

## **Gender, College Year, and Romantic Relationship Status Differences in Embarrassment and Self Attitudes of College Students**

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**ABSTRACT** - College students ( $n = 234$ ) completed questionnaires regarding embarrassment, blushing, interaction anxiousness, self-esteem, and body esteem. Females reported greater embarrassment, blushing, and interaction anxiousness compared to males, yet lower self-esteem and body esteem. Students in romantic relationships reported greater self-esteem and body esteem than those not in relationships. Freshmen reported higher levels of embarrassment, blushing, and interaction anxiousness than upperclassmen, but these differences were not statistically significant. Implications for college adjustment are discussed.

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College is a time of great change and exploration in a young adult's life. The college environment brings a host of new social and intellectual challenges which help students develop new skills and shape self-concepts. Consequently, knowledge of differences in social/emotional states and self attitudes in college students are important areas to investigate in order to understand the college student experience and adjustment process. Previous research has established gender differences in embarrassment (Miller, 1996), interaction anxiousness (Miller, 1995), and self- and body esteem (Kling, Hyde, Showers, & Buswell, 1999). We were interested in replicating these differences in a sample of college students, as well as considering how a student's rank in school and romantic relationship status may alter these differences. College students may be interested in learning about how self attitudes and social behaviors are influenced by relationships, year in school, and gender in order to successfully adapt to the college environment. College professors and administrators may be interested in these differences in order to understand factors which may be related to student retention, college adjustment, and academic success.

Consistent with previous studies, we predicted college females, compared to males, would report greater embarrassment, blushing propensity, interaction anxiousness, and lesser self- and body esteem. These predictions are consistent with previous research

findings that women have greater social sensitivities and are more emotionally affected by social situations than men (Kling, Hyde, Showers, & Buswell, 1999; Miller, 1995; Miller, 1996). We also predicted first year students would report greater embarrassability, blushing propensity, interaction anxiousness, and lesser self- and body esteem compared to upperclassmen. Freshmen are entering a new social environment and may feel less certain about their social roles and more anxious about interpersonal interactions than upperclassmen, which may lead to more negative evaluations and uncertainty of the self (Loeb & Magee, 1992; Robins & Trzesniewski, 2005; Saville & Johnson, 2007). Students involved in romantic relationships were also predicted to report greater self- and body esteem compared to those not in romantic relationships. Being emotionally involved in a close relationship may buffer an individual from threats regarding self- and body esteem, and being involved in romantic relationships may increase personal acceptance and enhance self beliefs (Forbes, Jobe, & Richardson, 2006; Lin & Kulik, 2002; Long, 1983).

## Method

### *Participants*

Two hundred thirty four college students (71.8% women) participated in this study in order to fulfill a partial course requirement for their introductory psychology course. Participants ranged in age from 17 to 40 ( $M=19.34$ ,  $SD=2.91$  years). The majority of participants were Caucasian (91.9%), 2.1% were Asian, 2.1% were “other,” 1.7% were African American, .9% were Latino, .9% were Native American, and one participant did not indicate race. Participants’ class ranks included 69.7% freshmen, 18.8% sophomores, 6.8% juniors, 3.8% seniors, and two participants did not indicate rank. The majority of participants indicated that they were in a romantic relationship (55.1%), 43.2% reported they were not in a romantic relationship, and four participants did not indicate their current romantic relationship status. Sexual orientation of the participants was primarily heterosexual (97%), with only 1% indicating bisexual, .9% reporting homosexual, and one participant did not respond.

### *Materials & Procedure*

Participants completed a randomly ordered packet of questionnaires containing one general embarrassment questionnaire (Modigliani, 1968), one general blushing questionnaire (Leary & Meadows, 1991), one interaction anxiousness questionnaire (Leary, 1983), one questionnaire on self-esteem (Rosenberg, 1965), one questionnaire on body esteem, and demographic questions relating to age, ethnicity, year in college, romantic relationship status, and sexual orientation.

The Embarrassability Scale (Modigliani, 1968) is a measure of general embarrassability, an individual’s general likelihood of becoming embarrassed. This scale consists of 26 brief descriptions of social situations participants read and then consider how they would feel, such as having a group of friends sing “Happy Birthday” to them. Respondents then select their response for a 5-item Likert scale (1=*I would not feel the least embarrassed: not awkward or uncomfortable at all*, 2=*I would feel slightly embarrassed*, 3=*I would feel fairly embarrassed: somewhat self-conscious and rather awkward and uncomfortable*, 4=*I would feel quite embarrassed*, 5=*I would feel strongly embarrassed: extremely self-conscious, awkward and uncomfortable*).

The Blushing Propensity Scale (Leary & Meadows, 1991) presents a series of 14 written situations, such as talking to a member of the opposite sex, and asked participants to indicate whether they feel themselves blushing in each scenario. The response scale was a 5-point Likert scale where 1=*never*, 2=*rarely*, 3=*occasionally*, 4=*often*, and 5=*always*.

The Interaction Anxiousness Scale (Leary, 1983; Leary & Kowalski, 1993) is a 15 item scale which assesses how socially anxious and nervous people typically feel in various social situations. Respondents provide responses to how characteristic each statement is for them using a 5-point Likert scale, 1=*not at all characteristic*, 2=*slightly characteristic*, 3=*moderately characteristic*, 4=*very characteristic*, 5=*extremely characteristic*.

The Rosenberg Self-Esteem Scale (1965) is a well-established 10-item scale which measures global feelings of self-worth or acceptance. Respondents indicate their agreement with statements, such as "I feel that I am a person of worth, at least on an equal basis with others," on a 4-point Likert scale (1=*strongly agree*, 2=*agree*, 3=*disagree*, 4=*strongly disagree*).

We created the Body Esteem Scale to provide an indication of how positive or negative participants thought about their body in general. The measure contained seven questions focusing on different parts of the body: face (facial features, complexion, hair), lower torso (buttocks, hips, legs, ankles), mid torso (waist, stomach), upper torso (chest or breasts, shoulders, arms), muscle tone, weight, and height. Participants were asked to indicate their assessment for each body area on a 5-point Likert scale (1=*strong negative feelings*, 2=*negative feelings*, 3=*neutral*, 4=*positive feelings*, 5=*strong positive feelings*).

After students completed the collection of questionnaires, students were debriefed and thanked for their participation.

## Results

Each scale was scored according to its directions and group means were calculated. Larger values indicate greater amounts of the variables being measured. For each dependent variable, we conducted a 2 (participant sex: male or female) x 2 (relationship status: in a relationship or not in a relationship) x 2 (class rank: freshman or upperclassman) ANOVA.

*General embarrassment.* There was a significant main effect for gender on the Embarrassability Scale (Modigliani, 1968), where females reported significantly higher general embarrassment scores compared to males,  $F(1, 229)=13.85, p<.001, \eta^2=.06$ ,  $M_s=2.58 (SD=.61)$  and 2.19 ( $SD=.50$ ), respectively. Freshmen ( $M=2.54, SD=.61$ ) reported greater general embarrassment than upperclassmen ( $M=2.33, SD=.58$ ), but this difference was not statistically significant. We found no significant main effects for relationship status and no interaction effects.

*Blushing.* The main effect for gender was the only significant main or interaction effect found for the Blushing Propensity Scale (Leary & Meadows, 1991). Females reported greater blushing propensity than males,  $F(1, 229)=15.41, p<.001, \eta^2=.06$ ,  $M_s=2.77 (SD=.72)$  and 2.31 ( $SD=.64$ ), respectively. Freshmen ( $M=2.71, SD=.72$ ) reported greater propensity for blushing than upperclassmen ( $M=2.49, SD=.72$ ), but this difference was not statistically significant.

*Interaction anxiousness.* We found a significant main effect for gender on the Interaction Anxiousness Scale (Leary, 1983), such that females reported greater interaction anxiousness than males,  $F(1, 229)=13.67, p<.001, \eta^2=.06, Ms=2.72 (SD=.72)$  and  $2.31 (SD=.58)$ , respectively. Freshmen ( $M=2.65, SD=.71$ ) reported greater interaction anxiousness than upperclassmen ( $M=2.50, SD=.69$ ), but this difference was not statistically significant. We found no significant main effect for relationship status and no interaction effects.

*Self-esteem.* We found a significant main effect for gender on the Self-Esteem Scale (Rosenberg, 1965), such that males reported greater self-esteem than females,  $F(1, 229)=22.06, p<.001, \eta^2=.09, Ms=3.48 (SD=.40)$  and  $3.13 (SD=.52)$ , respectively. There was also a marginally significant main effect for relationships status,  $F(1, 229)=3.57, p=.06, \eta^2=.06$ , such that those in relationships reported greater self-esteem than those not in relationships,  $Ms=3.28 (SD=.47)$  and  $3.16 (SD=.56)$ , respectively. Freshman and upperclassmen reported similar self-esteem. We found no significant interaction effects for self-esteem.

*Body esteem.* Since the Body Esteem Scale was a new measure, we first determined that the seven scale items were generally measuring satisfaction with body esteem,  $\alpha=.74$ . For gender, we found a significant main effect, such that females reported lower body esteem scores than males overall,  $F(1, 229)=20.32, p<.001, \eta^2=.08, Ms=3.24 (SD=.63)$  and  $3.70 (SD=.54)$ , respectively. We also found a marginally significant main effect for relationship status, where participants in relationships reported greater body esteem than those not in relationships,  $F(1, 229)=2.83, p=.09, \eta^2=.01, Ms=3.43 (SD=.60)$  and  $3.29 (SD=.67)$ , respectively. The main effect for class rank and the interaction effects were not significant.

A correlation matrix, showing the relationships between these embarrassment and self attitudes dependent variables, is presented in Table 1.

**Table 1**  
***Correlations Between Embarrassment and Self Attitude Measures***

|                                | <i>General</i>       |                 | <i>Interaction</i> | <i>Self-</i>  | <i>Body</i>   |
|--------------------------------|----------------------|-----------------|--------------------|---------------|---------------|
|                                | <i>Embarrassment</i> | <i>Blushing</i> | <i>Anxiousness</i> | <i>Esteem</i> | <i>Esteem</i> |
| <i>General Embarrassment</i>   | ---                  |                 |                    |               |               |
| <i>Blushing</i>                | .68                  | ---             |                    |               |               |
| <i>Interaction Anxiousness</i> | .57                  | .70             | ---                |               |               |
| <i>Self-Esteem</i>             | -.37                 | -.34            | -.42               | ---           |               |
| <i>Body Esteem</i>             | -.35                 | -.32            | -.31               | .50           | ---           |

Note: All correlations were significant at the .01 level (2-tailed)  $N=234$

**Discussion**

Our predictions were generally supported. Compared to males, females reported significantly higher general embarrassment scores, greater blushing propensity, greater interaction anxiousness, lower self-esteem, and lower body esteem scores. Those in relationships reported greater self-esteem and greater body esteem than those not in relationships. Freshman reported higher embarrassability, blushing propensity, and interaction anxiousness than upperclassmen, although these differences were not statistically significant. We did not find a significant difference in self-esteem or body

esteem between freshmen and upperclassmen. The relationship between measures was also an interesting finding. General embarrassment, interaction anxiousness, and blushing propensity were correlated with each other. Low self-esteem and low body esteem were related to higher general embarrassment, blushing propensity, and interaction anxiousness.

One limitation with our study was that the majority of participants were freshmen, with few students in each of the categories of sophomore, junior, and senior. This unequal dispersion of participants may help explain why we did not find significant differences in embarrassment and self attitudes among the different college year categories. Further analysis of individual classes (freshman, sophomore, junior, and senior) would have been preferred, and future research may explore these class differences. Another potential investigation would involve following the same participants over their time in college to determine changes from one academic year to the next. Indeed, Loeb and Magee (1992) found that students suffered declines in self-esteem and self-confidence in their first semester of college, but rebounded in their second year.

The sex differences in embarrassment and self attitudes were quite robust and support previous research findings. To further explain these results, it is important to consider how students cope with the stress and adjustment to the new college environment. In general, men prefer task-oriented coping methods and females prefer social support and emotional coping resources (Rawson, Palmer & Henderson, 1999). However, Pritchard (2006) found that male students increased the use of emotion-focused coping styles in college, thereby developing a new coping strategy to aid in college adjustment. The use of behavioral and cognitive strategies to regulate personal distress is also related to relationship development and management.

Relationships may protect self attitudes and buffer against social threats. We found that students involved in romantic relationships reported higher self-esteem and body esteem than those not in relationships. Another explanation for these findings is that those who have high self-esteem and body esteem are more likely to attract partners and begin romantic relationships due to this enhanced self-confidence. Either way, relationships play an important role in self-identification (Forbes, Jobe, & Richardson, 2006; Lin & Kulik, 2002; Long, 1983). Friends and social communities are also important to the adjustment of college students. Buote et al. (2007) studied friendships in relation to university adjustment and found a connection between the quality of new friendships and college adjustment. Friends and relationships make adjusting to new social environments easier and less stressful.

Knowledge of these results may help college students prepare for college by anticipating new challenges and possibly learning new coping and social skills. These findings may help college personnel prepare for the emotional adjustments college students experience on campus. College campuses may emphasize a sense of community and assist with the creation of opportunities for relationship development through living arrangements and social events and the availability of counseling services. Faculty and students should be sensitive to the relation between social interaction, embarrassability reactions, and self- and body esteem, especially among female students, inside and outside the classroom setting. This is especially relevant since the majority of students

seeking college degrees today are women (Adebayo, 2008). The encouragement of healthy relationships between students, faculty, and college administration may strengthen campus community connections, reduce social anxieties, and enhance self attitudes.

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### Author Note

Portions of this research were presented at the 20th Annual Association for Psychological Science Convention, Chicago, Illinois.

We thank Emily Tresky and Matt Sacco for assistance with data collection and Mishaya Studstill for comments on a draft of the manuscript.

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