

# The Relationship Between Facebook and Body Esteem Comparing College Women

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## **Abstract**

As of March 2013, Facebook recorded having 1.11 billion active members worldwide (Associated Press, 2013). Research reveals a staggering amount of college students are users of Facebook. Considering Facebook's prevalence in the lives of young people, it is essential to understand how Facebook affects our society. The purpose of this study was to examine the relationship between Facebook and body esteem and compare this relationship between college freshmen and senior women. This nonrandom pilot study surveyed 106 college women at a west-central Wisconsin university. The method used was a cross-sectional research design. We predicted that Facebook would negatively affect body esteem in young women when users utilized the site for social comparison among Facebook friends. We also predicted that there would not be a difference between college freshmen and senior women when looking at the relationship between Facebook and body esteem. Due to our research comparing college women based on academic status, survey data was statistically analyzed using cross-tabulations, mean comparisons, independent t-tests, and a Cronbach's Alpha reliability analysis. Results showed mixed support for both hypotheses. Implications for those working with college women include raising awareness on possible effects of Facebook on body esteem, and providing tips for healthy usage of Facebook. Future research would benefit from a large, randomized national and global sample, and qualitative interviews to capture the lived experience of those surveyed.

*Keywords:* Facebook, body esteem, college women, Social Comparison Theory

With technology becoming more and more integrated into our society, so too are social networking sites, the most popular being Facebook. As of March 2013, Facebook recorded having 1.11 billion active members worldwide (Associated Press, 2013). Research sampling mostly U.S. college students revealed that 90% used social networking sites, and of those students, 97% visited Facebook daily (Smith & Caruso, 2010 as cited in Junco, 2011). Considering the prevalence of Facebook in the lives of young people, it is essential to understand how Facebook affects our society.

Current research has revealed that Facebook could be a cause for stress, particularly in women, and could lead users to believe that their friends are living happier, more enjoyable lives than themselves (Thompson, & Loughheed, 2012; Chou, & Edge, 2012). The connection between Facebook and body esteem- how we perceive our body and our appearance- is just beginning to be explored (Mendelson, Mendelson, & White, 2010). A poll looking at this relationship found that Facebook users who viewed photos of themselves and Facebook friends were more conscious of their body and weight. This poll further revealed statistics that correlated Facebook use with comparing one's body to others (The Center for Eating Disorders at Sheppard Pratt, 2012). The features available on Facebook offer users the ideal instrument for social comparison processes.

Social comparison is the process of an individual comparing him/herself to others as a way of better understanding one's own attitudes, abilities, and opinions (Festinger, 1954; Goodman, 2005, as cited in Sheldon, 2010). Research on social comparison and body esteem found that women often suffer from poor body esteem as a result of social comparison (Franzoi, Vasquez, Sparapani, Frost, Martin, & Aebly, 2011). Although connections between Facebook and body esteem have already been identified, there is scant research examining the changes in body esteem in connection with Facebook throughout a young women's college career. This study examined the relationship between Facebook and body esteem comparing college freshmen and senior women.

### **Literature Review**

A literature review was conducted to investigate the relationship between Facebook usage and body esteem in

college women using Ebscohost. Key words used included: *Facebook, body esteem, college, women, social networking, and social comparison*. Literature from the past 5 years was utilized.

Current research on social networking sites (SNS) has examined the effects of Facebook on users' body image and overall wellbeing. A survey conducted by The Center for Eating Disorders at Sheppard Pratt (2012) found that 80% of respondents- both male and female, logged onto Facebook at least once daily and of those respondents, 61% logged in several times a day. About half of all users reported that they compared their life to others when viewing photos or reading statuses posted by friends, and 32% of respondents felt sad when comparing photos. A study by Thompson and Lougheed (2012) revealed that compared to males, females were more likely to report feeling stressed due to Facebook use, and feel anxious or upset if unable to access Facebook.

Research by Franzoi and Klaiber (2007) revealed that most college students in the study were more likely to compare themselves to other college students than professional athletes or models. This implied that students preferred to use a reference group of those who use their bodies in a similar manner when utilizing social comparison. Later research by Franzoi et al. (2011) found that women were more likely to compare their face and body shape to women whom they perceived as having similar or better physical qualities than themselves. These findings suggested that women were more likely to use similar or upward comparisons rather than downward comparison. Additionally, females have been shown to be especially prone to using the standards of peers to measure their own appearance, particularly during adolescence and early adulthood (Davidson & McCabe, 2005; Morrison, Kalin, & Morrison, 2004, as cited in Linder, Hughes, & Fahy, 2008).

Haferkamp and Krämer's (2011) research found that individuals who viewed photos of attractive SNS users were in a less positive emotional state afterwards. These individuals also reported a higher level of difference when comparing their build and an ideal build, and were less satisfied with their body compared to participants who looked at photos of less attractive SNS users. Chou and Edge's (2012) research found that the longer an individual used Facebook, the stronger they believed that others were living happier lives than they were and the less

likely they agreed that life is fair.

Sheldon's (2010) findings showed that both peers and family influenced women's body esteem; however, family influence subsided when women were attending college and peers were the most influential factor contributing to body esteem. Other findings show that women in emerging adulthood value their peers' opinions and acceptance regarding appearance. Messages about appearance from peers have been shown to be paramount in a young woman's self-concept (Gillen, 2007, as cited in Linder et al., 2008)

Krcmar et al.'s (2008) research revealed that interpersonal norms, including those of peers and parents, and mediated norms had a negative correlation to a young woman's appearance and body esteem. Social comparison and interpersonal norms were shown to either negate or reinforce mediated norms that force beauty and thin-ideals on women. This finding showed that support for thin-ideals within the social environment reinforced mediate norms that promoted the same beauty ideals. Linder et al. (2008) posits that as young people enter adulthood and form their self-concept, they use social comparison to develop their identity while also trying to fit in.

Current literature has established that women tend to have low body esteem and are heavily influenced by interpersonal norms and perceptions. The literature examining social networking sites indicated that Facebook can be utilized for social comparison and may have more adverse effects on women. The current literature does not adequately address if the influence of Facebook on body esteem changes with age. This study served as a way to better understand if this relationship changes as women goes through college.

### **Theoretical Framework**

Social Comparison Theory was used to inform this study. This theory assumes that individuals compare themselves to others to better understand their own attitudes, abilities, and opinions as these concepts are difficult to assess individually (Festinger, 1954; Goodman, 2005, as cited in Sheldon, 2010). There are two types of social comparison: upward social comparison- comparison to someone considered "better off", and downward social comparison- comparison to someone considered "worse off" (Wilson & Ross, 2000 as cited in Franzoi et al., 2011). Typically,

individuals prefer to compare themselves to others they view as similar to themselves. Upward social comparison is often utilized to motivate self-improvement; however research shows that this frequently leads to low self-esteem, especially when the comparison is to someone with unrealistic and unattainable standards (Collins, 1996 as cited in Franzoi et al., 2011).

As applied to our study, Social Comparison Theory would predict that women who use Facebook as a tool for social comparison and perceive their Facebook friends as better looking than they would have poorer body esteem, as upward social comparison has been shown to negatively affect body esteem (Franzoi et al., 2011). In Western social standards, women's bodies are perceived as beauty objects and are modeled to body types with physical standards difficult to attain. Thus, women typically rely on upward social comparison when evaluating their own body which can lead to more body dissatisfaction (Collins, 1996; Krahe´ & Krause, 2010; Tiggemann & Polivy, 2010, all as cited in Franzoi et al., 2011).

### **Purpose Statement**

The purpose of this study was threefold: 1) to examine the relationship between Facebook and body esteem and compare this relationship between college freshmen and senior women; 2) to develop a reliable survey instrument which measures college freshmen and senior women's attitudes towards Facebook and body esteem, and, 3) to increase awareness on the issue of Facebook and body esteem so programs can be further developed to build positive body esteem in young women.

The question central to this study was: "What is the relationship between Facebook and body esteem comparing college freshmen and senior women?" We predicted that Facebook would negatively affect body esteem in young women when users utilized the site for social comparison among Facebook friends. We also predicted that there would not be a difference between college freshmen and senior women when looking at the relationship between Facebook and body esteem. These hypotheses were based upon evidence from literature and theory.

## Method

### Participants

This study was conducted at a west-central Wisconsin university. One hundred and eighty-nine surveys were distributed to students in seven classes; 106 were included in our sample based on our demographic criteria. All of the participants were female, had a Facebook profile, and were students enrolled in the university. Fifty-four were freshmen and 52 were seniors; see Table 1 for age.

FAC						
YER	SD	D	U	A	SA	Total
Freshmen	7.4%	16.7%	61.1%	14.8%	0.0%	100.0%
Senior	13.5%	32.7%	48.1%	5.8%	0.0%	100.0%

AWA						
YER	SD	D	U	A	SA	Total
Freshmen	5.6%	13.0%	33.3%	40.7%	7.4%	100.0%
Senior	5.8%	13.5%	28.8%	40.4%	11.5%	100.0%

*Note.* (YER) = Year in college; (COM) – I often compare myself to the photos of others on Facebook; (ACC) = After viewing photos of myself on Facebook I am more accepting of my appearance; (MOR) = I tend to compare myself to people I perceive as more attractive than myself; (LES) = I tend to compare myself to people I perceive as less attractive than myself; (PRI) = I am proud of my body and appearance; (PER) = I care about how others perceive my appearance; (WEI) = I am happy with my weight; (EST) = My body esteem has improved in the past 4 years; (FAC) = I believe Facebook positively influences my body esteem; (AWA) = Facebook makes me more aware of my body and appearance

### Research Design

The purpose of this non-random survey research was to investigate the relationship between Facebook and body esteem and compare this relationship between college freshmen and senior women. A cross-sectional research design was utilized to evaluate this relationship among college freshmen and senior women at one point in time. Self-administered surveys were utilized, and were considered the most time and cost effective option as it allowed us to gather information quickly and reach our demographic population easily.

The population was college students at a west-central Wisconsin university that attended courses containing predominantly college freshmen and senior women. The sample consisted of 54 college freshmen and 52 senior women who had Facebook profiles. The study used a non-random, purposive sampling design. Our method was nonrandom as a way of being inclusive when sampling in classrooms. This study was approved by the Institutional Review Board (IRB). The ethical protection

of human subjects was provided through the completion of the IRB's Human Subjects training.

### **Data Collection Instrument**

The survey was designed to investigate the relationship between Facebook usage and body esteem in college freshmen and senior women. The survey included a brief description of the study, definitions of terms not commonly known, risks and benefits, time commitment, confidentiality, voluntary participation, our contact information and that of our supervisor, and instructions for completing the survey.

The survey consisted of seven demographic questions regarding gender, age, year in college, if they had a Facebook profile, number of daily Facebook log-ins, how often Facebook friends' photos and albums were looked at, and how often the participant uploaded photos on his/her Facebook account, as well as ten closed-ended statements based on based on a 5-point Likert scale, ranging from one (strongly disagree) to five (strongly agree). Statements and questions were informed by the literature on body esteem and Facebook and also the Social Comparison Theory.

The survey instrument had both face validity- logical correlation between the statements and the research question, and content validity- statements addressed the breadth of concepts from the literature reviewed. The survey statements and questions addressed Facebook usage and body esteem issues, and if there was a relationship between the two. Using feedback from our research supervisor, we refined and finalized our statements. The majority of our survey statements were informed by reliable survey instruments such as the Body Image Scale (BIS; Connor, Martin, Silverdale, & Grogan, 1996); thus, a pilot study was not conducted.

### **Procedure**

The survey process began when we e-mailed professors that taught classes predominantly populated with freshmen or senior women. We explained the purpose of our research and asked for permission to survey their classes. After receiving permission from the professors we set up specific times to go into each classroom and survey our sample. Data collection began November 1, 2012 and ended November 12, 2012.

For each class surveyed, we introduced ourselves and gave basic information found in the Implied Content section on the questionnaire. We explained the purpose of our research and explained that data from freshmen and senior women who have a Facebook account would be analyzed. We invited those who did not fall into this category to participate and informed them that their responses would still be considered. Surveys were then passed out and we read the Implied Consent out loud, asking students to follow along. Students were able to ask questions about anything on the implied consent and were then asked to detach and keep the implied consent. To decrease any pressure to complete the survey, the two of us as well as the professor, stepped outside of the classroom while the students completed the questionnaires. When the students completed their questionnaires they placed them in a file folder which we collected once all participating students were finished completing the questionnaire. The questionnaires were then locked in a safe in one of our homes until data analysis.

### **Data Analysis Plan**

The data was first "cleaned" and checked for missing data. The "cleaned" surveys were then "coded" using acronyms for each variable. Our independent variable was year in college (YER). All demographic questions were given a three letter acronym: Gender of participant (GEN); age of the participant (AGE); year in college (YER); if the participant had a Facebook profile (PRO); how many times the participant logged onto Facebook in a given day (DAY); how often the participant looked at Facebook friends' photos and albums (LOK); how often the participant uploaded photos on their Facebook account (UPL). Our survey statements were the dependent variables and each statement was also given a three letter acronym: I often compare myself to the photos of others posted on Facebook (COM); After viewing photos of myself of Facebook I am more accepting of my appearance (ACC); I tend to compare myself to people I perceive as more attractive than myself (MOR); I tend to compare myself to people I perceive as less attractive than myself (LES); I am proud of my body and my appearance (PRI); I care about how others perceive my appearance (PER); I am happy with my weight (WEI); My body esteem has improved in the past 4 years (EST); I believe Facebook positively influences my body esteem (FAC);

Facebook makes me more aware of my body and appearance (AWA).

The data was analyzed using the computer program *Statistical Package for the Social Sciences (SPSS)*. The individual was used as the level of analysis. Since our groups were compared, the data analysis included: frequencies, cross-tabulations, mean comparisons, independent t-tests, and a reliability analysis. Additionally, a Cronbach's Alpha reliability analysis was conducted.

## Results

All variables were subjected to frequency distribution analysis and no missing data was found. Only data from freshmen and senior women were analyzed, however any qualitative comments from students not in these groups were considered.

A reliability analysis was run to indicate if the variables were a reliable index to measure the major concept: The relationship between Facebook and body esteem comparing college freshmen and senior women. Cronbach's Alpha is a measure of reliability and in this analysis was 0.590, indicating that the survey statements were a moderately reliable measure of the major concept.

Results for our first hypothesis, predicting that Facebook would negatively influence body esteem, were mixed. For both groups, a large percentage of respondents were uncertain if Facebook positively influenced their body esteem (FAC). For the remaining respondents, there were more that disagreed than agreed with the statement. For the statement: Facebook makes me more aware of my body and appearance, both groups had approximately half of all respondents agreeing with the statement. This support is provided in the Cross-tabulations, Appendix A, Table 1.

Hypothesis #2, predicting that there would not be a difference between the two groups, also had mixed support as five out of ten variables between the two groups supported our hypothesis; these variables included: *I often compare myself to the photos of others posted on Facebook (COM)*; *I tend to compare myself to people I perceive as more attractive than myself (MOR)*; *I am proud of my body and appearance (PRI)*; *My body esteem has improved in the past 4 years (EST)*; *Facebook makes me more aware of my body and appearance (AWA)*. This

support is provided in the Cross-tabulations, Appendix A, Table 1. Results not supporting our hypothesis showed a significant mean difference between the two groups on the Independent T-test with a p-value of 0.017 for the variable *FAC*.

### **Discussion**

We found mixed support for our hypothesis that Facebook would negatively affect body esteem in young women when users utilized the site for social comparison among Facebook friends. We also found mixed support for our hypothesis that there would not be a difference between college freshmen and senior women when looking at the relationship between Facebook and body esteem. Statistically significant mean differences were found among one variable that will be discussed later within this section. Variable analysis will focus on cross tabulations and contrast whether the results were supported by literature and/or by theory. Limitations to the study, implications for practitioners, implications for future research, and the conclusion will be discussed as well.

The Social Comparison Theory supported our hypothesis that Facebook would negatively affect body esteem in young women when users utilized the site for social comparison. According to this theory, when women utilize upward social comparison body esteem is impacted negatively (Collins, 1996; Krahe' & Krause, 2010; Tiggemann & Polivy, 2010, all as cited in Franzoi et al., 2011). Given this theory and other research on the subject, our mixed support for this hypothesis was surprising. Both groups had a high percentage of uncertainty for the statement "I believe Facebook positively influences my body esteem", and the majority of the remaining students disagreed with this statement. This is consistent with a national survey that found that nearly one in three respondents felt sad when comparing photos of themselves to Facebook friends' photos (The Center for Eating Disorders at Sheppard Pratt, 2012). Nearly half of all respondents were also uncertain if they were more accepting of their appearance after viewing photos of themselves on Facebook. Mixed support was found in regards to whether respondents often compared themselves to the photos of others posted on Facebook. A high percentage of both groups believed that Facebook made them more aware of their body and appearance, and there was a reasonably high amount

of uncertain responses for this statement as well. Results from a national survey support these findings as it revealed that over half of respondents reported feeling more conscious of their body and weight after viewing photos of themselves and friends on Facebook (The Center for Eating Disorders at Sheppard Pratt, 2012). With the uncertainty of whether Facebook positively influences body esteem and the agreeableness from most participants that Facebook makes them more aware of their body and appearance, it could be suggested that students recognize that Facebook makes them aware of their body and appearance, yet they are unable to discern if this awareness affects them positively or negatively.

Our second hypothesis, predicting no difference between the two groups of women when looking at the relationship between Facebook and body esteem, showed mixed support. Half of our variable statements had similar results among the two groups. Within the literature it is stated that social comparison is part of human nature and as humans we cannot escape comparing ourselves to others (Musseweiler, Rüter, Epstude, 2006, as cited in Haferkamp & Krämer, 2011). Given that current literature typically compares genders but not ages of college students, we were curious to examine whether there was a difference among the two groups. The survey utilized in our literature review looked at the relationship between Facebook and body esteem but had a wide age range (18-40 years) and did not provide demographics of those sampled (The Center for Eating Disorders at Sheppard Pratt, 2012). Our results found that similarities between both groups related to Facebook and social comparison were how often students compared themselves to the photos of others posted on Facebook, comparing themselves to people they perceived as more attractive, if Facebook made them more aware of their body and appearance. Similarities between the two groups that related to body esteem were how proud they were of their body and appearance, and if their body-esteem had improved in the past 4 years.

The one statement that showed significant difference between the two groups on the Independent T-test ( $p < 0.05$ ) was "I believe Facebook positively influences my body esteem." Responses showed significantly more seniors than freshmen did not agree that Facebook positively influenced their body

esteem. This may suggest that seniors are affected more negatively than freshmen; or rather, seniors are more aware of the effects of Facebook on body esteem. Other differences showed that seniors cared more about how others perceived their appearance and were less happy with their weight compared to freshmen. This could suggest that senior women have lower body esteem than freshmen; however, results also revealed for both groups, students were mostly proud of their body and appearance. This presents a paradox in examining body esteem and differences among college women.

### **Limitations**

One limitation identified was the small sample; which prevented us from generalizing our findings to the larger population. With large percentages of uncertain responses on various survey statements, other limitations we identified included a lack of time to accurately respond to our survey and limited variation on the 1-5 Likert scale. The limited variation of options for demographic questions was also identified as a limitation.

### **Implications for Practitioners**

Bringing awareness to this topic should be addressed by health educators and licensed counselors on college campuses and in high schools. Support groups, posters on the issue with statistics, public service announcements, and additional resources for further information are all ways to spread awareness. Programs addressing eating disorders and body esteem issues could use this research to better consider the effects of social networking on body esteem. Such programs should consider strategies to make college students understand ways to utilize Facebook without negatively influencing their body esteem. Suggested healthy habits for using Facebook include: limiting daily usage, being aware of feelings that arise while on Facebook, not comparing photos, and keeping a realistic view of Facebook profiles and photos. Counselors, therapists, and psychologists will also find this research helpful as it puts forth the issue of Facebook and its effects on body esteem.

### **Implications for Future Research**

It is recommended that future research would include a random, large, nation sample in order to generalize the findings nationwide. Other ways to gain a broader perspective could include a global sample, a wider age range, and including men in the study. It would also be beneficial to increase the variability for the demographic questions and survey statements using a 1-7 Likert scale. Furthermore, it is suggested that if quantitative research was done again on this topic, respondents should be allotted more time to complete the survey. A qualitative study on this topic would be beneficial in gaining deeper knowledge on this topic.

### **Conclusion**

Our research shed light on the lack of awareness regarding how Facebook affects body esteem. The high number of uncertain responses and mixed support for our hypotheses leads us to believe that many young women have not considered how their online social life could be affecting how they feel about their body and appearance. Although similarities in the relationship between Facebook and body esteem were found between college freshmen and senior women, the differences that remained gave interesting insight. With somewhat contradictory findings, such as seniors women being less satisfied with their weight, but having the same rate of body pride as freshmen and believing that their body esteem has improved since freshmen year, the focus of scholarly conversation could shift to understanding how we personally define and perceive our body esteem and body pride as we mature. Our research questioned the role Facebook played in the relationship between body esteem and social comparison in college women. Based on our results, it would appear that there are many questions within this topic that remain unanswered.

### **References**

- Associated Press. (2013, May 1). Number of active users at Facebook over the years. Yahoo! News. Retrieved from <http://news.yahoo.com/number-activeusers-facebook-over-230449748.html>
- Chou, H., & Edge, N. (2012). "They are happier and having better lives than I am": The impact of using Facebook on perceptions of others' lives. *Cyberpsychology, Behavior*

- & *Social Networking*, 15(2), 117-121. doi:10.1089/cyber.2011.0324
- Connor, M., Martin, E., Silverdale, N., & Grogan, S. (1996). Dieting in adolescence: *Underlying beliefs and attitudes*. *British Journal of Health Psychology*, 1, 315, 325.
- Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, 7, 117–140.
- Franzoi, S. L., & Klaiber, J. R. (2007). Body use and reference group impact: With whom do we compare our bodies?. *Sex Roles*, 56(3/4), 205-214. doi:10.1007/s11199-006-91624
- Franzoi, S. L., Vasquez, K., Sparapani, E., Frost., Martin, J., & Aebly, M. (2011). Exploring body comparison tendencies: Women are self-critical whereas men are self-hopeful. *Psychology of Women Quarterly*. 36(1), 99-100. doi:10.1177/0361684311427028
- Haferkamp, N., & Kramer, N. C. (2011). Social comparison 2.0: Examining the effects of online profiles on social-networking sites. *Cyber Psychology, Behavior, and Social Networking*, 14(5), 309-314. doi:10.1089/cyber.2010.0120
- Junco, R. (2011). The relationship between frequency of Facebook use, participation in Facebook activities, and student engagement. *Computers & Education* 58,162-171.
- Krcmar, M., Giles, S., & Helme, D. (2008). Understanding the process: How mediated and peer norms affect young women's body esteem. *Communication Quarterly*, 56(2), 111-130.
- Lindner, D., Hughes, A., & Fahy, R. (2008). Eating pathology and social comparison in college females. *North American Journal of Psychology*, 10(3), 445-462.
- Mendelson, B. K., Mendelson, M. J., & White, D. R. (2001). Body-esteem scale for adolescents and adults. *Journal of Personality Assessment*, 76(1), 90-106. doi:10.1207/s15327752JPA7601\_6
- Sheldon, P. (2010). Pressure to be perfect: Influences on college students body esteem. *Southern Communication Journal*, 75(3), 277-298.
- Thompson, S. & Lougheed, E. (2010). Frazzled by Facebook? An exploratory study of gender differences in social network communication among undergraduate men and women. *College Student Journal*, 46, 88-98
- The Center for Eating Disorders at Sheppard Pratt. (2012).

Public survey conducted by the center for eating disorders at Sheppard Pratt finds Facebook impacts the way many people feel about their bodies. Towson, MD: Shaffer, K.

Appendix A

Cross-Tabulations

**COM**

YER	SD	D	U	A	SA	Total
Freshmen	9.3%	25.9%	24.1%	37.0%	3.7%	100.0%
Senior	11.5%	26.9%	28.8%	23.1%	9.6%	100.0%

**ACC**

YER	SD	D	U	A	SA	Total
Freshmen	1.9%	14.8%	59.3%	22.2%	1.9%	100.0%
Senior	9.6%	15.4%	46.2%	26.9%	1.9%	100.0%

**MOR**

YER	SD	D	U	A	SA	Total
Freshmen	5.6%	9.3%	27.8%	48.1%	9.3%	100.0%
Senior	9.6%	11.5%	19.2%	44.2%	15.4%	100.0%

**LES**

YER	SD	D	U	A	SA	Total
Freshmen	7.4%	13.0%	24.1%	48.1%	7.4%	100.0%
Senior	5.8%	17.3%	34.6%	32.7%	9.6%	100.0%

**PRI**

YER	SD	D	U	A	SA	Total
Freshmen	.0%	16.7%	33.3%	31.5%	18.5%	100.0%
Senior	7.7%	11.5%	28.8%	30.8%	21.2%	100.0%

**PER**

YER	SD	D	U	A	SA	Total
Freshmen	1.9%	7.4%	25.9%	48.1%	16.7%	100.0%
Senior	3.8%	5.8%	15.4%	53.8%	21.2%	100.0%

**WEI**

YER	SD	D	U	A	SA	Total
Freshmen	7.4%	27.8%	14.8%	22.2%	27.8%	100.0%
Senior	13.5%	28.8%	19.2%	25.0%	13.5%	100.0%