (Fassinger 1995). According to research, Sadker and Sadker (1994) note that one out of every two women remains silent during an individual college class. Men are twice as likely to dominate class discussions.

From surveys about class participation, Fassinger (1997) found seven variables were significantly related to student participation: class traits (class size, participation as a part of students' grades, students' communication with each other in class, and emotional climate – friendship, acquaintances, cooperation and support from peers in class) and student traits (confidence, interest in subject matter, and gender of student). Other studies on classroom participation revealed that participation is influenced by students' confidence (Fassinger 1997); class size and gender (Fassinger 1996;

Constantinople et al. 1988; Canada and Pringle 1995) and other social context factors (Canada and Pringle 1995; Fassinger 1997).

There are mixed reviews of the influence of instructor's gender on student participation. Constantinople et al.'s (1988) findings indicate that the sex of the instructor only tends to influence class participation in conjunction with another factor. Studying a college transitioning from a women's institution to a coeducational institution, Canada and Pringle (1995) observed the role of classroom gender composition in class participation along with other social context variables such as class size and professor's sex. Fassinger (1995) claims that faculty gender has no significant impact on class participation.

Women's Voices in the Classroom

Research shows that regardless of exactly what is responsible for a "chilly" climate, male and female students do behave differently in coeducational classrooms. Some traits are seen as more characteristically masculine or feminine (Bem 1981). Typically masculine traits include: rationality, decisiveness, deliberateness, and control. Typically feminine traits include: warmth, gentleness, understanding, sensitivity, and an absence of authority (Bachen et al. 1999: 194). Theories of student development offer explanation for the varied patterns of development for college students, specifically female students. Notably, Gilligan's conception of a different voice (associated but not exclusively linked to the female gender) illustrates that women approach the world differently than men – a pertinent distinction in a world that has typically accepted male development and behavior patterns as the norm. Women tend to be more polite, hesitant,

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and apologetic (Sandler et al. 1996). Stereotypes are explicitly and implicitly presented to students from early childhood education through graduate school with different expectations for men and women with regard to students' participations in class, noise-level, and physical activity. Masculine traits are preferred over female traits (Miller & Chamberlin 2000; Bennett 1982). When women do participate, they tend to preface their comments with caveats such as "this probably isn't right, but..." Women also use the "I don't know" option instead of guessing at answers. As Sadker and Sadker (1994) state, these devices are "tacit acknowledgement of diminished status" (171).

In conversations and discussions, men are more likely to interrupt and to control the topic of conversation (AAUW 1992; Sadker and Sadker 1994; Sandler et al. 1996). Men use devices such as completing women's sentences, giving minimal response to topics women bring up, acknowledging a topic when it is introduced by a man, and interrupting women without consequence. These devices restrict women's control of the conversation thus controlling their voices (Candace West as cited in Smith 1987). Female students raise their hands to respond to questions; they wait their turns, do their work, and blend in; and in conversation, women are likely to defer to men (Sadker and Sadker 1994; Sandler et al. 1996). The underlying gender messages found in the classroom are that boys are active participants in control of the classroom conversations, and women are passive (Sadker and Sadker 1994; Sandler et al. 1996).

Females use speech for developing and maintain relationships (Gilligan 1982; Belenky et al. 1986; Case 1990; Sandler et al. 1996). The results of Case's (1990) study support Gilligan's idea of different voice for women identifying themes in women's speech patterns such as "responsibility, affiliation, fairness, understanding, and

commitment to the group, with use of words implying feeling, emotion, and personal references to their own experiences" (103). Males use speech to establish dominance and are more likely to use declarative statements and make requests (Case 1990; AAUW 1992). For women, speech and communication is more about connecting with others than about distinguishing themselves from the class. Neither women's or men's voices are better than the other, but including both voices allows for varying perspectives in viewing and solving problems (Desjardins 1989). In classroom environments that support male approaches and diminish women's approaches, women are at a disadvantage. By staying silent, women fail to practice the participation skills that are useful in workplace and the world outside the classroom (Sandler et al. 1996).

Silencing

In the classroom, women's silence refers to female students' lack of participation, their lack of contributions and questions, and their general stance on the periphery of the classroom. Women's silence in the classroom may also refer to the absence of women in the curriculum, textbooks, and grammar (masculine pronouns as the norm) (Rich 1979b; Thorne 1989; Sadker and Sadker 1994). For the purposes of this discussion, silence will pertain to female students' and their patterns of inclusion in the classroom.

Silence is associated with oppression. Those without a voice are powerless. For Belenky et al. (1986), women who are unaware of their own capabilities, who do not believe they have their own voice, and who believe that only other people are authorities are in the initial stage of women's ways of knowing: silence. Freire (1971) presents oppressed persons as those who are silent or uninvolved in changing the structures that

oppress them. Belenky et al. (1986) describes Freire's "banking concept" of education as a system of oppression in which students are seen only as objects, receptacles to be filled with knowledge. Men and women as groups tend to experience learning differently, and educational approaches that are not in line with women's ways of knowing may make the education experience more alienating for women (Sandler et al. 1996). The structure of education oppresses students, and for women may leave them silent. Sociologist Dorothy Smith (1987) captions women's exclusion from the intellectual, cultural and political world by claiming that male voice has historically been the authority in those arenas. She posits that women have been accepted as secondary, excluded from the making of culture and knowledge and women are recognized only as marginal voices (Smith 1987).

The perception of silence itself is different for men and women. For men, silence can be seen as time for them to think, but for women, silence may be seen negatively as a sign that they are not assertive or uninformed (Sandler et al. 1996).

Why Women Are Silent

As previously noted, research shows that students' participation is potentially affected by students' confidence, class size, gender of the student, gender of the professor and other social context factors (Constantinople et al. 1988; Fassinger 1996, 1997; Canada and Pringle 1995). For women in particular, confidence was significantly related to interaction norms (Fassinger 1997).

The style of classroom interaction may not be suited for women's preferred learning styles. Women tend to appreciate a connected knowing over an authoritative style where students simply receive knowledge from the instructor (Belenky et al. 1986;

Bachen et al. 1999). Women have also been shown to value an inclusive classroom over a debate-style environment, and as a result, women may stay silent. Silence is used as a way to resist becoming vulnerable (Thorne 1989). Smith (1987) describes women's marginality noting "there seems to be something like a plus factor that adds force and persuasiveness to what men say and a minus factor that depreciates and weakens what women say" (30). Silence may be employed because of fear of judgment from teachers and other students or as a way to avoid tasks or involvement in the class.

Although intelligent women may remain silent in classroom discussions, they may express their intelligence in other ways such as through the quality of their written assignments or engaging the professor in a discussion outside of class (Hall and Sandler 1982). If the environment is not conducive to their styles of interaction, women may silence themselves or they may work within the system to express themselves. As research shows, women have historically been disadvantaged in the classroom and in fully using their voices. Women have been socialized to be silent (Sadker and Sadker 1994; Sandler et al. 1996). Sadker and Sadker (1994) note that women remain in in the challenging position of trying to regain their voices, and at the college level "women's silence is the loudest" (170).

Role Conflicts

Women often find themselves at odds with themselves, driven towards both femininity and masculinity. At all levels of education, women are socialized towards achieving an ideal image of what it means to be a female student, maintaining both feminine attributes as well as masculine traits (Komarovsky 1985; Brown and Gilligan

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1992; Bachen et al. 1999; Duke University 2003). At the same time, women confront the expectation to be "nice girls" who are concerned with pleasing others and meeting others' expectations often by lowering their own aspirations (Rich 1979a; Gilligan 1982; Belenky et al. 1986; Brown and Gilligan 1992; Tidball, Smith, Tidball, Wolf-Wendel 1999; Valian 1998). In order to succeed in this environment, the challenge for women has been to both maintain the expected gender roles of women and to accomplish the "masculine" behaviors that are successful.

Based on their interviews with students at an all-girls school (primary and secondary), Brown and Gilligan (1992) found that there is a division between girls' public personas and private selves. As they learn and anticipate others' reactions girls learn to silence themselves as to maintain "good behavior" such as being nice, not hurting others' feelings (Brown and Gilligan 1992). Girls come to understand and strive to achieve the image of ideal girl. Whether they are aware of it or not, these women focus on the relational aspects and shape themselves, their thoughts, and behaviors to respond and fit in thus limiting their individual interests, talents and dreams (Brown and Gilligan 1992; Sadker and Sadker 1994).

At the college level, female students still feel obligated to conform to feminine norms, which often mean downplaying their intellectual abilities because academic achievement is associated with masculine performance (Duke University 2003). Based on the findings of their 2003 report on the climate for women at the university, Duke University determined that a large issue for female students is meeting the "polarized standards" of balancing feminine and masculine norms: being socially accepted as female and feminine while at the same time establishing their power by working hard to get good

grades and be successful in academics and extracurricular activities (Duke University 2003). Women, more than male students, feel pressured to meet these social ideals, and women who do not meet this ideal risk being excluded from the mainstream student culture. Female undergraduate students momentously described this underlying goal of "effortless perfection" as the expectation that women "would be smart, accomplished, fit, beautiful, and popular, and that all this would happen without visible effort" (Duke University 2003: 12).

Although not explicitly calling them "gender schemas," Sadker and Sadker (1994) discuss the flexibility girls have to explore a range of behaviors. Focusing on the grade school level, the authors discuss how it is socially acceptable for girls to play sports, to dislike dresses, and to explore other typically "masculine" behaviors. Boys, however, are more restricted in their exploration of "feminine" behaviors, from the authority of peers and parents. One answer according to Valian (1998) is that female gender schema is more flexible than male gender schema; girls and women are freer to develop masculine interests than men are able to explore feminine interests because society holds masculine interests with more value. Men are considered the norm; that may partly be why is more acceptable for a female to adopt masculine characteristics than for a male to adopt feminine ones.

Women are encouraged to use more masculine approaches to communication in order to be taken seriously, but in adopting more assertive, self-confident speech styles, women have been perceived as aggressive or overbearing (Case 1990). Valian (1998) notes that masculine behavior is normal for men, but it masculine behaviors are noteworthy in women. Individual perception often leads women and men to be perceived

in different ways even if they are doing or saying the same thing (Sandler et al. 1996). There is an incongruity between expected gender roles for women and the behaviors associated with success, and women struggle to gain the same respect as men using similar behaviors.

Social Reproduction

Focusing on the classroom environment, students' behaviors, attitudes, and voices are affected by the structure in place. As noted earlier, some researchers argue that teachers are largely responsible for shaping the classroom climate (Hall and Sandler 1982) while others come argue that the classroom is jointly created between students and instructors (Fassinger 1995, 1996, 1997). Institutions of education, specifically the individual classroom, are confronted with the balance between structure and agency. Institutions face the challenge of establishing enough structure to support students but not imposing so much structure that students lose all responsibility for formulating "their own agendas for learning" (Belenky et al. 1986:213).

Sociologist Dorothy Smith (1987) explores how dominant social structures had been established by men, relevant to men, and to the exclusion of women. Bourdieu and Passeron (1977) begin from the standpoint that not only are the ruling ideas the ideas of the ruling class but that these ideas themselves maintain their legitimacy and reinforce the ruling class by concealing the fact that their very basis comes from the power of the ruling class.

Role Models

The general understanding of the Hall and Sandler report is that the classroom climate is largely established and controlled by the professor. Professors play a central role by serving as sources of control and validation for students (Belenky et al. 1986), and professors' behaviors and expectations are some of the most powerful influences in the classroom environment (Hall and Sandler 1982; Baxter Magolda 1992; Tidball et al. 1999; Bain 2004). Even research that argues that professors' traits are not central to student behavior acknowledges that professors influence the structure which shapes classroom dynamics (Fassinger 1996; 1997).

While much of the research on role models is discussed in the capacity of women in the workplace, the information is translatable to female students in higher education and can be considered in conjunction with research specifically on mentoring and role models in higher education.

The influence of role models is important for students – both to maintain and challenge the status quo (Komarovsky 1985; Sadker and Sadker 1994; Tidball, Smith, Tidball and Wolf-Wendel 1999). In his work on social psychology, Albert Bandura (1997) addresses the function of modeling in the development of self-efficacy, an individual's judgment of his or her own capabilities. Modeling as a part of observational learning involves the behaviors that students observe (attentional processes), the processing of information and establishing conceptions based on what students observe (retention processes), translating concepts into appropriate behaviors (behavioral processes), and translating information into performance (motivational processes) (Bandura 1997).

Research demonstrates a positive correlation between the number of female faculty and the success of female students (Tidball et al. 1999). With fewer female faculty at the college level, however, female students have fewer strong female role models, which can limit women's ambitions (Rich 1979c; Anderson and Ramey 1990).

Students' Own Influence

The influence students have is powerful and often overlooked. Individuals both produce and are products of social systems (Bourdieu and Passeron 1977; Bandura 1997). In *Reproduction: In Education, Society and Culture,* Bourdieu and Passeron (1977) focus on the structural reproduction of disadvantages and inequalities that are caused by cultural reproduction. According to Bourdieu, inequalities are recycled through the education system and other social institutions (Bourdieu and Passeron 1977). But as Bandura's (1997) findings indicate, while the agentic element of self-efficacy is interdependent upon other individuals and that agency operates within a network of sociostructural influences, it is increasingly common for people to alter their environment to suit themselves rather than simply adapting themselves to the environment.

In his work on childhood studying American and Italian preschool children William Corsaro (1997) employs Goffman's concept of secondary adjustment – using unauthorized means to circumvent an organization's or an authority's assumptions of what a person should do or be. In the examples Corsaro uses children violated established rules in innovative ways, and their teachers responded with changes to their behavior and selective enforcement. Through their actions, although they were minor, students influenced teachers' behaviors and the environment of the classroom. Translated into the

college classroom, college students can also be considered equally capable of leading professors to alter their behavior. Higher education serves as a gatekeeper, largely maintaining the status quo (Miller et al. 1999). Still, as Arlton, Lewellen and Grissett (1999) suggest, a number of small changes can lead to larger structural change. Students themselves have the power to make small, effective changes.

To revisit Corsaro's (1997) study of the sociology of childhood, the author uses the phrase "interpretive reproduction" to describe the contributions children make both to the preservation of society and to its change. Previous sociological studies of childhood focused on socialization – children adapting to and internalizing society. In a deterministic model the child is passive, and it is society which appropriates the child. In a constructivist approach, children actively construct their world and their places in it by being active agents and eager learners. Corsaro (1997) argues that childhood is a structural form (like social class or age group) that influences children but is also able to be shaped by children themselves. Children give new meanings to adult behaviors through appropriation, reinvention, and reproduction (Corsaro 1997). They actively contribute to cultural production and change but are simultaneously constrained by the existing social structure and by societal reproduction.

Students have the power to both maintain and challenge the status quo. Even through small acts of individual agency, students can influence the larger structural system.

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Critical Consciousness

Education, particularly critical thinking and questioning the status quo, is frequently cited to remedy inequity (Friedan 1963; Freire 1971; Valian 1998, 2004; hooks 2010). The final stage in theories of cognitive development involve critical consciousness, higher-order thinking, and the ability to question and potentially refute the unquestioned acceptance of authority (Perry 1970; Belenky et al. 1986; Baxter Magolda 1992; Tyler 1992; Bain 2004). Critical thinking is integral to understanding the world as it is than how it is assumed to be.

In Freire's (1971) banking concept of education, knowledge is held by teachers and disbursed to students who then store those deposits of information: "The more students work at storing the deposits entrusted to them, the less they develop the critical consciousness which would result from their intervention in the world as transformers of that world" (73). Existing only as storage containers responsible for the mechanical memorization of information they receive, students lose critical consciousness. Students can be liberated from this pattern through action and reflection on their worlds (Freire 1971). This transformation, liberation from the status quo, requires critical consciousness on the part of the students. It requires students' questions and their voices. "Only dialogue, which requires critical thinking, is also capable of generating critical thinking. Without dialogue there is no communication, and without communication there can be no true education" (Freire 1971: 92-93).

Pascarella and Terenzini (2005) analyze research on students' critical thinking which overall concludes that exposure to postsecondary education has a positive effect on critical thinking skills and postformal reasoning in college students. Freire (1971) draws

attention to the importance of words and dialogue in the learning process and as a

consequence student voices and speech in the classroom are central to the process. Freire

would agree that all students are capable of and in fact need to speak, be heard, and

contribute to the process.

Challenge of Engaging Students in Critical Thinking

Belenky et al. (1986) revisit Paulo Freire's "banking concept" of education where

students accept deposits of information from teachers. The authors suggest that teachers

want to move beyond this information sharing type of teaching, but students are often

reluctant to do more than accept and store information. Students just want to listen and

take notes instead of truly engaging in the learning process. Belenky et al. (1986) suggest

the possibility that students are not given opportunities to see the thinking and learning

process that goes on behind what the teacher shares in the classroom. Even in classrooms

that encourage students' voices and new ways of thinking, teachers may inhibit students'

ability to truly engage in the conversation. Teachers come to class prepared with ideas;

therefore students only see the product of the teacher's thinking and not the process

behind it. Students value the teacher's knowledge and feel like they are vandalizing the

teacher's "property" by criticizing it (Belenky et al. 1986: 215). When teachers hide these

"imperfect processes of their thinking" students have little choice but to see the teacher's

knowledge as something only a professional could think up. Students may not feel

capable of questioning or criticizing what they learn in class.

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Students' Perception of the Classroom and Awareness of Gender Dynamics

The literature on classroom climate touches on students' own perceptions of the climate, with mixed findings. Allan (2006) suggests that many participants in classroom climate research are not accustomed to critically questioning gender norms or gender inequities. The "chilly" behaviors noted by Hall and Sandler (1982) can be considered socially acceptable and therefore continue without always being acknowledged (Sadker & Sadker 1994; Sandler et al. 1996; Valian 1998). Dube (2004) questions where students, both male and female, get their ideas about feminism, and she expresses concern that her students are not paying attention.

Given the covert nature of gender schemas and the social acceptance of differential treatment towards women, students are not necessarily trained to critically assess the gender dynamics of the classroom. Women may recognize sexism or unfairness on the macro level but fail to see the instances that affect them individually. Valian (1998) speaks of this as ignoring "the evidence of unfairness or to deny that what applies to women in general applies to them in particular" (165). It is impossible for there to be any discrimination on the macro or group level without there being discrimination on the individual level.

Students' Perception of Professors

Student evaluations of their professors offer further insight into the gender dynamics of the classroom. Much research has been done on the influence of gender in students' evaluations of faculty members, often with mixed interpretations of gender patterns. There is the question of whether student evaluations reflect actual performance

differences on the parts of the professors or whether evaluations reflect only the

perceptions of the students (Dukes and Victoria 1989). Some studies argue that student's

evaluations are influenced by gender, particularly the degree to which the professor's

personality meets or varies traditional notions of gender (Bachen et al. 1999; Miller and

Chamberlin 2000; Sprague and Massoni 2005; Laube et al. 2007). Evaluations can be

based on whether instructors meet students' expectations of gender roles. Other student

evaluation studies maintain that gender is not a major influence in evaluation (Bennett

1992; Feldman 1993, 1992; Freeman 1994).

Consistent with the concept of gender schema, students themselves hold their

professors to gender-specific standards based (Sprague and Massoni 2005). Student

evaluations assume that the same standards for scoring are applied regardless of the

subject at hand corresponding to similar behaviors and abilities across teachers (Laube et

al. 2007). If students have different baselines for evaluation, based on individual and

societal expectations, they are not reflected in quantitative methods. Likert scales fail to

grasp the depth of difference when the same numbers represent subjects being evaluated

by different standards.

While Basow (1995) found a difference in the ratings of female professors based

on the gender of the student evaluator, she also found that male professors' ratings were

not affected by student gender. Bennett (1982) argues that male and female students use

the same perceptual framework to make assessments of their professors.

Some researchers acknowledge that gender bias affects teaching evaluations but

in a complex way (Dukes and Victoria 1989; Feldman 1992, 1993; Freeman 1994;

Sprague and Massoni 2005; Laube et al. 2007). Gender effects on student evaluations

may be influenced by factors other than gender, such as student's mood when filling out the survey (Basow 1995), the difference in research methods (experimental studies versus studies of student evaluations from the college classroom) (Feldman 1992, 1993), other contextual factors such as grades (Laube et al. 2007), or factors unrelated to effective teaching such as course characteristics (size, level, elective or major course of study, subject matter), characteristics of teachers, and characteristics of students (Dukes and Victoria 1989).

Regarding students' perceptions of male and female faculty, all students found the climate in male professors' classes to be "chillier." Male professors made more offensive comments, we less approachable, provided less feedback and less support than female professors (Hall and Sandler 1982; Fassinger 1995).

Return to Role Conflict

Women tend to be evaluated on their sensitivity, concern, and other nurturing characteristics (Bennett 1982; Feldman 1993; Bachen et al. 1999). By being held accountable to gendered standards and responding to those, female faculty are in a position that requires them to exert more effort than male faculty for the same results (Laube et al. 2007). From their interviews with faculty and students at The Citadel, Siskind and Kearns (1997) present the issue of being in a "double bind" – the challenge of being traditional woman *and* playing by the boys' rules to be taken seriously. The double standard is that traits and behaviors that are acceptable for men are not as easily accepted in women. Female faculty teaching in ways expected of females (being nurturing, etc.) may not be appreciated by male students, but women who use masculine

approaches to teaching also criticized for not conforming to feminine standards (Siskind and Kearns 1997).

Women in the Workplace

The end of the twentieth century saw an increase in the research on women in the workplace, with a substantial amount of research on women's advancement as faculty in higher education. Gendered patterns in the workplace play out in ways similar to the patterns of men and women at the college level. Women find themselves in systems largely defined by and often dominated by men. Even though there is progress in gender equity, according to the research, women's professional advancement is still slower than men's (Valian 2004).

For women, gender is increasingly salient in groups dominated by men (Kanter 1977; Basow 1995; Valian 1998; Bachen et al. 1999). According to research on hiring practices, in job applicant pools with less than 25% women, women were judged more by their gender than by their background or ability to do the job (Valian 1998). Kanter (1977) articulates that in skewed groups with a high percentage of people from the dominant group (up to 85:15 ratio), people in the non-dominant group are perceived as symbols of their category rather than individuals. Data suggest that women will be more fairly evaluated if they make up at least 25% of the group; they will be judged as persons, not as representatives of their gender.

In higher education, women faculty face many issues similar to those faced by female students such as sexism and unequal power relationships between men and women (Bagilhole 1992; Miller et al. 1999; Chancellor's Committee on Women 2005;

Epstein 2007; Toth 2009); students' expectations of women to be nurturers and men to be

authority figures (Gilligan 1982; Chancellor's Committee on Women 2005; Toth 2009);

social attitudes towards careers for women (the stigma of working outside the home and

career tracking into traditional "women's fields") (Sutherland 1985; Landino and Welch

1990; Arlton et al. 1999); and starting and managing a family, negotiating romantic

partnerships, and choosing between career and family (Sutherland 1985; Gray 1994;

Arlton et al. 1999; Miller et al. 1999; Toth 2009).

Additionally, women in higher education are underrepresented in higher positions

(Rich 1979c; Sutherland 1985; Anderson and Ramey 1990; Valian 1998; Epstein 2007).

This disparity between men and women can be attributed to gender schemas, women's

lack of same-sex role models for women, and reproduction of the status quo. As

discussed earlier, gender schemas reflect the expectations individuals hold for men and

women, which affect the perception and evaluation of those individuals (Valian 1998,

2004). Often, women are forced to exert more effort than men just to be considered equal

to them, and having to prove that you are equal with peers by proving that you are better

than them is unfair and sets women up for failure (Valian 1998). According to

Bagilhole's (1992) findings, men have "natural access" to role models and support

systems because there are more men in senior positions. The university thus becomes an

influential boy's network where the informal support system influences men's career

success (Sutherland 1985). Despite advances for women, women still face multiple glass

ceilings as they face subtle prejudices by men in gatekeeping positions (Epstein 2007).

In education, particularly in the United States, the assumption is that success and

achievement are based on merit. It can be hard to understand the role of socialization in

the attainment of higher faculty positions. Because these limiting social practices are nearly invisible, women are faced with a "glass ceiling"; they have the opportunities to advance but are limited by covert operations (Flanders 1994; Arlton et al. 1999; Epstein 2007).

Woman-Centered University

Adrienne Rich's (1979c) "woman-centered" university incorporates women's perspectives and values into the academic discipline. An academic environment geared to the needs of women would include female role models in faculty and senior administration in proportion to the numbers of women receiving advanced degrees, and although gender would not be diminished, students would be recognized as unique individuals, judged by their abilities and who they are as students before they are judged by their gender (Duke University 2003). Overall, students would be held to high expectations of all students, and women would be taken seriously (Rich 1979b; Solomon 1985). The fact that so many authors reflect on what a woman-centered university would look like in the future clearly means that it has not yet been achieved.

Synthesis and Justifications

The premise behind gender schemas is that the expectations we hold of males and females influences our perceptions of them and informs how we treat them. This division based on gender takes precedence over other distinguishing categories (Bem 1981; Epstein 2007). While some research explores gender variations with categories such as race and ethnicity, class, or sexual orientation, this review has focused singularly on the

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differences based on gender. Similarly, Perry (1970) admits that his study neglects some variables, but his work focuses on a "common scheme of development" thus considering only the bare minimum of individual differences in personality, temperament, ability, sociology and personal history (206). Not to neglect or diminish these individual differences, the focus is on the interactions of students as students, not as representatives as members of demographic categories. By focusing on the future, our expectations or our hypotheses about behavior, people are often blind to the care and treatment of people in the present (Corsaro 1997). The aim is to understand college students in their present capacity as students and to explore the influence of gender on their experiences in the classroom.

Understanding Women

Hall and Sandler (1982) notably captioned the "chilly climate" for women – a climate that had been developing since women were first included in higher education. The report identifies ways in which women are treated differently (mostly by professors) and how this treatment inhibits their ability to learn successfully. The treatment of women in higher education does not begin or end there. Valian (1998, 2004) explores gender schemas as an integral piece to understanding women's advancement. Gender schemas reflect socially constructed understandings of the expectations for people based on their gender. Even across different social and cultural contexts, the expectations of women and men differ. Gender is considered a socially constructed category, but some researchers identify innate ways of knowing and approaching the world that are different for each gender category (Gilligan 1982; Belenky et al. 1986; Baxter Magolda 1992).

There is an interrelated cycle of understanding gender that involves real or socialized differences between genders, expectations and gender schemas, and the differential treatment of women in the classroom based on individuals' interpretations of those expectations.

Education, higher education in particular, has historically been a male-dominated arena, designed by men and geared towards masculine ways of thinking and working (evident in debate-style discussions and focus on the individual among other things). Women, who are more inclined to focus on their connection with others, are at a disadvantage in a classroom designed for a different approach (Belenky et al. 1986). Female students are also expected to maintain both feminine and masculine traits. Women are in the unique position of having greater flexibility to explore masculine traits but are also subject to criticism when their behaviors are too masculine (Case 1990; Sadker and Sadker 1994; Valian 1998). Women face the double standard of being expected to maintain feminine and masculine norms but risk not being respected if their behavior falls outside other's gendered expectations. The experience of role conflicts and incongruity with classroom styles contributes to the suppression of women's voices in the classroom.

Students' participation is integral to effective learning in the classroom, and consequently women's voices are important and relevant. Although research on the causes or the extent of differences between men's and women's behavior is inconclusive, women are more often the ones who remain silent in class (Thorne 1989; Sadker and Sadker 1994; Sandler et al. 1996). As a result women have less practice using the participation skills that they will use in the world outside of the classroom.

These patterns of women's silence and role conflict in the college classroom are similar to women's patterns of behavior in the workplace. In areas that have historically been dominated by men, women face differential treatment. Because these differences have become socially accepted, they are largely invisible. So although women have many of the same opportunities for jobs as men do, there are often subtle differences in how women are evaluated and in the socialization women receive that operate as a "glass ceiling" limiting women's equity in achieving those positions (Valian 1998, 2004; Epstein 2007).

Critical Thinking and Students' Own Influence on the Classroom Climate

Critical thinking plays an important part in shaping students' awareness and understanding of the behavior going on in the classroom (Freire 1971). Research on the classroom environment and gendered patterns of interaction is available as is research that assesses students' critical thinking abilities, but there is little research that demonstrates how students' critical thinking relates to their understanding of the classroom environment.

Research shows that students influence the classroom environment (Fassinger 1995, 1996, 1997; Corsaro 1997; Allan and Madden 2006). To look at the agency on the part of the students implies the relevance of students' influence on the environment. Students share in the shaping of the classroom climate, but the available research does not answer the question of to what extent do students understand the existing patterns and the patterns they are shaping.

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Studying Gendered Patterns of Behavior in the Classroom

The college campus is a site which serves as a microcosm of the larger social and cultural climate (Miller et al. 1999). The classroom itself can also be seen as a reflection of larger social patterns. A number of researchers support sociological study of the college classroom advocating that the classroom reflects the social context and behavior patterns of larger society (Solomon 1985; Canada and Pringle 1995; Sandler et al. 1996; Miller et al. 1999; Trowler 2005; Atkinson et al. 2009). Fassinger (1997) argues that in the research on college classrooms a sociological perspective is overlooked: students in classrooms constitute groups with norms and beliefs that may alter members' actions, particularly college classes such as small classes at liberal arts colleges where they "can develop cohesive identities" (22). In the fields of psychology and counseling, the premise behind group counseling is that within the artificially constructed group, individual members act in authentic ways that mirror their behaviors in real life groups (Yalom 2005). Although there are limitations, studying the college classroom would allow for a similar process: the behaviors of the students and instructors in the classroom reflect the patterns of the larger society. Studying student behaviors in the college classroom allows researchers to see how inequalities are created and reproduced, specifically issues related to gender and gender equity (Canada and Pringle 1985; Atkinson et al. 2009).

A number of studies have responded to Hall and Sandler's original report on the classroom climate, and the differential treatment of women is a relevant subject even thirty years later. Still, the classroom climate is changing dependent upon the students and teachers which comprise it, and it can be expected that the differences in behavior of

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men and women are changing as well. Therefore, continued study of the classroom will be relevant to understanding the climate at that moment in time.

Students' Awareness and Understanding

The research argues that gendered patterns of behavior exist along with differential treatment based on gender. There is a wealth of research on student evaluations and students' perceptions of their professors, but there is less available literature on students' understanding of classroom interactions and students' own contributions to the environment.

In the classroom students have different expectations and perceptions of themselves and other students. Some researchers make note of women's preferences for a classroom environment that focuses on relationships, dialogue between teacher and student, and the value of student experience is valued (Belenky et al. 1986; Bachen et al. 1999). Others identify differences in students' self-perceptions: males saw themselves as more confident and more involved; female students saw themselves as more prepared for class, more interested in the subject matter, and more interested in peers' comments and questions (Fassinger 1995). Still, limited research has been conducted on students' understanding of the gendered patterns of behavior that occur within the classroom.

Higher education as an institution and as social structure holds influence over student behavior, but as shown, students themselves have agency in the establishment of classroom norms and rules for behavior. What students say and do is relevant to understanding the college classroom. Presumably students are influential in

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understanding and changing the state of gender equity in the classroom and in the

professional world.

Research Design, Data and Methods

The data used in this study come from a combination of qualitative methods including classroom observations and semi-structured interviews of students in undergraduate courses at Lehigh University. The data I collected come from a single recitation section from an introductory level course (for which I served as the teaching assistant) and a breadth of observations of undergraduate courses across a variety of disciplines.

In answering the question of how do students perceive and understand gendered patterns of interaction in the college classroom, it is imperative that the research methods elicit information directly from the students. Sensitive to individual voices, qualitative interviews are frequently employed in the study of gender (Gilligan 1982; Belenky et al. 1986; Baxter Magolda 1992; Moore 1996; Townsend and Pace 2005; Josselson 1987, 1996). Specifically in the college classroom, Sandler et al. (1996) note the importance of students' voices in understanding the classroom experience stating: "If there is 'valid' evidence of the existence of a chilly climate, it must in part be in the words of the students who experience it" (6). To answer the question of student perception and understanding, in-depth analysis of one recitation section was conducted using interviews, along with surveys and evaluations, allowing students to express their individual perspectives in their own words.

To identify the patterns that exist in contemporary college classrooms, I systematically observed a variety of undergraduate classes. Previous studies also use classroom observation to answer questions about gender differences (Canada and Pringle 1995; Fassinger 1995, 1996, 1997; Townsend and Pace 2005; Constantinople 1988). Both

the in-depth analysis of the recitation section and the breadth of classroom observations were used to address the question of students' own contributions to the reproduction of gendered patterns.

Interview Participants

This analysis includes semi-structured interviews of students in a single recitation section within the introductory course, Introduction to Sociology and Social Psychology (hereafter "Intro to Sociology"). As discussed, college students' awareness and understanding of gendered patterns of interaction is rarely the subject of empirical research. Allan (2006) suggests that many participants in classroom climate research are not accustomed to critically questioning gender norms or gender inequities. Still, student perception is relevant given the prevalence of differential treatment based on gender and students' own contributions to its reproduction as previously discussed. The "chilly" behaviors noted by Hall and Sandler (1982) can be considered socially acceptable and therefore continue without always being acknowledged (Sadker & Sadker 1994; Sandler, Silverberg, & Hall 1996; Valian 1998).

The recitation section studied is one of eleven small, discussion-based classes within the Intro to Sociology class. Utilizing this course is both purposeful and convenient. As a course that satisfies requirements for the sociology major and minor as well as social science or diversity requirements from other academic disciplines, the Intro to Sociology course brings together students from all colleges of the university. The student composition of introductory courses closely reflects the demographics of the university at large. According to the Common Data Set for Lehigh University (2012), of

all undergraduates 30% are students of color and 57% are male. Based on observations of the Intro to Sociology course, approximately 23% were students of color and 50% were male.

Utilizing this course was also convenient because I was assigned to serve as a teaching assistant (TA) for this course. Each week, students in the Intro to Sociology course attended two 50-minute lectures conducted by the professor and attended one 50-minute small group recitation session lead by a TA. As the lead TA (with other leadership responsibilities in the course), I was assigned to lead one of eleven recitation sections. The other sections were divided among 3 other graduate TAs and one undergraduate teaching assistant. It is the recitation section which I led that is the subject of my research.

Frequently, research in college classrooms is conducted by outside researchers not directly involved with the specific classroom. Limited research is conducted by professors on their own students. In a unique experiment, Melanie Moore (1997) used her own Issues in the Family course (which included a guest lecture from a male professor) to identify students' unconscious evaluations of faculty of different genders. I found no studies where professors systematically studied their own students during the semester in which the researcher also served as their professor. Although there are limitations (such as instructor bias in grading or negative impact on students' classroom behavior after their interviews), I believe that my position as a researcher is enhanced by my simultaneous role as the TA of the recitation studied. In general, students expressed positive attitudes towards the interviews, and afterward, many said they enjoyed the experience of talking about what they saw in class. By interviewing students, I was able

to further build my rapport with them individually, which facilitated communication and learning in the classroom. As the TA leading the class, I understood my motivation in the behaviors I engaged in, and I was present to observe the other classroom behaviors students discussed in their interviews. My motivations and observations of the class, coupled with students' explicit comments, further informed my understanding of the patterns of interaction in the recitation section.

Although the entire Intro to Sociology class reflected the diversity of the university, this particular recitation was limited in its representation. The single recitation section was composed of 12 students (42% women, 58% men). Students represented all levels of seniority from first year students to seniors. Students were traditional college student age (between 18-24); one student volunteered that when he graduates he will have spent six years in college after attending a community college for 4 years prior to Lehigh. Although the Intro to Sociology course as a whole was diverse in terms of academic majors, the recitation I led consisted largely of students from the College of Business (including finance, accounting, and marketing majors). One student began the semester as an undeclared student (later declaring a psychology major), and another student majored in behavioral neuroscience. I did not explicitly ask students to identify their race or ethnicity, but the students in my recitation were almost exclusively white. One student identified as Asian. Besides the Asian student (who was from China), all recitation students were from the east coast of the United States, specifically Pennsylvania, New York, New Jersey, and Maryland [See Appendix A].

I conducted one-time, semi-structured interviews with all but one student in my recitation section in the last half of the fall semester. The interviews lasted between 45

minutes to an hour and a half, and they were all conducted in my office (a room on the top floor of the Sociology and Anthropology Department building shared by all the TAs). The interviews were audio recorded and transcribed. I began recruiting my students during the second to last week in October by discussing my research project during a recitation session and sending a follow-up email the class a few days later. I began conducting interviews the first week in November, and I was able to schedule 1-3 interviews per week through mid-December.

During the interviews, I loosely followed an interview protocol which I established myself [See Appendix B]. The questions were designed to gain a general understanding of students' observations, experiences, and motivation for participation. When I initially requested their assistance, I explained to my students that my research was about classroom dynamics – not specifically gender dynamics. In the interviews, I began with general questions about the classroom before directing the conversation to gender. The way I conducted the interviews was informed by the research of William Perry. Studying ethical development in college students, Perry (1970) advises researchers that students who have been asked to interview will reasonably expect to be directed by the researcher's questions instead of engaging an in open discussion as the research might desire. His remedy was to begin the interviews by briefly restating his interest in hearing from the student, asking for permission to record, and beginning the interview with the simple question: "Why don't you start with whatever stands out for you about the year?" (Perry 1970: 19). Each of my interviews began in a similar format with the introductory question: "What stands out to you about classroom interactions during recitation?"

The subsequent questions dealt with students' observations of interpersonal interactions, their expectations for student and instructor behavior in the classroom, reactions to specific incidents in the recitation, classroom culture, the influence of gender, and students' responses to the gendered participation patterns identified in existing research.

My Personal Approach to Interviewing

For each student, I assured them that I was more interested in the things that stood out to them than answering my prepared questions. I believe this allowed students to feel more confident in reflecting on their awareness and understanding of classroom dynamics. Because my students I were engaged in existing relationships, I treated the interviews more as conversations. While I kept my comments minimal, I still responded to students as I would if we were talking during class or in an office visit. I joked with them, used dry humor, and felt no hesitation in sharing my opinions or agreeing with students' statements. There were a number of questions I posed which asked students' to discuss the actions of their course instructors including me. In each interview, I told students that they should feel welcome to be critical of me (and at a separate time, reminding them that their input would not impact their grade). Generally, given the relationships I had with my students, I had the impression that they would be willing to express criticism of me, as they have during our recitation sessions. Overall, I attempted to make this interview an extension of my existing, open relationships with students.

Classroom Observations

While the interviews were used to understand the individual perceptions of the students in my recitation, I used observations of a variety of disciplines to identify the patterns which exist in the contemporary college classroom. Classroom observations were conducted during the fall and spring semesters of the 2012-2013 academic year [See Appendix C]. In the fall, I conducted observations during the last third of the semester presumably when each class was established in its norms and interaction patterns. In the spring semester, observations occurred after the second week of classes, in order to give the classes time to establish themselves and their individual norms and patterns of behavior.

The sample of classes observed were drawn from recommendations of instructors who would be willing, interested, or able to allow me to conduct a one-time observation of their courses. From my own networks in the Lehigh community – namely faculty members – I gathered recommendations for over 75 course instructors to contact for this project. I emailed the recommended instructors individually, and an email was distributed on my behalf to the faculty list for the Women, Gender, and Sexuality Studies department (which includes faculty from across the university). Overall, coordinating classroom visits with professors was fairly easy as the people I contacted often expressed sincere interest and willingness to help with a student's research. The courses I observed were selected based on the instructors' interest and availability and my availability as the researcher. During the last six weeks of the fall semester, I was able to schedule and conduct 7 classroom observations. In the spring semester I conducted 13 formal observations for a total of 20 observations.

For these observations, I followed my established observation guidelines, taking notes for the duration of the class session without audio or video recording. While single-researcher observations have the potential to be less reliable than those with multiple observers, I sought to keep my data collection consistent with the observation guidelines [See Appendix D].

As a former undergraduate student and as a current graduate student, I had my own routines of participation and my own lens through which I observed other students in class. While I do not hesitate to interject my own subjectivities – where I think they are warranted – I do want to be clear that my overall aim was to identify as objective an understanding of the classroom as a single researcher could. Specifically by following my observation guidelines, I maintained a more object lens than if I only paid attention to what I wanted to see.

The guidelines for how I managed my time during the observation were based loosely on the classroom observation protocol discussed by Katherine Canada and Richard Pringle (1995) in their study of classroom gender dynamics at a former all-women's institution. I spent time prior to the beginning of the class mapping out the room: identifying seating positions of male and female students, physical obstructions, and the location of the instructor. At the beginning of class, I introduced myself to each instructor before taking a seat at the periphery of the room. Some instructors began their classes without acknowledging my presence; others introduced me as a master's student who was observing the class for the day.

From the beginning of class onward, I wrote field notes related to the items on the observation guidelines: instructor behavior, student behavior, instructor-student interaction, and student-student interaction. I spent the classes writing notes, looking

around the room at individual students and the instructor. Generally I got the impression that my presence did not significantly change the class dynamic in any of the classes I observed (of course I cannot say with certainty whether it did or did not).

At the end of most classes I thanked the instructor, and they often engaged in a few minutes of conversation by asking questions about my project. For some observations, professors volunteered their own perspectives on the class, the students' awareness, and the professor's own motivation for their behaviors. These extended discussions (5 in total, all female professors) lasted between 15 to 30 minutes after the class ended.

My aim in the classroom observations was to identify existing patterns of behavior including common occurrences and notable differences. For the interviews and surveys, my goal was to establish what gendered patterns of interaction exist in the college classroom and to identify students' interpretations of these interactions. By comparing the patterns and themes found in data from all sources, I was able to compare observed classroom behaviors to the thoughts, actions and awareness of individual students. Individual perspectives and existing behavior patterns were compared and contrasted as a representation of college students in undergraduate classrooms.

Results and Analysis

Investigating students' understanding of the college classroom requires awareness of the existing practices as well as students' own interpretations. From my one-time observations of 20 undergraduate college classes, I was able to get a glimpse into the behaviors that occur in a breadth of college courses. Largely, my observations were intended to serve as comparisons to how students themselves described classroom interactions. To elicit students' own understanding of existing patterns, I asked explicit questions in the interviews about their participation in class, motivation behind their own participation, and what they think motivates others to participate. I also asked the interviewees themselves to identify patterns of behavior they saw in the classroom.

Building on the gendered accounts identified in previous research, I maintain that there still exists gendered patterns of behavior in the contemporary college classroom. My interpretations of the contemporary classroom are based on common occurrences. While there are exceptions, my categorizations reflect commonalities in class participation and student perspectives, and I argue that my observations are suggestive of broader patterns in existence across similar college classrooms.

Overall, I conclude that gendered patterns contribute to inequality in class participation – an arena which students presume reflects equitable access. From students' own discussions, there exists an underlying adherence to a narrative of individual agency, which impacts how students see inequality in the classroom. In the classroom, female students appear to invest substantial effort into their academic appearance and participation while male students' participation appears effortless. The observed gendered patterns in today's classroom are embedded in everyday, accepted behaviors, and

students themselves are unaware of exactly how or why they behave in those ways. Students help maintain existing patterns, contributing to their reproduction unaware of the potential influence of students' own individual agency.

First I address the theme of efficiency evident in students' discussion of the classroom. Next I introduce the commonly repeated notion that students speak when they have something to say, arguing that this suggests a narrative of individual agency. I then explore differences in the patterns of female students and males students suggesting that women maintain an overt conscientiousness in the classroom while male students' behaviors reflects an effortlessness less evident in women's behavior. From the data collected, I identify that women's behavior in today's classroom closely mirrors the behaviors recorded in earlier research. This evidence – coupled with students' own explanations of their behavior – supports the argument that student participation still operates within gendered constraints identified in earlier research on college classrooms. Furthermore I explore particular factors that motivate student participation, specifically confidence, intimidation, and willingness to express vulnerability. Lastly, I address evidence of the embedded nature of gendered patterns by discussing students' awareness of existing patterns and gendered expectations, and I discuss how students themselves contribute to the reproduction and maintenance of these behaviors.

Efficiency: Getting the Right Answers

One of the concepts repeated in both interviews and observations was the theme of efficiency, specifically students' underlying goal of achieving the "right" answers. Most students I interviewed (9 students, 82%) were studying in programs within the

College of Business (accounting, finance, and marketing – programs which often focus on improving the bottom line). But I saw this desire to get the "right" answers even among students outside the business school. This attitude is commonly understood by the faculty, staff, and students to be a part of the culture at the university: students aspire to get good grades, they want to know what will be on the test, they want to know the requirements to get an "A," and they will strive to meet those requirements in order to meet their goals.

All the students I interviewed discussed some aspect of using class time in order to get the "right" information and using that information to get it right on the test. Further illustrating their interest in the bottom line, at least three of the students I interviewed explicitly asked what I needed them to tell me in order to get what the results I wanted. I assured students that I wanted their genuine opinions and observations – not any particular statements. Still, as students discussed their class behavior there was an underlying focus on the end result. Students saw the class period – specifically recitation – as the time to get the information that would be on the test. Often, they expressed less value in what peers had to say; rather they wanted to get the "right" answer from the book or from the instructor.

At the same time, students agreed that the classroom served as a place to share their ideas and to learn by participating. All students I spoke with identified some value in exploring ideas during class time in order to further individual understanding (most often for their own benefit rather than making comments to benefit others' learning). One of the male seniors from my recitation, Miles, noted that for the Introduction to Sociology class particularly, he "needed" to ask questions in class in order to learn for himself. The

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material from the book left him unsure, so Miles used class time to ask questions and make mistakes. He saw the purpose in participation as a means to get the correct information about the subject that he could not gain on his own. Additionally, two of the other male students I interviewed suggested that knowing the material beforehand would be reason *not* to participate in class. They saw the value in using class discussions to learn the material, but these male students also questioned why they should participate if they already know the material (which as I will later illustrate is a decidedly different approach from how female students understood class participation).

Another thing students understand about participation is its impact on their grades. Both male and female students noted numerous classes where they participated because participation was a part of a final grade. David, another male senior, admitted the following about his participation in recitation (where participation is part of the grade): "I try to get some clarification if I'm confused, but normally I try to make sure I say something in every class, so it's obvious that I am participating." Prior research on classroom participation posits that one way to increase student participation is to attach a grade to it (Fassinger 1996). While the impact on final grades was not the only reason students participated, in all but two interviews students commented on how they would be sure to participate (ask a question, give an answer) just in order to get the participation credit. For many students, class discussions and class participation served as a means to an end: to get the right information or to at least get a good participation grade.

Having Something to Say

In terms of students' understanding of class participation and students' motivation to participate, nearly all the students I interviewed (10 students, 91%) suggested that those who participate in class are the ones who "have something to say." This idea – that students participate when they have something to contribute – is a notable theme across interviews and observations. On the surface, students accepted class participation as a reflection of their individual agency: simply, a student has something to say (i.e. information to share, questions to ask), and the classroom serves as a venue in which to exercise that agency.

In their interviews, students identified overt patterns in how students participated in the classroom. Female and male students both agreed that male students tended to be more outgoing. Miles, noted:

> I think guys are more likely to talk over each other, blurt things out. …Girls are - in classes I've been in - seem more willing to wait, and then they'll raise their hand, instead of just blurting things out in conversation.

All students noticed that male students were more willing to jump in to class discussions while female students were more inclined to wait and raise their hands to speak. A common pattern students identified was that women responded or replied after someone else spoke first. "It's usually if one of the guys says something and the girl has a comment" said Juliet, a senior finance major.

When asked to speculate about reasons for differences in class participation ("why are some students more likely to participate than others?"), the students I interviewed suggested other individual factors: a student's own personality, self-confidence, or confidence in their own knowledge. Students agreed that along with

"having something to say," an individual's personality[1] was also one of the strongest

factors in a student's participation in class. There was an understanding, among men and

women alike, that student participation in class was largely dictated by the type of person

a student was (whether they were outgoing, liked to talk, or quiet and introverted). Two

of the female students I interviewed – both first year students – noted that when they

knew the answers, they saw nothing that inhibited them from talking in class. Charlotte

put it bluntly: "Nothing stops me from answering a question if I know the answer." To

the students I interviewed, class participation – at least on the surface – was a reflection

of an individual's internal drive or individual attributes.

Especially among male students, there was also an expectation that all students

should feel comfortable participating in class. James, a male senior, articulated his

expectation that all students should be accustomed to learning in coeducational

environments. As he said in his interview, James assumed that most students at the

university came from coeducational high schools, so they "should be used to it."

Interestingly, James admitted to being close friends with Juliet, a female student who

previously attended a single-sex high school, but he never reflected on her experience.

James said he would be comfortable participating in a class filled with girls, and he

articulated his assumption that the reverse would be true as well. Other male students

expressed a similar view that they felt comfortable participating in mixed-sex classes, and

they assumed female students felt comfortable, too[2]. Of the four female students I

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[1] While I explicitly asked if they thought personality was a factor in participation [see Appendix B], five students (45%) brought up personality before I mentioned it.
[2] There were two male students who noticed female students participated more in classes within academic disciplines that have higher percentages of women, but they did not speculate about women's comfort levels in participating.

interviewed, one insisted that she always felt comfortable participating in any class (and based on her active participation in recitation, I had no evidence to disagree with her). But the other three female students offered multiple, external factors (discussed below) that limited their comfort level in class and consequently limited their participation.

Within their discussions about participation, students relied on a narrative of individual agency. There was an underlying adherence to the idea that participation depended on what individual students had to say or what their personalities (or confidence levels) internally impelled them do. By assuming that all students should be comfortable participating in class, students neglect the impact of larger structural factors that limit participation. What students struggle to see is that beneath the surface there are invisible structural constraints that students themselves work within when it comes to exercising their individual agency.

In this research I explore the impact of gendered constraints, specifically gendered expectations. These gendered expectations are included within Valian's concept of gender schemas, but I focus on the expectations that individuals hold for women. Among other things, this can include the expectation that the work women do is less valuable that the work done by men (Hall and Sandler 1982; Sandler et al. 1996; Moore 1997; Valian 1998, 2004; Miller and Chamberlin 2000) or that women in higher education will still conform to feminine norms (Duke 2003). I argue that participation in the college classroom is not simply about having something to say and each and every student experiencing an equal chance to contribute to the classroom. Students operate within gendered constraints that are often unacknowledged and can have a negative impact on

student learning. While students easily recognize overt behaviors, they may not grasp the strength of influence that goes on beneath the surface.

Treatment from Their Professors

One external factor that impacts students' participation is the treatment from professors in the classroom. While Hall and Sandler's (1982) report emphasizes the professor as a significant factor in the classroom climate, subsequent studies highlight the importance of other social context factors. In this research I consider professors' actions to be part of the structural constraints that can limit student participation. This research will not address all the data I recorded on professor-student interactions, but I would like to include some key messages elicited from my interviews and observations. Particularly I intend to illustrate continued students' adherence to a narrative of individual agency despite evidence to the contrary.

Based on the professor-student interactions I observed, the patterns of behavior reflect previous research but also patterns that illustrate more equitable treatment of student. Overall, I saw little overt gender discrimination. Professors praised and gave feedback to male students; professors praised and gave feedback to female students. Professors interrupted women; professors interrupted men. I saw female professors who ignored female students that had their hands raised and older professors who referred to female students as "lady" and "sweetie." I also saw professors who asked higher order thinking questions of women, professors who ignored male students who had raised their hands, and professors who called all students by their names.

When asked about professors' behavior in the classroom, nearly all the students interviewed began by saying their professors treat students the same. Over the course of the interviews, they each articulated differences – even small ones – in professors' treatment that could negatively impact the experience of some students over others. Students expressed an awareness of how professors adjusted the treatment and feedback they gave individual students in both positive and negative ways. For example, most of the students I interviewed (9 students, 82%) noted that in recitation, I made sarcastic statements to some students who appeared receptive to it but not to others (such as the international student who explicitly said he often does not get the jokes). All but one of the students I interviewed identified professors who treated students differently, based on the student's personality, interests or needs.

Some students, however, also noticed more drastic – and negative – differential treatment. One female student spoke about a finance professor who played "favorites" by asking more questions of the male students who expressed an existing interest in stocks and bonds (and posing fewer questions of female students who did not express the same interest beyond the classroom). A male student described an accounting professor who gave the accounting club president special treatment: not punishing her for cheating while punishing other students for the same infraction. The latter example was less common in students' discussions, but there were a few examples of extreme differential treatment. In fact, Miles used the term "refreshing" to describe a professor who verbally expressed the same expectations of all students to do their homework and answer questions in class. To describe equal treatment as "refreshing" implies that in some situations, differential treatment is still an issue.

To return to the larger point of students' narrative of individual agency, students initially claimed that their professors treated all students fairly, implying that every student had a fair chance to speak and to learn in class. But, as evidence from classroom observation and from students themselves illustrates, professors do engage in behaviors that benefit some students over others. For the female finance students who were asked fewer questions by their professor, they were potentially limited in the number of opportunities to speak when they did "have something to say." Differential treatment by professors in the classroom can impact students' opportunities to contribute resulting in a climate where individual agency is not the only factor in student participation.

Female Students' Overt Conscientiousness

In a qualitative study of British lecturers' perceptions of student gender, Francis, Read, Melling, and Robson (2003) caption a narrative of "female conscientiousness" reflecting female students' patterns of avoiding errors and using evidence to support their arguments. In my own research, I find this an appropriate phrase to describe the careful patterns I observed among female students' classroom behaviors. Additionally, Francis et al. (2003) offer a counter-narrative of "male carelessness," drawing specifically on the expectations of sloppy, rushed, and unpolished essays authored by male students. Contrasting the socially-constructed expectations of female students' conscientious work against the haste and carelessness associated with male students, the authors nod to Bourdieu and Passeron's (1977) suggestion that "the academic ideal is one of 'effortless achievement'" (Francis et al. 2003: 366).

As the Duke University (2003) report acknowledges, female students – unlike male students – are driven to perform "effortless perfection:" balancing the pressure to meet socially accepted ideals of femininity yet maintaining academic success "without visible effort" (12). Based on their gender, male students are in a position of historical advantage in education[3]. Even through contemporary gender schemas, male success is attributed to their skill or ability, while female students' success is attributed to luck[4]. Consequently men are less likely to be aware of the benefits of their gender, and women need to conscientiously work harder than men to just be perceived as comparable[5].

I argue that women invest a substantial amount of effort into their academic work and maintaining their academic appearance in the classroom. This conscientiousness is evident in women's classroom behavior that I observed and that which I discovered through students' own discussions of their behavior. I hesitate to describe men's behavior as "careless"; rather I argue that in contrast to women's conscientiousness, male students' behavior can be perceived as "effortless." Female students' conscientiousness is evident in their appearance in the classroom, their preparation, their attention to detail and disruption, and in the theme of women's sacrifice.

Academic Appearance

As briefly mentioned earlier, in terms of academic participation, women most often raise their hands to answer questions and wait to be acknowledged by the professor before speaking. Of the students who brought computers to class (to type notes or follow

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[3] Thorne, as cited in Baxter Magolda 1992; Duke University 2003
[4] Hall and Sandler 1982; Sadker and Sadker 1994; Sandler et al. 1996; Valian 1998
[5] Hall and Sandler 1982; Sandler et al. 1996; Moore 1997; Valian 1998, 2004; Miller and Chamberlin 2000

along with Power Point presentations), most of the students I observed doing these things were female. During class and lectures, women regularly had notebooks, papers, pens, folders, water bottles, and textbooks out on their desks. For example, as I sat in the back of a large lecture hall for an introductory level course (95 students, 44% female)[6], I saw one female student sitting alone with an open textbook on her desk, a notebook open to a fresh page in front of her, a calculator to her right side – the cover placed at the back so she can easily start typing at any moment, and other papers with notes on them sitting to the left of her textbook and more underneath. Seeing a female student ready with materials on the desk in front of her was common in classes of any size. For the same class, I commented in my field notes that I did not see any women without notebooks or computers, but there were multiple male students staring at the professor without any materials in front of them. In another lower-level class (22 students, 36% female), I noted that nearly all the female students wrote in their notebooks, especially when the professor wrote something on the board; only three or four male students did the same. My understanding was that women appeared to be attuned to how academically prepared they appeared in the classroom.

Female students consistently presented themselves as organized, attentive and academically serious. As Miles said in his interview, women are the ones who "are really organized with titles on their binders and notes [that] are really, really neat and color coordinated." He would never expect a male student to do that; he sees male students as more casual in their classroom behavior.

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[6] Student totals and percentages reflect the data from the day I observed the class

While I argue that women were conscientious of their academic appearance in the classroom, I will also briefly reflect on their physical appearance. For five of the first seven classes I observed, students' clothes and physical presence stood out to me much more than I had anticipated. Without diving too far into the gendered standards of fashion and beauty (or the relation to social class or cultural), I will say that from class observations across the school year, my overall analysis is that women tend to be "dressed up" or look "put together" more often than male students. Men commonly wore jeans, t-shirts, sweatshirts, university-related sports apparel, sweaters, button-down shirts, and khaki pants. In most classes, this is what I saw 85-95% of the men wearing[7]. Women who wore sweatshirts and t-shirts only accounted for about 20-40% of the women I saw; the rest were more "dressed up" wearing knee-high boots, sweaters, blazers, scarves, make-up, and patterned clothes that coordinated with other items in their ensembles. On multiple occasions I recorded in my field notes general impressions that female students appeared to be "polished" or "well dressed." Overall the male students did not strike me as disheveled, but there were fewer instances where I recorded that male students looked "put together." While my brief observations of students' physical appearances cannot fully explore the underlying social expectations (that impact students or impact my own bias as a woman), they do illustrate that appearance is one more aspect within the realm of women's conscientiousness. More often women's physical appearance reflected a careful attention to detail that was not as evident in men's.

Prior research on gender and education discusses women's challenge to achieve an ideal image of what it means to be a female student. There is an internal conflict that

[7] I did not formally record detailed inventories of students' clothes for every class; these statistics come from 14 classes where I did record student apparel.

women face as this socially-constructed image of a female student requires maintaining

both feminine attributes as well as masculine traits (Komarovsky 1985; Brown and

Gilligan 1992; Bachen et al. 1999; Duke University 2003). In my observations of the

college classroom, women exhibit an image that is both academically serious yet coupled

with feminine aspects such as the preservation of a feminine physical appearance.

Women appear conscientious in their appearance in the contemporary classroom, which

echoes the behavior female students exhibited in earlier classroom research that was

driven by constraints related to society's perception of gender.

Preparation

Women's participation was closely linked with their preparation further reflecting

their conscientiousness in the classroom. As students themselves noticed, male students

often speak first in class, and female students follow with comments later in the

discussion. Many of the instances where women were first to volunteer were situations

where they had clearly prepared their comments beforehand. At the beginning of an

upper-level management course (19 students, 21% female), it was a female student who

immediately volunteered – and was the only volunteer – to share a "ditty" (so called by

the professor: a prepared response to an article about current events in business). In other

courses, female students were among the first to respond when asked to share what they

prepared during an in-class writing period or when asked to share their responses from a

graded assignment that was handed back during class.

When participating, the female students I interviewed identified their need to

know the answers before speaking in front of the class. The female students in my

recitation said they themselves came to class prepared beforehand (i.e. read the material, taken notes, listed questions), and they had an understanding of the material being covered. The four female students I interviewed all repeated this need to be prepared, and I saw evidence of their preparation during our recitations (as well as similar behavior from the female student whom I was not able to interview). These women said they would ask questions but only when they already had an idea of what the answer would be. Juliet said she needed to be 90% sure she was right before answering in class. Unlike the male students discussed earlier who used the classroom as a place to learn the material, these female students needed to be prepared *before* they would participate. Kate, a marketing major, named recitation specifically was a place where she could get feedback or have her ideas "backed up" by the teaching assistant. Kate used the classroom to find confirmation of what she has already thought of or learned.

Although women were not commonly the first students to speak in class discussions, female students were likely to introduce thoughtful comments and opinions well into the class discussion. I frequently saw female students participating later in class discussions such as the two women in an English class (24 students, 79% female) who had not spoken for the first three quarters of the class both shared insightful comments and personal reflections towards the end of the class. I did not consider myself capable of evaluating the quality of student comments across all the disciplines I observed (nor did I attempt to systematically record indicators of quality or "value" to the conversation). But for many student contributions – from both men and women – I did note verbal and non-verbal cues that could be interpreted as indications of quality. In an upper level sociology course (25 students, 40% female), multiple students responded to the discussion prompt

with their own reflections, but it was a female student who referenced specific academic

influences in her response when she participated later in the conversation.

Moreover, female students may not have been the first to answer, but when they

did speak, they often shared the correct answers. In an introductory economics class (95

students, 45% female), the professor asked students to identify the letters that

corresponded with positions on a chart projected at the front of the room.

> Professor: "Under a tariff, what is a producer surplus? Volunteers? Gentleman on the aisle?" *(calling on the only student with a raised hand)*
>
> Gentleman on the aisle: "A, B, D, and E?"
>
> Professor: "No. ...gentleman in the grey sweatshirt?" *(again, the only student with a raised hand)*
>
> Gentleman in the grey sweatshirt: "A, B, D, and C?
>
> Professor: "No. other volunteers?"
> *A male student in the same row as the previous responders raises his hand. He makes eye contact with the professor before responding.*
>
> Male student: "B, D, C, G?"
>
> Professor: "no."
> *The professor looks towards the other side of the room and calls on the female student on the aisle who raised her hand.*
>
> Female student: "C and G."
>
> *The professor returns to the front of the hall and points to the diagram*
> Professor: "The producer's surplus is C and G."

After three male students attempted to answer the question, it was a female student who

offered the correct answer. From my perspective – and without speaking to the students

themselves – I had no way of knowing whether she knew the correct answer all along or

whether she learned from the previous speakers' mistakes. I speculate that female

students, in this and similar situations, used their time to think about their answers before volunteering. Additionally, I speculate that the female students used the previous speakers' mistakes to their advantage. For women, it may take time and careful thought before sharing their ideas in front of a class.

Continuing the ideas expressed in previous research that female students negotiate the balance between masculine and feminine traits, women's preparation in the contemporary classroom reflects women's conscientious awareness of their appearance. To return to Valian's (1998) concept of gender schemas, people form hypotheses about men and women based on what they see and expect, and they treat men and women according to those expectations. As addressed in the discussion of prior research, female college students in the twenty-first century who feel obligated to conform to feminine norms have been shown to downplay their intellectual abilities (because academic achievement is associated with masculine performance) (Duke University 2003). Unlike earlier research, the women I interviewed were not explicit about actively downplaying their intellectual abilities. Still, there is evidence that women are conscious of their classroom appearance, and all the female students I interviewed expressed concerned with how their intelligence was perceived. This internal role conflict may still be at work today, and as a result, women's attention to preparation and unwillingness to risk offering incorrect answers can be interpreted as behavioral adjustment based on gendered social expectations. In my discussions with female students themselves, they did not explicitly articulate these reasons, but most of the women also did not provide other explanations for their behaviors.

Attention to Disruption

Female students also expressed conscientiousness through their acute attention to classroom details. Based on my observations alone I cannot speak conclusively about students' internal awareness, but I can comment on students' visible reactions as a reflection of their attention. One thing I routinely noted was women's responses to classroom disruptions. Whether it was large lectures or smaller discussion-based classes, there were numerous incidents that could have caused disruption to the class and many that did. In all classes I recorded incidents of student-produced disruptions and physical movement in the classroom (entering the room after class started, moving around and leaving during the class). Students' involvement in these disruptions and students' physical responses to these events were noticeably divided along gender lines.

I observed both male and female students entering the room after class began and reported both genders moving around the room and leaving during class. In my records, I noted comparable numbers of the times male and female students left class (10 for male students; 14 for female students). From my records, however, I noted that male students were nearly twice as likely to arrive to class late (35 instances of male students arriving after class started; 17 for female students). While I did not exhaustively record arrival times, most "late" students arrived within the first ten minutes of class, but there were a number of student entries that occurred far later (and hence more noticeable to an observer) such as the male student who entered an economics lecture 35 minutes after class started or two male students who arrived at a sociology class 45 minutes after class began (missing more than half of the 75 minute class). I have no record of female students entering a class later than 20 minutes after the course began.

When students did move around the classroom or leave the classroom, female students' behavior reflected a conscientious awareness of their disruptions to the class while male students' behavior did not reflect a similar concern. When male students moved around the classroom, they often did so at the same pace and volume as the movements they made at the beginning or end of class. In one English class (17 students, 59% female), a male student left the classroom letting the door slam shut behind him, and when he returned, he opened the door with a reverberating sound. In the same class there were two female students who left class and returned; both stood up and walked more slowly than their earlier movements (entering the room before class started). Both closed the door slowly behind them as they left and opened the door slowly and quietly when they returned. One of the women even ducked down as she walked between the professor and the screen at the front of the room. While I use this example to illustrate the contrast of men's and women's attention to disruption, this example also reflects what I routinely saw in classrooms: female students adapted their behavior, limiting potential disruption and male students maintained their normal routines. Female students exhibited conscientious behaviors related to their own potential disruptions to the class.

Female students also showed attentiveness to disruption caused by others. I recorded over 15 instances where cell phones interrupted the classes I observed. A majority of the time (in all but two times), female students were physically attentive to the disturbance; I only observed male students physically respond to three or four instances. When a cell phone vibrated in one upper-level classroom, the male students nearby made no physical attempts to see if it was their phone, but the female student picked her bag off the floor to look inside. During a business class in a large lecture hall,

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a cell phone rang for 12 seconds, and four or five female students looked at each other questioning where the phone was; the male students nearby did not change their physical positions. While I observed an electrical engineering course, I made a noise turning the pages in my notebook. None of the male students or the professor physically responded to my noise, but the female student (sitting in one of the seats furthest away from me) turned her head towards me. Although there were exceptions, it was most common to see female students who were the ones most attentive to these disruptions caused in class.

Additionally, in my interviews, I noticed a pattern in the depth of female students' perception of classroom interactions. The female students I interviewed noted not only the loud, common, or obvious behaviors but also less obvious or absent behaviors. Shannon, a first year student, mentioned how the girl who sat next to her did not talk in class but clearly knew the answers, and she physically reacted when she had an opposing opinion to what the rest of the class was discussing. Shannon compared the female student's subtle behavior to the overt actions of David, one of the male seniors in the recitation. David was more reserved than most of the other male students in the class, but he still verbally expressed his differing opinions by raising his hand or speaking up during the discussion. As previously discussed, students noticed that male students were more willing to just jump in to class discussions while female students were more willing to wait and raise their hands to speak. In their interviews female and male students both agreed that male students tended to be more outgoing. But in most of the interviews with female students (3 students, 75%), they articulated an awareness of specific, less obvious student behaviors. In interviews with male students, they also addressed less obvious behavior, but instead of naming specific instances they had seen, male students often

speculated about what *could* happen. Both male and female students were aware of the most overt behaviors in the classroom, but female students also expressed an awareness of more covert behaviors or behaviors that were not taking place in the classroom.

Earlier research suggests that as women negotiate the balance between masculine and feminine traits in their behaviors as students women confront the expectation to be "nice girls" concerned with pleasing others (Rich 1979a; Gilligan 1982; Belenky et al. 1986; Brown and Gilligan 1992; Tidball, Smith, Tidball, Wolf-Wendel 1999; Valian 1998). My observations of women's attention to disruption in the classroom are suggestive of this concern for others. Women's actions in the classroom reflect an awareness of others and attention to the disturbances that female students themselves could potentially cause. Again, this mimics the behaviors identified in earlier classroom research which argued that women's behaviors were limited by socially expected behaviors.

Women's Sacrifice

Another theme I found in women's behavior – less common than other behavioral aspects but which also reflects women's concern for others – is the act of sacrifice. In my observations, I noted multiple ways in which female students sacrificed themselves, which I did not see in male students' behavior. For example, in instances where multiple students were talking at once, it was female students who verbally offered to defer to the other students: "You go ahead." Female students visibly expressed a concern for other students. In an upper-level literature course (17 students, 59% female), after seeing that multiple students raised their hands when she was called on by the professor, Naomi

explicitly volunteered to shorten her response to allow time for others to speak. In another English course (24 students, 79% female) when a female student was called on and spoke first out of a group of students with their hands raised, I noted that the male student who was called immediately after her spoke for at least twice as long as she did. Although I cannot say for certain that the first female student shortened her comments to accommodate the others, I can describe what I saw: the male student who spoke for at least twice the amount of time as the first student, and he continued speaking while a female student close to him kept her hand raised. So although there were other students waiting, the male student continued his discussion. These examples from class observations illustrate how female students expressed a concern for others and a willingness to make accommodations. In many cases, this translated into shortened comments for the female students.

Women were also the ones who went out of their way to help others. In a small senior seminar, the professor was coughing 2-3 times in each sentence she spoke to the class. A female student across the table from me pulled out a bag of Halls and offered them to the professor, "If you need one." The professor responded, "I think I have one" and proceeded to pull out her own bag of Riccola. Both the student professor laid their bags of cough drops on the table, and they remained available until the class took a break.

Another example of women's sacrifice comes from a group of engineering students that were working together on a group project. After informing students that their next regular lecture would be cancelled, the professor told the group (6 students, 67% female) that at least one member would have to attend the presentation being held in place of the lecture. At first, no one volunteered to attend the presentation, and the group

entered into a three minute discussion about who to send to the presentation. In jest, one female student asked if they were going to draw straws. Finally,

Nikki: "I can sacrifice myself and attend the presentation on Thursday."

Professor: "You're all like martyrs."

Male student: "So when's assignment 6 due?"

Although not all women behaved like this, these helping and accommodating actions were regularly done by female students, often with male students disregarding the sacrifice entirely. One of the students I interviewed even commented on male students' disregard in the classroom. Based on her observations, Juliet noted that she expected male students not listen to what women say in class. While women may listen to what other students say, male students are not careful in listening to what women say in the classroom. As Baxter Magolda (1992) addresses in later stages of her Epistemological Reflection Model, female students often engage in interindividual learning valuing both her own ideas and the ideas of others, but male students tend to use individual knowing, valuing the individual's own thinking over that of peers. Not only does the behavior of male students reflect little impact of factors such as gender composition or professor-structured participation – male students easily navigate the classroom sharing what they want, when they way – but there is little expectation that male students will intake the ideas of others. In the case of the engineering students, one woman volunteered to sacrifice her time for the group's benefit, and immediately afterward the male student was ready to move on and talk about upcoming assignments. These examples reflect a small number of observed instances of female sacrifice. Still, I maintain that these are suggestive of larger patterns that could be observed across disciplines.

Having something to say

To return to students' original idea that the students who participate are the ones who have something to say, the evidence from my observations and the students themselves does support this notion. Female students *do* speak when they have something to share. Still, there are unacknowledged limitations that impact female students making women's decisions to participate not only about whether they have something to say. Female students who do have something to say may be limited in their ability to say what they want at risk of altering their perception in the classroom. These limitations manifest themselves in women's conscientious behavior: maintaining an academic appearance, need to be prepared before contributing to the class, being attentive of their own classroom behavior, and their sacrifice.

Even though women appear conscientious of their appearance in the classroom, women's classroom participation does not nearly reflect the depth of effort that female students undertake. The extent of calculated effort and energy that goes into female students' participation often goes unnoticed by other students. Additionally, women's behavior in the contemporary classroom mirrors behaviors identified in earlier research on gender and education, which suggests that some of the gendered expectations relevant in earlier literature may also be relevant today.

Male Students' Effortless Participation

While women were more inclined to abide by unacknowledged limitations with regards to their participation, male students' behavior reflected fewer limitations. Male

students expressed more inclination to participate whenever they wanted to talk, and they participated despite the socially constructed constraints. Specifically, I address both men's and women's responses to limitations of gender composition and the academic structuring of the professor. In their classroom interactions, male students were less likely to limit themselves and their participation by adhering to these social constraints, and their behavior appeared more effortless in its approach.

Talking When They Want to Talk

I observed male students who spoke during class, and I regularly interpreted their contributions as examples of wanting to talk. One male student, Charlie, was present in two of the classes I observed. He stood out to me as one of the more vocal students based on how he frequently volunteered answers and shared opinions related to the texts. He also stood out because he offered more non-verbal attention to students and professors than other students in either class (frequently nodding his head in agreement or giving quizzical looks while others were speaking). Often, Charlie's comments lead to a change in direction for the class discussions. In my field notes I reflected on my impression of Charlie and how none of his words or actions seemed to be directed towards lessening the input of other students; rather his comments seem to reflect his desire to share his own thoughts, not overpower others.

Another passage from my field notes illustrates the motivation of one male junior, Walt, and my perception of his interview combined with my observations of his class participation:

Walt is very willing to interject his own opinions, and he is true to his word that he *"likes to talk."* He also takes risks in the classroom. He will speak and volunteer answers, even when he clearly did not read the text. (He was first to raise hand to respond to my questions, but in my feedback to him during class, I pointed out multiple points that were already raised in the chapter - indicating that he had not read). *"I just like answering questions, I like saying what I feel about things, you know. If people don't want to say how [they] feel, I don't care, but why not try to input how I feel into the conversation?"* He wasn't fazed by doing something embarrassing, and he was not afraid to put "something" out there even if it wasn't correct.

The behavior I observed from Charlie and Walt illustrate one of the most common perceptions of male students in the classroom: if they have something to say, why not say it? My interpretation of these students (and some of the other male students I observed) is that they expressed an interesting in wanting to talk.

In both their interview discussions and in practice, the male students from the recitation I taught expressed an inclination to share their ideas even if they were not prepared or even if they were not sure they were right. Starting off with the right answer was not important to these male students. They participated, said what they wanted to say, and learned the right answer through the discussion or when the professor corrected them. Walt adhered to the idea that students who participated in class were the ones who had something today, and he typified this narrative through his own active class participation.

Not all male students were equally outgoing or equally inclined to speak during class. To credit students' narrative of individual agency, we can assume that there are individual characteristics that contribute to a student's participation. In my research I saw ways in which male and female students reconcile these characteristics differently. Of the male students I interviewed, two admitted to being shy and less likely to speak in class,

and their participation in recitation reflected this. In recitation these students responded when I called on them directly, but they rarely volunteered comments otherwise. Of these shy, male students one was an international student (Jin, from China) who explicitly addressed how his personality and cultural differences limited his own participation. Jin noted that other students (Americans) liked to talk, but Jin himself was "not that guy." Although Jin preferred to listen and think about the discussion instead of jumping in and imposing his own ideas (similar to what female students said), even he was inclined to participate when he had something to say. In a recitation session during the last half of the semester – an example that was addressed by students in two other interviews – Jin raised his hand and contributed his opinion to the current discussion, a dissenting opinion from the (other male) students in the class. This vignette reflects the actions of the admittedly shy male students. Even though they were less inclined to talk in class, they were often able to contribute when they "had something to say."

By engaging in this repeated process of speaking when they have something to say, male students maintain this standard of classroom behavior. For the students whose personalities may limit their behavior, even they participated when they had something to contribute. In my data, I did not find many examples of women's classroom participation that reflected a similar urgency to talk. As addressed earlier, women who do have something to say may feel constrained in their participation. There is an ease with which male students can contribute (even if they are shy) that is not equally evident in women's contributions. Female students' behavior was more likely to reflect elements of hesitation.

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Women's Hesitation

When women did participate in the classroom, I observed that they often

exhibited some aspect of hesitation which were not regularly evident in male students'

participation. Prior research on classroom climates describes how students' patterns of

speech reflect their confidence in the classroom. Women tend to use more caveats and

qualifiers suggesting that they are less confident in themselves and what they have to say

(Sadker and Sadker 1994). Female often students responded with caveats such as "I'm

not sure this is right." They repeatedly asked "...does that make sense?" to confirm that

their ideas are clear. In addressing the whole class, women were likely to be concerned

that others could understand. During a female student's in-class presentation she began

by saying "if I say anything that doesn't make sense, let me know" and finished her short

presentation with "hopefully I didn't confuse you more."

There were a few times when female students lost their direction while speaking.

One female student in a small, upper-level, discussion-based class (4 students, 75%

female) admitted "I don't know where my argument is going" during her comments. For

many of the women who used these caveats of hesitation, they continued their responses

– presenting clear, logical thoughts – and were sometimes praised by the professor

immediately after. In my field notes, I reflected on some of these moments of hesitation

in women's speech:

> A female student answered: "not sure if this is right" and then proceeded to offer a seven second explanation without using "um." To me, it sounded like a clear explanation that was thought out beforehand.
>
> Rose began speaking but stopped mid-sentence: "I'm starting to forget what I'm trying to say." After that, Rose continued with her comment - without any awkward pauses or any indication that she was unsure about her statements.

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To be clear, male students also expressed some of these patterns in their own comments, but my discussion of women's hesitation reflects a consistent pattern among women. Examples of men's hesitation serve as exceptions to their regular pattern of behavior. In four classes, I heard male students suggest that their response "might not be a good example," and I heard at least two male students apologize for asking a question by starting their comments with "sorry." I noted two instances where male students responded at a noticeably softer volume than the voices of others speakers in the discussion. I recorded one male student's careful concern for the class discussion in an upper-level marketing course when he said "I don't want to take away from the discussion, but I would argue that McDonald's is more like company B."

But even in their hesitation, male students exuded an ease in contributing to the class. During another upper-level class (25 students, 40% female), Jacob quickly responded to the comments of another male student. His answer was filled with pauses and fillers such as "like" or "um." Casually leaning back in his chair, Jacob continued, "Just like in terms of like… I lost my thought. You know what I mean?" The male student next to him nodded his head, and other students nodded in agreement and offered comments of approval. Despite his behaviors of hesitation, Jacob was able to communicate with the class, and he appeared relaxed and comfortable making his fumbled comments in front of others.

In addition to specific speech patterns, women also expressed hesitation about the extent of their own knowledge. A senior female in a class about religion admitted, "I feel uncomfortable speaking about Buddhism since I know so little." A female engineer

working on a group project designing pharmaceutical equipment shared her feelings of guilt at not being able to contribute as much as others in the group: "Since I have so little anatomy experience, I have little input in weeding out the options." These examples were unique, but they reflect what I commonly observed in college classrooms: women engaged in behaviors that illustrated their hesitation.

Overall, however, men exhibited a notable lack of hesitation in many of their classroom interactions. When male students were called on by the professor, they often contributed something even if they were not prepared to speak. In an upper-level marketing class (19 students, 21% female) multiple male students illustrated their willingness to respond when the professor called on them individually, even if they were not prepared to respond. In one instance:

Professor: what's the market like?

Students mumble.

Professor: "I heard rrrrr-rrrrrr. Karl?"

Karl: "It's about to explode."

Professor: "How about we use some strategic marketing terms?"

The student responded with his thoughts even though he did not use the terminology expected by the professor. Male students' responses reflected that they were willing to offer ideas to the class even if their comments are not polished or prepared beforehand. Karl offered a comment that (I assume) immediately came to his mind but was not distilled through a marketing lens before being presented to the class. He contributed an idea that appeared organic and unpolished; female students (in this marketing class and across other courses) contributed ideas that appeared conscientious and prepared. While I

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want to avoid painting male students as lazy, I argue that these types of interactions reflect an easiness in male students' contributions that suggests a willingness to participate at any moment.

Again, I cannot speak about the internal preparation of the students I observed, but I can comment on the execution of their participation. While I did observe each of these characteristics in the behavior of male students (hesitation, use of qualifiers in speech), for male students overall these instances were the exceptions. The prevalence of hesitation in women's speech and behavior was the norm. Male students' contributions appeared effortless and uncomplicated while women's responses reflected conscientious preparation.

Participation Despite Constraints

In coding my observational data, I identified two factors that affected when students spoke in class: gender composition of the class and the professor's solicitation of comments. While women's behavior in class reflected limitations based on these two aspects, men's participation was not limited in the same ways.

One of the specific aspects I noted in my data was instances where students "spoke first" – either responding to prompts from the professor (questions to be answered or invitations for students' own questions or comments) or initiating discussion or interjecting their ideas (without a prompt from the professor). Of the observations I recorded, women were more likely to speak first when they were in the gender majority, environments with higher female to male ratios. One class where female participation

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was common was in a biology class (17 students, 84% female). Women repeatedly

answered the professor's questions and routinely were first to answer.

> Professor: "What gets absorbed?" A female student said one thing, another female student another thing, another female student said yet another answer, and then a male student responded with an answer (each answer came within 2-5 seconds of each other).

In this case, female students were in the majority, the professor was also female, and the

questions were continuous (there was less pressure on the students who responded to

individual questions). Notably from the interviews, two male students identified that

women participated more in classes such as English, psychology or other disciplines

where there are more women. They only briefly touched on the reasons for women's

increased participation by noting the proportion of women to men. They did not explore

their statements any further considering women's comfort level in classes with more

women[8].

For males, their participation extended into classrooms where they were in the

minority. In one class that was 75% female, it was a male student who spoke first when

the professor asked students to share their opinions[9]. Even in this environment where

conversations are open and all students are relatively equally involved - and in a female-

dominated environment - it was a male student who was quickest to speak about his

opinions. One of the classes where I recorded the most instances of male students

speaking first was in an English class that 59% female. Male students' behavior does not

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[8] Research suggests that when women make up at least 25% of a group they will be more fairly judged as individuals instead of representatives of their gender (Kanter 1977; Valian 1998)
[9] While there were other prompts from the professor where female students did respond first, this particular prompt was issued after a very weighty discussion about a controversial issue.

appear to be significantly impacted by the gender composition of the class. When they are in the gender minority, men's participation (overall participation, not just speaking first) is similar to participation in other classes, but women's participation is more limited when they are in the minority.

Another limitation is the professor's act of soliciting comments and questions from students. As noted earlier, I recorded instances where students spoke when prompted by a professor or whether students initiated discussion on their own. From the records of my own observations, I noted at least 30 accounts of male students responding to a question or prompt first, bringing up their own ideas first, or initiating discussion by making a comment to the professor. In my records I noted only 15 times where female students did the same. Of those accounts for female students, most were responding to a prompt from the professor rather than initiating a discussion. From what I saw, women were more likely to speak when prompted by the professor (specifically asking a question or looking for student comments). Most often they spoke when they raised their hands and were acknowledged by the professor.

From my observational records, I noted that men were twice as likely as women to initiate the sharing of their own reactions or opinions. I recorded 8 discrete occurrences where male students initiated the discussion of a topic by making a statement or asking a question when it was not solicited by the professor but only 4 instances where female students initiated. These include simple things like asking "can you go back one slide" during a PowerPoint presentation or raising a hand and asking for more specifications about a test question, to more intrusive statements like the male student who spoke up in an electrical engineering class and suggested whole new way to organize class groups.

Male students were also the ones who interjected what they had to say while professors were speaking. One male student (17 students, 82% female) spoke up while the professor was speaking to add: "Also alpha!" The professor continued the discussion, building on his comment by asking questions about what alpha does in the equation. Not only did the male student have something to say but the professor reframed the conversation around his statement. In a lower-level marketing course (22 students, 55% female), the professor was in the middle of explaining the story behind Google's name when a male student in the back row called out: "1 million zeros." Again, the professor incorporated the student's comment into her discussion. Although comments were not being solicited by the professors, male students interjected information they wanted to share, and the professors rewarded them by integrating those comments into the class discussion.

Male students appeared inclined to share what they had to say – even without prompting, and male students were also likely to defend their ideas even when the professor corrected them. In a small mixed-sex group of engineers (6 students; 33% male), one male student described an aspect of their project as "adjunct." The (female) professor overseeing the group corrected him, but the male student insisted: "I think it's adjunct." Another example from my field notes describes a male student in a female-dominated biology class who continued to argue his point:

> Before the professor left the room, a male student answered one of the professor's original questions calling the object being addressed a "convoluted" capsule. The professor heard his comment, and she responded quickly clarifying that it was not a convoluted capsule. While the professor was out of the room, the male student repeated his statement "*it's totally convoluted*" and looked up in his book to prove his case, *"totally convoluted!"* He turned to the female members of his group,

"come on, help me." The female students did not appear to change their behavior or their work to meet his commands but instead continued to draw the diagram and refer to the book as they had been doing.

Even when they were not in the majority, male students' behaviors appeared effortless. They acted as individuals who shared their own ideas whether or not those ideas were solicited. This effortless was not evident in women's participation.

Factors in Participation: Confidence, Intimidation, and Students' Willingness to Express Vulnerability

Students' internal motivations were also factors in their classroom behaviors. The students themselves discussed a narrative of individual agency which included factors such as confidence and intimidation. Drawing on the data from student interviews and classroom observations, I also argue that students' classroom participation was also impacted by students' willingness to express vulnerability in the classroom.

Confidence and Intimidation

When asked why students might refrain from participating in class, each of the four female students I interviewed identified confidence and intimidation[10] as factors in women's class participation. Previous research on classroom participation suggests that confidence is significantly related to participation (Fassinger 1997). Female students indicated that they needed to be confident in themselves and in the material they were

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[10] Some male students also suggested confidence and/or intimidation in their interviews (for men or women), but those who did discuss confidence and intimidation did so casually or addressed them only as potential influences. For women, these factors were central to participation.

discussing in order to participate in class. They also noted that they were concerned by what others thought of them and admitted to feeling intimidated by other students (specifically a few of the male students in recitation who often lead class discussions).

This is in keeping with previous comments on preparation – that female students are more likely to be first to respond when it is material they have prepared beforehand. Although women may not routinely be first to reply, when they do participate later in the discussion, they often volunteer well-researched, thoughtful comments. Their preparation gives female students confidence in the material to make quality contributions.

It probably goes without saying that participating in a class discussion can be intimidating. By sharing their own thoughts or ideas, students open themselves up to criticism and embarrassment by simply saying something out loud. The way one economics professor phrased his search for student participants was telling; "I need a volunteer. Anyone feeling dangerous?" For some students, class participation can be intimidating, but as Thorne (1989) discusses, women's silence in the classroom is a way to resist becoming vulnerable.

While my research did not formally include the perspectives of professors themselves, I did gather some data from informal conversations with professors who expressed an interest in my research. After an undergraduate marketing class as I explained my interest in gendered patterns of behavior, the female professor immediately suggested that I observe an MBA course at the university. "The women don't speak. They're intimidated by the men in the class." She explained to me how stark the situation was: talented, intelligent female students in graduate courses remained silent for the entire class and let the male students keep talking. Recently when the professor taught an

MBA course, she felt obligated to take the female students aside to talk about their lack of participation and how it was impacting their grades. Even at the graduate level, female students were driven to silence because of their intimidation.

Willingness to Express Vulnerability

While women's classroom behavior reflects a need to *know* what they are talking about before participating in class, male students use class participation as a chance to *learn* the right answers. For male students, as evidenced from their interviews, class time is the chance to learn the right answer by asking questions. In their interviews Miles, Walt, and James, spoke explicitly about how comfortable they felt exploring ideas in front of the class, not only in recitation but in many of their other courses as well. Juliet, however, specifically noted that during class she preferred to "take it all in" instead of being expected to participate to show that she was learning and retaining information. Additionally, most of the male students spoke about being willing to ask questions whether or not they knew the subject being discussed[11].

While I observed many professors who offered positive feedback and even notably encouraged more timid students, there was one professor who reminded me – and his students – just how defeating it can be to volunteer an answer in class and be wrong. The following comes from my field notes for a large introductory lecture (87 students, 41% female):

> The male student asked a follow up question after the professor said the student's original answer was incorrect. The professor bluntly replied *"No"* in response to

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[11] only one male student said he hesitated to participate in class because he did not want to get something wrong.

the student's question. The professor paused, turned towards the class, and smiled: *"I'm supposed to be more supportive.* [to the original student in pseudo-serious fashion] *'That's a very interesting answer ...No!'"* The professor proceeded to explain an encounter he had with a colleague who observed the professor's class, recommending that he should be more supportive of students with wrong answers. The professor turned to the student again, *"No!"* And the class laughed.

Although the professor smiled and appeared good natured, his comments reflect the treatment students risk exposing themselves to when they contribute to class discussions. Based on their behavior in the classroom, female students were not as likely, and perhaps not as willing, to open themselves up to this kind of criticism. From my observations and comments directly from students, women were less willing to express vulnerability in class and more likely to hesitate when it comes to participation in the college classroom.

From observations alone it is hard to tell what goes on internally for students. Still, in some of my observations, I could visibly see that students were going through a learning process in front of the class, based on their comments. Male students openly spoke about their in-class discoveries and their incorrect answers. The following is an example from a lower-level Jewish studies course (22 students; 67% male):

> *The professor posed a question about the meaning of a term found in the assigned text.*
> Professor: "Does anyone know what [that] means?"
>
> Male student: "80?"
>
> Professor: "Close. Only a silver star for you." *(jokingly)*
>
> Second male student: "18."
>
> *After a pause, the original male student says to the class,* "That's just Hebrew for 18. I just got it!"

Sometimes, by asking the question, the male students exposed their own misperceptions or their own incorrect answers. In an accounting class (28 students, 39% female), a male student asked to clarify a number from the professor's Power Point presentation revealing that he (the student) had a different – and consequently incorrect – number for the answer. Later when the professor asked for questions about a subsequent problem, the male student volunteered that he had the wrong answer there as well because his original number was wrong. I observed only one instance where a male student did not respond to a question that the professor asked directly of him (by calling on the student by name). More often, the students who were willing to open themselves up to this experience of learning in front of the entire class and express vulnerability were male.

I did identify examples of women engaged in learning processes in front of the class.. Most of the recorded evidence I have comes from a senior seminar class of 4 students (75% female) led by a female professor and an upper-level English class (17 students, 59% female) led by a female professor. To revisit the female student quoted earlier for saying, "I don't know where my argument is going," after she paused, the professor and other students continued to discuss her ideas, and the original student joined back in with more of her own thoughts. In the same seminar, a female student sought other students' assistance by saying, "Maybe you guys can help me with one of the details." In this small, female-majority classroom women were able to work cooperatively with others in order to understand the material or learn for themselves. In the English class, one female student posed a discussion question to the class, which initiated an exchange between multiple students (I saw male students pose questions to

the entire class three separate times in business classes, but I have no other records of women posing questions to the class). These examples illustrate an inclination towards connectedness with others as discussed in earlier research on women (Gilligan 1982; Belenky et al. 1986; Baxter Magolda 1992). From my observations, it is within these smaller, female-majority spaces that female students were most likely to engage in the learning process – not just in front of other students but *with* other students.

These patterns of classroom behavior return to the notion of intimidation. Why are male students willing to be vulnerable and undergo a learning process in front of a large group of students but women are not as inclined to engage in the same thing? Why are women more comfortable learning in a small, female-dominated group, but we do not see those same patterns in larger classes or classes with different male-to-female ratios?

My understanding of female students' intimidation comes largely from my interviews with students themselves. I can speculate students' feelings from my observations, but I could not conclusively make statements from speculation alone. While I did not formally intend to use my own experiences as a student to inform this research study, there was some data I was confronted with – as a student peer – that I could not avoid. During my data collection in the fall semester, I was concurrently enrolled in an upper level sociology course comprised of both undergraduate and graduate students (18 students, 72% female). Not only did I witness and participate in the discussions during the class period, but I also collaborated with a small group of female students on a class project. Late in the semester, I met with the rest of my group – three female seniors – and in that meeting they each admitted how intimidated they were by one particular male student in the class. The student, Ethan, spoke regularly and assertively in class, and one

of my peers even said she felt "personally victimized" by his comments. The group spent at least 20 minutes identifying specific statements and behaviors of Ethan's and the direct impact his actions had on their behavior in class.

Over the course of the semester I had seen two of my group members regularly participate in class discussions. The other student, Cassidy, was more reserved, but when called on, she usually supplied thoughtful, logical answers. From my own conversations with her outside of class, she talked knowledgeably about the material. Each of these women offered multiple examples of being intimidated to the point that they hesitated to talk in class for fear that Ethan would criticize them. It surprised me to hear their heated comments. I could remember many of the exchanges they talked about, but I was somewhat oblivious to the gravity of those interactions. I remembered a specific incident Cassidy described: the professor asked her to respond to a question, and Ethan sat directly across from her, staring at her as she answered. She said his gaze was enough to make her jumble her words and draw a blank on the topic she was asked to respond to. I remembered hearing the pauses in her unfinished statements, but despite my sensitivity to women's classroom participation, even I failed to note the impact of the intimidation on her participation.

What can be taken away from this incident is that not only were these female students intimidated by other, more critical students in the class to the point of fumbling their own words or avoiding participation altogether, but these occurrences go easily unnoticed (even by those of us who are specifically looking at women's classroom participation).

Professors Who Encouraged Students

Over the course of my observations, I did notice professors who provided encouragement for female (and male) students who hesitated. In multiple classes, professors encouraged quiet students to repeat their responses, "louder," reflecting an appreciation for what all students have to say. Some female students were able to identify their own hesitations and gain encouragement from professors. For the engineering student who expressed her concern with having "so little anatomy experience," her professor quickly reminded her that the group's project was interdisciplinary and not everybody would know everything. The female professor encouraged the student to get used to it and to take advantage of the fact that the student did not have to know everything. Repeatedly, female professors took the time to encourage students. The following is an example of a female student who hesitated every time she started to address controversial topics:

> Elizabeth: "You know I always do that, not follow through with my thoughts."
>
> Professor (female): "Elizabeth, you have to be bolder. Just say it. You're not going to offend anyone."

Professors also advocated for class time for female students. In an English class (17 students, 59% female) a male student responded first to the professor's question, and when a follow up question was posed, the male student started to speak while a female student raised her hand. The professor called on the female student "Go ahead, Helen." In my field notes, I noted that generally the professor seemed to make sure that all students got a chance to answer; I recorded at least twelve times during the class where she verbally listed the speaking order for students after she saw multiple hands raised.

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Overall, the encouragement I saw between professors and their students was not limited by student gender. Professors helped and encouraged male students and female students. To keep in mind, the professors observed for this research were most likely suggested because they have some interest in teaching or were willing to be observed. I did not go out of my way to observe professors who were poor teachers.

Embedded Nature of Gendered Patterns and Students' Contribution to Reproduction

My research suggests that female students are likely to express behaviors in the classroom that are conscientious while male students' behavior appears effortless. Also, female students' behavior in contemporary college classrooms reflects that they are operating within gendered constraints similar to the role conflict addressed in previous research. I argue that there still exists gendered expectations of male and female students that impact student's behavior. Additionally, students are mostly unaware of these gendered expectations (and unaware of many of the gendered patterns of classroom behavior) because they are embedded in accepted, everyday expectations of the classroom. In the interviews I conducted, some students – male and female students alike – insisted at first that they did not see gender differences. Others agreed right away that there were gender differences in their classes. The majority of students that I interviewed could identify gendered patterns when asked, but they had not spent much time prior to our conversations looking for these patterns. Over the course of the interviews, all students eventually identified examples – even slight – of ways in which women and men were treated differently in the classroom. Only when students spent time critically

looking at their everyday experiences were they able to identify these accepted differences.

At some point in each interview, I introduced information about prior research in classroom dynamics. Specifically, I pointed out Hall and Sandler's discussion of differential treatment (by professors and by other students towards women), and I often noted additional conclusions about classroom interactions drawn by other researchers. There was a noticeable difference in the ways female students and male students responded to this information. To female students, the introduction to classroom research was almost a relief or at least a confirmation of the ideas they may have already had about the classroom. To male students, the prior research was mostly a surprise. Although Kate strongly disagreed at first ("I don't see that at all."), after discussing these examples, all of the women agreed that to some extent these behaviors exist and that they have seen them in the classroom.

> Charlotte: "I haven't seen it – I don't think – or I haven't noted...like I've seen it, but I haven't recognized it. But I don't disagree; I can see how that would be common. I think it's actually really interesting."

> Shannon: "It doesn't surprise me."
> CR: "But it may not have stood out to you?"
> Shannon: "yeah."

> Juliet: "I can definitely see that."

The students I interviewed may not have thought about that kind of behavior before or looked for it, but when I pointed out that others have seen differential treatment, then the female students could see it. During my interviews with Charlotte, Shannon, and Juliet, I got the impression that deep down they understood that those differential

behaviors existed, and by talking about it out loud, I brought it to the surface. Once I pointed out what other research had said, each of the female students were able to name classroom situations where they saw similar occurrences happen.

Male students were more surprised by the research. They were not able to identify as many current examples of the differential treatment I described as the female students were. Only one insisted he did not see those patterns at all, and two male students brought up examples of behaviors they saw in their classes that countered what I said. None of the women offered examples that countered the research I addressed. Women accepted the research; men were surprised by it or even challenged it.

To me, these discussions about the prior research are telling of the accepted nature of gendered expectations. Most of the female students could easily understand that there exists research explaining how women were disadvantaged in the classroom. These women offered examples of classroom disadvantages that they had seen or had been a part of. Historically, women have been the "others" in comparison to male students' position of privilege. Dominant social structures were established by men and relevant to men, but they excluded women (Smith 1987). For those in positions of power and privilege, it is difficult to see how the system is designed to their benefit and to the disadvantage of others.

Gendered Expectations

Among the students I interviewed, there were two students who captioned the idea that in the college classroom there exist social "pressures" that are based on gender. These students stood out among the respondents because of their significant awareness of

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gender within the classroom, and they both clearly articulated their ideas about gender and the patterns they noticed. Both were seniors – one male, one female – and both had an interest in observing patterns of behavior in other people. David studied behavioral neuroscience as his major. Juliet had recently taken a class on women and gender and had attended an all-girls high school before coming to a coeducational college. These students either had an interest in gender differences or had life experiences that made them more aware of differences. As Juliet said, "Once you're aware of the gender differences, you notice it more."

David brought up and discussed the existence of social "pressures" abstractly, but he noted that he could not see them. He said that within the classroom, all students were on same playing field and argued that students' social groups had more influence on behavior than their gender.

Juliet, however, very candidly discussed the pressures and expectations unique to women – in the classroom and in the professional world. Her discussion began with differences in the ways women and men present themselves (women's clothes, nail polish, professional appearance for job interviews), but in the last 20 minutes of a 90 minute interview, the discussion moved towards her recognition that all these small differences can add up to large differences in expectations and perceptions.

> Juliet: "I think women have this expectation of how they're supposed to behave and respond and what's acceptable to say and what's not. Whereas men have that also, but I think women subconsciously think about that kind of stuff more than men do. And I think men just kind of....
>
> CR: "Do what they want (?)"
>
> Juliet: "Yeah, just kind of sit and say and do whatever... it's not a bad thing, I guess, *but it's not always fair.*"

Of all the interviews I conducted, Juliet was the only student who captioned the situation for women as "unfair." By critically engaging with her own classroom experiences and her understanding of gender, Juliet was about to identify specific actions and perceptions that resulted in a disadvantage to women. For Juliet, the overt conscientiousness of female students and the effortlessness of male students reflected high expectations for women versus "what men can get away with."

Both men and women were quick to say that their own gender did *not* impact their individual participation. No one suggested that their own gender did impact their participation, nor did they volunteer gender as a reason for why other students might not participate. In my interview with Juliet (as in my other interviews) I explicitly asked if she thought her gender impacted her participation, and even she hesitated. During her interview, Juliet presented herself as someone who was not only self-aware but highly aware of the perceptions and expectations of those around her. She even alluded to male students' potentially sexist attitudes and behaviors (observing that they did not always listen to what women said in class). In discussing her own awareness of the impact of gender that she developed during a prior women's studies course, Juliet said she discovered that gender difference "is actually very applicable to what I'm doing and I'm sure to pretty much every discipline or social interaction - just every part of life. People don't even think about it." For Juliet theses gender differences were "still very apparent." She confirmed their existence today and that students' general lack of awareness, but at the same time she found it hard to identify specific instances of differential treatment.

Despite their own admissions that differential treatment and gendered

perspectives exist, there are students who find it hard to see the impact on their own lives.

This echoes Valian's (1998) discussion of how women struggle to connect the issues they

see at the macro level (i.e. sexism or unfairness) to how they as individuals are affected.

Juliet made a few brief comments about how early in the semester she has seen

first year students (mostly female) ask lots of questions about what information would be

on upcoming tests or how best to study. Juliet reflected on how those students would

eventually learn from older students (by observing their behaviors and their questions in

class) about the types of questions to ask to get the information they will need to know.

From my interviews, I got the impression that students generally understood this pattern

of reproduction; students commented on how other students or they themselves learned

acceptable behavior based on what they say other students do in the same context.

A few students were able to articulate their unequivocal awareness of the cycles

of reproduction that occur within any classroom. Jin noticed that some professors asks in-

depth questions of male students - perhaps not directly because of gender – but because

the professors know those students (males) will answer those types of questions, the

professor continues to ask those types of questions of the male students. This cycle of

questioning (although not necessarily based on gender originally) forms and continues

because of habit. The reproduction of these patterns exists, but its connection to gender is

not the link students notice or expect. These gendered expectations become part of a

cycle.

Miles also noted the cyclical nature of gendered differences. He said that he did

make assumptions based on gender, but clarified that his assumptions were based on what

he has seen. For example, he expects female students to be more prepared and academically-orientated because he has witnessed female students come to class with organized notebooks and study guides, asking questions that illustrate how well they read and understood the material. Miles is clear to note that this expectation does not apply to all women, but based on what he has seen, he does not expect men to be as prepared as women. Miles has never seen a guy use different colored highlighters and organize their notebooks and take "insane notes" to the extent that he has seen female students to that.

These student comments highlight an unspoken acceptance of the system of reproduction. Even when students can see ways that the cycle reproduces itself, they are not inclined to consider the impact of their own agency in its reproduction. If we consider Bourdieu and Passeron (1977), students themselves have a powerful influence because not only are they products of a system, but students themselves produce the system. Students are constrained by the existing social structure and by societal reproduction, but they also actively contribute to its preservation and can contribute to its change (Corsaro 1997). Still, based on their interview responses, students appeared to have little understanding of their own influence.

Early in his interview, Miles spoke about recently being required to participate in a group rehabilitation program with other students at the university, most of whom were underclassmen.

> I started almost preaching to them "you might think you have to go out every night, to be cool, and think rushing [a fraternity] is all that matters," and the group leaders were saying the same things I was. But at the end, they asked what did you get out of this session, and four or five of the kids said "I really appreciated what Miles said," and I think it was because I wasn't just some counselor there, I was someone who actually went through it.

Miles' discussion illustrates multiple ways in which a student can impact the social world around him. He was speaking to other students as a trusted peer and sharing information that others valued. Miles' credibility came from his own lived experiences; other students respected him and respect what he said over the comment of authority figures. And in Miles' brief discussion, he addressed that the students themselves expressed their appreciation for his comments. Later in Miles' interview I explicitly asked if he thought he had any direct influence on the other students in his college classes. He quickly said "No, no, I don't think I impact the class. I think I raise my hand and talk, and it makes other people more comfortable to talk. I don't know. I wouldn't say I impact the class." Despite his own evidence that what he said and did had an impact on other students, Miles hesitated to say that he had any influence on the classroom. While there were students who could see the cyclical nature of socially reproduced ideas – and even see individuals reproduce accepted patterns – students struggled to see their own potential impact.

Within social systems, individual people are both products and producers. Students have the power to both maintain and challenge the status quo. Even through small acts of individual agency, students can influence the larger structural system. When speaking about the college classroom, students themselves identify a narrative of individual agency – that they participate based on individual characteristics such as having something to say or their personality.

Conclusions

Narrative of Individual Agency

When students discuss class participation, they adhere to a narrative of individual agency. Students express a belief that individual factors are the most important factors in students' participation. Commonly, the students I spoke with adhered to the belief that those who participate in class were simply the ones who had something to say. Having something to say, a students' own personality, or self-confidence are what students think impact their classroom behavior. This understanding recognizes some students' motivation but fails to recognize the impact of external factors (such as professor treatment) or gendered expectations that people are held to.

The frequent examples of male students talking when they want to talk serve to maintain students' beliefs that this is the common behavior. Still there is evidence, from observations and interviews, that students' participation is impacted by other factors (such as classroom gender composition or the professor's solicitation of questions). Some students do talk when they want to talk, but this is not the only influencing factor on students' participation. Based on students' own accounts, most do not actively consider all the factors that contribute to whether or not students participate in the college classroom.

Gendered Patterns of Behavior

Routinely men's behavior is perceived as the standard, and women are considered the "others" (Valian 1998). As evidenced in previous research on classroom climate and

student participation, this pattern holds true in higher education. Women are often disadvantaged by the subtle, accepted inequalities embedded in everyday classroom behaviors (Hall and Sandler 1982). In contemporary classrooms, the existence of gendered patterns of behavior remains – with limited awareness and understanding on the part of students within the system.

As illustrated in this research, male students and female students engage in gendered patterns of behavior in their classes. To students' credit, some of these patterns do reflect students' individual agency (i.e. talking when they having something to say, personality, student's own confidence). For female students, the classroom is the place to confirm what they already know; for male students, it is a chance to learn new information or to share their opinions. This research also shows how the behaviors of female students contrast the behaviors of male students. Overall, women engage in behaviors that appear overtly conscientiousness, but male students' participation appears effortless. Male students more often talk when they want, or they can overcome restricting factors (such as being shy) when they do have something to say. They are less likely to hesitate in their discussions and patterns of speech. As discussed earlier, when women do participate, they are likely to be prepared. While men may be prepared when they speak as well, they often participate even if they are not prepared. Female students are less willing to be vulnerable in the classroom. Women are conscientious about their academic appearance in the classroom, and they are attentive to disruptions.

The patterns observed in this research also reflect a compliance with gendered constraints: class gender composition and professor's solicitation of comments or questions. Women were first to participate more often in female-majority classes while

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men participated in similar ways irrespective of gender composition. Female students who did participate were likely to speak after the professor invited student comments, and the students who interjected their comments without the professor's structuring were most often male students. In addition to these constraints and aspects of individual agency, I argue that through repeated socialization gendered patterns of behavior in the classroom subsequently reflect older, gendered constraints that students may be unaware of and unaware that they are reproducing.

While the patterns of behavior may have evolved over the three decades since Hall and Sandler's report, gendered patterns of behavior have not been eliminated from the classroom. In fact, many of behaviors of female students identified in this research closely mirror the behaviors of female students from earlier research. The Duke University report (2003) and other research uncover the deep conflicts women internally undertake as female students in higher education, negotiating masculine norms of the university yet being expected to maintain feminine ideals (Komarovsky 1985; Brown and Gilligan 1992; Bachen et al. 1999). Society also holds the gendered expectation that women will be "nice girls" who strive to please others and meet their expectations potentially by lowering their own academic aspirations (Rich 1979a; Gilligan 1982; Belenky et al. 1986; Brown and Gilligan 1992; Tidball, Smith, Tidball, Wolf-Wendel 1999; Valian 1998). In today's classroom, female students exhibit hesitation in their speech and in their behaviors (e.g. sacrificing themselves to help others, deferring to other student, using qualifiers in their statements). As earlier research suggests, these behaviors reflect an effort to please others and meet feminine ideals. The student

behaviors described also exhibit women's diminished status in the classroom (Sadker and Sadker 1994). Even today, women still exist as "others" in the classroom.

Yet female students struggle to identify specific reasons for why they behave in the ways they do. All the female students I interviewed spoke about wanting to be prepared before sharing answers in class. Some women talked about being intimidated by more outgoing students, or they said they did not want to embarrass themselves. But only one of the female students explained why women felt obligated to maintain their conscientiousness about the academic appearance. The other three female students did not offer much explanation about why women maintained the classroom behavior they did. Many of the students I interviewed, specifically many of the women, were unaware of the explicit historical disadvantages women have faced in the college classroom. Only Juliet recognized that she and other students were driven by gendered expectations that were unfair to women. While I cannot overgeneralize my findings and assume that 75% of all women are unaware of the underlying reasons that women are academically conscientious, I do suggest that there are many female students who are not aware of the underlying reasons that impact their behaviors.

From observations alone, I could not determine students' internal role conflicts, but even when I talked to female students, they did not explicitly uncover many of their internal processes. As a female student myself, I can speculate that other women feel the pressures identified in earlier research to meet social ideals of balancing masculine and feminine norms. Juliet started to reflect on these concepts when she spoke about the details of women's appearance that are expected in job interviews and the workplace. She said that women could be judged by many little details (clothes, hairstyle, nail polish

color), and indicated that she felt obligated to meet employers' expectations of a balance between a feminine appearance and maintaining the qualities expected of the job (often masculine traits). Other than Juliet, none of the other female students addressed a negotiation of masculine and feminine in determining how they presented themselves in the classroom. I expect that some internal negotiation exists, but that female students are not consciously aware of it nor entirely able to articulate how it impacts their behavior. Today, female students are conscientious of their academic appearance in the classroom, but they may not be able to articulate an understanding of the gender schemas in place that affect how others perceive them.

I argue that to some extent, female students in today's classroom maintain some of the behaviors identified in earlier research or as relics of previous women's role conflicts. In education women are still the "others" even if they don't recognize it. Female students still maintain "nice girl" behaviors even if they don't recognize them as such (i.e. sacrificing themselves, causing little disruption in the classroom). Students have been socialized to follow patterns of behavior of other students, so it is conceivable that they repeat these behaviors without realizing the depth of motivation in the original behaviors. Juliet expressed a common understanding among the students I interviewed when she commented on how easily students learn to behave in class based on what they see (specifically how they learn what questions to ask in order to know what to study for exams). In the classroom students take their cues from other students, and they are socialized to the norms and behaviors expected of the classroom. Often they remain unaware of the exact reasons for those behaviors, or they are unable to articulate reasons for these patterns. Furthermore, students are not necessarily asked to consciously think

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about why they engage in the behaviors they do. Students themselves accept these standard behaviors and continue to engage in the same behaviors contributing to their reproduction.

Simply, the difficulty students have in seeing the difference in behavior reflects how embedded these gendered patterns and expectations are within the general understanding of the contemporary classroom. Consequently, the gendered constraints that impacted earlier students behavior are effectively still in operation today because of the reproduction of those original behaviors. As previously discussed, the influence students have is potentially powerful but often overlooked. Students consider class participation as a reflection of individual agency, yet they appear to be unaware of the power of that same individual agency to impact the social system.

Silencing

One final reflection on classroom participation relates to student voices and student silence. In education, student voice – students' ideas and their literal voices in participation – are understood to be important aspects of the learning process. As Desjardins (1989) reminds us, listening to both men's and women's voices are important otherwise the focus lies on one voice to the exclusion of the other. In silence, women are not only without a voice but they remain essentially powerless (Belenky et al. 1986).

When male students routinely participate in the classroom and voice their own opinions they become "an active part of the learning process" as one male student described it. Do female students suffer academically when they avoid the same kind of engagement in the classroom? If students are not aware that men and women use

classroom participation in different ways and possibly to women's disadvantage – then students can still hold onto their ideas of individual agency and being on a level playing field with students in their classes.

Given the covert nature of gender schemas and the social acceptance of gendered patterns, students are not necessarily trained to critically assess the gender dynamics of the classroom. Women may recognize sexism or unfairness on the macro level but fail to see the instances that affect them individually (Valian 1998). Through critical reflection and action – questioning, using their voices – students can be liberated from their loss of critical consciousness (Freire 1971). This transformation, liberation from the status quo, requires critical consciousness on the part of the students. It requires students' questions and their voices.

Overall, repeated patterns of behavior in the classroom disadvantage women, but silencing specifically becomes detrimental. In the course of my research, I encountered multiple incidents of female students simply not having a voice: women not joining discussions during recitation, female graduate students not talking in MBA classes, women shortening their comments or deferring to others so they can contribute. Even on a basic level, students understand that the classroom is meant to be a place to learn by engaging with the material. Many classes at the university are discussion-based in order to elicit student ideas and to cement student understanding through discussion with professors and other students. When women stay silent, not only are their voices not heard, but they lose the opportunity to learn through engagement. Their own learning is hurt as well as the learning experience for other students.

These female students themselves admit that they are prepared, and they know the material. I saw those patterns in the recitation I led as well as the other classes I observed. Women are knowledgeable, but they often stay quiet. As stated earlier, women's hesitation in the classroom reflects their diminished status. When they stay silent – when their voices and ideas are not communicated – women themselves accept and maintain their second class status.

For students who rely on a narrative of individual agency, it may seem as though silence in the classroom is a reflection of the individual student. Female students remain inhibited by accepted gendered expectations and gendered constraints, and this is reflected in their classroom participation. Male students, on the other hand, are limited in fewer ways, and in this research they have shown how they participate despite constraints. Women's conscientiousness and men's effortless in the classroom reflect the gendered limitations that women and men are negotiating beneath the surface, behind the participation that is evident in the classroom. Students themselves think of aspects of individual agency when they consider classroom participation. But just as individual agency is not the only factor in students' participation, improvements for the current classroom situation should not only reflect what an individual can do.

While I suggest that students themselves can use their voices and their agency to become critically aware of the existing gendered constraints, I also suggest that changes in structural aspects will be required in order to achieve gender equity in the classroom. Although students themselves contribute to the reproduction of the gendered patterns in contemporary classrooms, I think that further research into the gendered limitations that exist will reveal ways in which they are constructed structurally.

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Appendix A

Interview Participants

N=11

Gender
    Male: 64% (7)
    Female: 36% (4)

College
    Arts and Sciences: 18% (2)
    Engineering: 0%
    Business and Economics: 82% (9)

Class Year
    First Year: 18% (2)
    Sophomore: 9% (1)
    Junior: 18% (2)
    Senior: 55% (6)

Race/Ethnicity
    White: 91% (10)
    Students of Color: 9% (1)

Residence
    Pennsylvania: 18% (2)
    New York: 36% (4)
    New Jersey: 27% (3)
    Maryland: 9% (1)
    International (China): 9% (1)

Appendix B
Interview Protocol for Student Interviews

General discussion about the interviewee's perceptions of the classroom environment, including but not limited to:
- Observations of classroom interactions
- Expectations for behavior and participation, their own and others
- Reactions to specific incidents, conflicts, or responses which have occurred
- Unique classroom culture that has been established during the semester
- Responses to the gendered participation patterns identified in research

Perceptions of the classroom environment, classroom interactions, and participation:

Background Information
- Class year:
- Academic major:
- Gender (noted by not explicitly asked):
- Where are you from?
- Why are you taking this course?

Interpersonal Interaction
- What stands out to you about classroom interactions during recitation?
- How would you describe the overall climate of the classroom?
- How would you describe the patterns of behavior for students in this class?
- Are there some students who are more likely to answer questions right away?
- Do students respond to comments made by other students?
- Are students ever interrupted by the instructor? By other students?

Classroom Expectations
- How do you expect the instructor to behave when leading a recitation?
- How do you expect other students to behave during recitation?
- Do you expect every student to participate in the same ways?
- How would you respond if you didn't agree with another student's comments?
- How would you respond if you didn't agree with the instructor's comments?
- Would you expect other students to respond in the same ways? Why or why not?

Other Classroom Observations
- What kinds of feedback do students receive when they make comments or respond to questions (from the instructor or other students)?
- Are students asked questions that involve higher-order thinking (as opposed to questions that are factual or simple)?
- Do you notice any patterns in how I (the instructor) respond to students?
- Are there any ways in which I treat students differently?

- Have you seen any negative interactions during recitation? (i.e. conflict or negative comments)?
- Is there any time where you feel uncomfortable participating in recitation?
- How do the classroom interactions in this recitation compare to other classes that you have taken?

Participation Rationale

- How would you describe your participation in during recitation?
- Is your participating during this recitation similar to your participation in other classes?
- Why do you think your behavior is the same or different in this recitation?
- Would you attribute your level of participation in recitation to your personality?
- Do you think anything else affects your participation? Your race? Your gender?

Gender Influence

- How do you think your gender affects your participation?
- Do you notice any differences between male and female students in this recitation? In their participation? In the types of comments they make?
- What are your expectations of male students and their participation during recitation?
- What are your expectations of female students?
- How would your expectations of me (the instructor) be different if I were of the opposite gender?
- When you think about female students in this recitation, do you expect them to participate and say what they think?
- When you think about female students in general or in other classes, do you expect them to participate in the same ways as male students? Why or why not?

- Research shows that women and men face different treatment in the classroom – by instructors and other students. For example, instructors are more likely to ask women questions that are factual and to ask men questions that require higher-order thinking. Male students are likely to interrupt female students without notice, but when female students interrupt others they are often reprimanded for their behavior. Are you aware of the extent to which gender influences the expectations and patterns of behavior that exist in college classrooms?
- Would you say that you have seen those examples or similar interactions in your own college classes? Why or why not?
- Before today, how much thought have you given to gender differences in classroom participation – in this recitation or any other classes?
- How do you think this awareness might influence your future classroom interactions?

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<u>Final Questions</u>

- Are there any other aspects of the classroom dynamics in this recitation that you would like to discuss?
- Is there anything you would like to add?

Appendix C

Classroom Observations

N=20

Semester Conducted
    Fall 2012: 35% (7)
    Spring 2013: 65% (13)

College
    Arts and Sciences: 45% (9)
    Engineering: 25% (5)
    Business and Economics: 30% (6)

Size of Class
    <10 students: 20% (4)
    11-25 students: 45% (9)
    26-40 students: 20% (4)
    >40 students: 15% (3)

Course Level
    100 and below: 30% (6)
    200: 20% (4)
    300: 50% (10)

Class Composition
    Undergraduate students only: 90% (18)
    Graduate students also registered: 10% (2)

Professor Gender
    Male: 30% (6)
    Female: 70% (14)

Professor Race/Ethnicity
    White: 85% (17)
    Persons of Color: 15% (3)

Class time
    Morning: 55% (11)
    Afternoon: 45% (9)

Percentage of Women in Class
  <10% female: 5% (1)
  11-25% female: 10% (2)
  26-50% female: 40% (8)
  51-75% female: 15% (3)
  >75% female: 30% (6)

Percentage of Students of Color in Class
  <10% female: 10% (2)
  11-25% female: 65% (13)
  26-50% female: 15% (3)
  51-75% female: 10% (2)
  >75% female: 0%

Appendix D

Observation Guidelines

Subject/Course Title:
Date:
Class Meeting Time:

Before class begins or within the first ten minutes of beginning, make note of the following:
- Total number of students: _____
- Number of male students: _____   female students: _____
- Diagram the classroom with regards to the locations of the instructor and students. If possible, note student seating by gender and any physical distractions (noisy A/C, etc.)

During class, take note of the behaviors and interactions in the following categories, specifically noting gender of the parties involved:

- Instructor behavior
  o Verbal communication
  o Calling on students by name?
  o Level of enthusiasm for the subject
  o Use of technology, PowerPoint, etc.
  o Nonverbal communication

- Instructor-student interaction
  o What kinds of interaction occur?
  o How is discussion initiated?
  o What kinds of questions are being asked of students (i.e. factual, higher order thinking, etc.)?
  o How long does the instructor wait for students to answer questions?
  o Responses and feedback

- Student behavior
  - Level of attention: listening attentively, note taking? Talking to other students?
  - Nonverbal communication
  - Participation: hand raising? Calling out?
  - Level of engagement in the discussion or classroom activities
  - Physical positions and surrounding objects (i.e wooden chairs, computers)

- Student-student interaction
  - What kinds of interactions occur?
  - Voluntary interaction, or at the request of the instructor?
  - Verbal communication: tone of voice, specific words used, innuendos, sarcasm
  - Interrupting other students
  - Students who are notably silent
  - Students' reactions to comments

Other things to consider:
  - General classroom climate: Respectful? Competitive?
  - Changes in classroom climate from beginning to end
  - Changes in behavior from beginning to end
  - Immediately notable patterns of behavior

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Vita

Charlene's critical interest in education has been a life-long development. Growing up in a small town near Pennsylvania's Lehigh Valley, Charlene's intellectual capabilities (and fluency in sarcasm) were cultivated during regular Socratic interactions with her stay-at-home father. In her second year of elementary school, Charlene's oratory prowess was so developed that she could easily articulate driving directions from the backseat of her parents' car, discuss the logistics of long division, and explain how to program the VCR. By sixth grade, she was shaking President Clinton's hand and being interviewed by local radio stations. Through her formative years, Charlene's parents challenged her to think for herself (and never gave her straightforward answers to even the simplest of questions). Not only did Charlene refine her critical thinking skills, but she acquired an insatiable interest in teaching others.

For more than a decade, Charlene has dedicated her time to encouraging students in their own intellectual pursuits. She has "worked" as a pre-school teacher, full-time nanny, camp counselor, swimming instructor, and substitute high school teacher as well as positions in college admissions and student recruitment. At Lehigh University, she served as a teaching assistant and was recently praised by students for her clarity, her humor and her ability to make a 9:00am class on a Friday "relatively painless."

Expanding not only her critical but her global lens, Charlene has spent much of her life traveling abroad. She has seen Grecian structures as old as Homer, watched dozens of tourists photograph the Mona Lisa, deftly avoided the sting of jelly fish in the Great Barrier Reef, has successfully navigated British National Rail during the Christmas holidays, and with increasing frequency can understand the thickest of Scottish accents.