Implicit and Explicit Attitudes Towards Gender in the Workplace: A Comparison of Differing Party Affiliations and Political Identities of Allegheny College Students

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IMPLICIT AND EXPLICIT ATTITUDES TOWARDS GENDER IN THE WORKPLACE: A COMPARISON OF DIFFERING PARTY AFFILIATIONS AND POLITICAL IDENTITIES OF ALLEGHENY COLLEGE STUDENTS

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Abstract

At a small, liberal arts institution, 50 Allegheny College students participated in a study of implicit and explicit attitudes towards gender in the workplace. These measures were analyzed dependent upon each participant's party affiliations (Democrat, Republican, Independent, Unaffiliated, Unknown, or Other) and political identity (Strongly Liberal, Slightly Liberal, Slightly Conservative, or Strongly Conservative). The Implicit Association Test for Gender scored participants as either having a strong, moderate, slight or little no gender association for Male with Career and Female with Family or Female with Career and Male with Family. Explicit attitudes were evaluated based on six key survey questions that asked the personal importance students place on career and family, along with how strongly they associate males and females with career and family. The hypothesis formed predicted similar results for the implicit measure across all participants, while predicting explicit attitudes to change dependent upon party affiliations and political identity. While implicit attitudes stayed consistent amongst all, the explicit attitudes measure yielded both predicted and unpredicted correlations. An analysis was also done of Allegheny's student and political life and it's effect on the students' displays of their explicit and implicit attitudes.

Implicit and Explicit Attitudes Towards Gender in the Workplace: A Comparison of Differing Party Affiliations and Political Identities of Allegheny College Students

At Allegheny College, 2,100 students pride themselves on their "liberal" arts educations where they are encouraged to make "unusual combinations" in their academic choices. Currently, Allegheny is ranked 86th amongst over 200 liberal arts colleges in the U.S. and is considered one of the "up-and-coming" institutions ("National Liberal Arts", 2012; "Up-and-Coming Colleges", 2008). This college's promise to rise in rank stems from the administration's initiative to create new and innovative programs. These range from implementing environmental sustainability to having political presence and fostering diversity.

Diversity Initiatives

The college continuously tries to create a "welcoming, affirming, and inclusive campus" for its students (Potter, 2012). These words have been followed by much action on the part of administration, including the recent establishment of IDEA (Institutional Diversity, Equity & Access), the Allegheny College Civility Award, CAREs (Community Action Response Efforts), and more. Administration's efforts are also shown through the devotion to a new "theme" every academic year. The 2011-2012 term has been deemed "The Year of Sustainable Communities". Previous academic years have included "The Year of Global Citizenship" (2010-2011) and "The Year of Social Change" (2009-2010) ("Year of Sustainable Communities", 2012).

The college's attempts in recent years to create an inclusive and diverse campus can be described as "egalitarian", where all students are equal, no matter their demographic differences and where negative attitudes towards other identities are not tolerated. These efforts by the college therefore extend to the area of politics as well. Since April 2010, The Center for Political Participation on campus has been doing extensive research about the civility of current world politics. Their data showed disappointing results, which prompted them to create an Allegheny

College Civility Award. This award is to be given to one Republican and one Democratic politician who currently holds office and encourages civility in political discourse ("Civility Award", 2012).

Allegheny's strategic plan, *Combinations 2020*, was developed by President James Mullen and administration. It explicitly states that fostering diversity is of primary importance. Therefore, when Rankin and Associates proposed to facilitate a climate survey across campus in the Spring of 2009, the college accepted. That Fall, the survey was administered by the Climate Steering Committee. Within a year they produced a *Recommendations Report* which revealed the weakness the college faced and the improvements that were necessary to be made in the future (Climate Steering Committee, 2011). Administration acted upon these results and by 2010, more programming began almost immediately.

In August of 2010, the administration created the position of Chief Diversity Officer for Dr. Lawrence T. Potter, Jr., PhD who founded the IDEA program. By Fall of 2011, he released a "Strategic Diversity Update" which describes all of the newly implemented initiatives on campus. Some of these include the development of CAREs (Community Action Response Efforts), for students to address discrimination and other events significant events on campus dealing with harassment or inequality ("CAREs", 2012); ACCESS Allegheny and Navi-Gators to prepare first-generation students for college; and the hire of Tahirah Jordan as Associate Dean and Director of CIASS (Center for Intercultural Advancement and Student Success) and Steven Canals as Associate Director of Gender and Sexuality Orientation Initiatives for CIASS (Potter, 2011). All of these programs show the extensive efforts being made by the institution to initiate change and continuing to develop diversity and other political initiatives.

"Statement of Community" and Recent Events

Allegheny staff and students see themselves as promoting healthy environments for all students of different demographics. Throughout the past few years especially, President James Mullen has stressed the importance of the College's "Statement of Community":

> "Allegheny students and employees are committed to creating an inclusive, respectful and safe residential learning community that will actively confront and challenge racism, sexism, heterosexism, religious bigotry, and other forms of harassment and discrimination. We encourage individual growth by promoting a free exchange of ideas in a setting that values diversity, trust and equality. So that the right of all to participate in a shared learning experience is upheld, Allegheny affirms its commitment to the principles of freedom of speech and inquiry, while at the same time fostering responsibility and accountability in the exercise of these freedoms. This statement does not replace existing personnel policies and codes of conduct." ("Statement of Community", 2012).

Unfortunately, throughout the last year, this code has been violated by select individuals in public displays that were offensive to the majority of students. These displays included a blackface incident and written homophobic slurs. The 'blackface' incident occurred during Halloween when a few white students attempted to change their skin color by using some kind of make-up product as part of their costume (Tulloch, 2011). The homophobic slurs have occurred multiple times throughout the last few years by the de-facing of property of LGBTQ students with offensive words. Many of the more recent incidents have been accompanied by a campus wide email to students released by campus officials, making the knowledge public and trying to raise awareness (Bauer, 2011). But because the students who have committed these acts have

never been brought to light, students have not been able to see these situations resolved. Therefore, they may start to believe that these individuals are indeed "select" and that this behavior is not representative of Allegheny College's campus life. Actions such as these threaten the ideals that the college hopes to stand for with the support of its students.

Student Life

Almost all of the students on campus are involved in multiple co-curricular activities. Also, the university largely encourages student involvement by sponsoring the following: Involvement Fair, Late Night Programs, First Fridays, Chompergram, Game Room and much more, which are all coordinated by The Office of Student Involvement. There are currently 122 registered groups on campus, which are divided amongst subject and include academic, athletic, Greek life, service, and other topics. Among these, 19 groups are devoted towards diversity or political activism (6.4%) ("Student Organization Directory", 2012). Students' involvement on campus is a testament to their commitment to creating a strong Allegheny community alongside administration. However, Mullenberg College, which is similar to Allegheny in rank, size, and location has almost 11% of its student organizations devoted to such causes ("Student Organizations", 2012). Although these percentages do not differ greatly, these statistics can show how Allegheny has more work to do before being able to name itself as a progressive institution, at least in terms of student involvement.

Loren Pope, who is largely known for his successful publication of "Colleges That Change Lives", has spoken on behalf of Allegheny College as being part of this list of top 40 institutions. He believes he has "egalitarian instincts" and therefore has included the college amongst others that promote the same atmospheres (Finder, 2007). Pope is highly respected for his career with The New York Times as the education editor and also with his work as an

independent college counselor. Therefore, Allegheny students and staff not only believe the college to be an inclusive community, but it has also been publically recognized for its advances and efforts.

Although Allegheny strives to be a progressive institution that makes large advances in equality, diversity, and political change, these endeavors may not have immediate results. Sexism, racism, homophobia, and religious discrimination among other things are still present in our society, despite Allegheny's resistance against them. Although the majority of administration, staff and students support Allegheny's efforts, there has still been a presence of discrimination on campus that has been publicly displayed.

Luigi Esposito and John W. Murphy (2010) might suggest that Allegheny's liberal values serve as a disguise to post-civil rights racism and other kinds of discrimination. The authors would also suggest that although the United States is applauded for its advancement towards egalitarianism, the inequality is still evident in our society, "including health care, criminal justice, employment, housing, and education" (Esposito & Murphy, 2010). These authors make an interesting point that liberalism ignores the very real problems that still face our society in respect to social issues. Although they focus on the issue of race, their theory is transferable to sexism and gender in the workplace. Liberal facades may therefore be present in higher educational institutions like Allegheny College that promote a "liberalism" stance. While Allegheny's intentions are genuine and just for promoting such ideas of equality, it cannot escape the internal biases that Americans have towards minorities of all kinds, not just pertaining to race.

Sexism and Gender Biases in the American Workplace

Sexism continues to play a significant role in American society, just as racism does. There is sufficient academic material that show women are not only living in a sexist society, but also that men are more privileged than women in the particular areas of career and the workplace, which this study hopes to examine further. It is essential to consider the Motherhood Mandate, the Glass Ceiling effect, and the fact that women are paid on average 77.4 cents to the dollar compared to a man in the same job (Cotter et al., 2001; Russo, 1979; Institute for Women's Policy Research, 2011). Even if society believes that sexism is an issue of the past and is hidden behind a liberal facade, it is evident that biases towards gender still exist because of these three topics, amongst many others.

The Motherhood Mandate, written by Nancy Felipe Russo (1979) was not just the title of her work, but it was also the newly coined term for a theory about the expectation for women to become mothers. This mandate expects women to bear at least two children or more, raising these children "well", and being available when they need her. Women who do not fit a traditional motherhood role violate the expectations and are ostracized by her community, alongside women who are infertile, are childless, or decide to enter the workforce (Russo, 1979). A study in 2005 by J.M. Riggs suggests that these views by society are still apparent today. She hypothesized that mothers would be more harshly criticized, by other middle-aged parents, for not being present in their child's life than a father would be. Her hypothesis was confirmed by the results of her study and she provided extensive research on the topic. Riggs' data supports the double standard that mothers are negatively judged on pursuing career and child-rearing simultaneously, while men are given approval for the same behavior (2005).

The *Glass Ceiling Effect* is a metaphor most commonly used to talk about the mobility of gender in the workplace, but is not limited to just gender, but also race and class statuses. The concept relating to gender suggests that figuratively when women enter the workforce they are trapped by a glass ceiling and have no upward mobility. The notion is that they can see to the top of the corporate ladder or at least higher paying positions, but are unable to obtain these positions. The research insinuates that there are implicit biases towards women in the workplace that prevent their hire or promotion, most likely by a male in a position of power. This very real effect continues to be studied today and is an indication of the attitudes that society holds about gender in the workplace (Cotter et al., 2001).

"The Wage Gap" refers to the difference that exists in the salary earned by men and women. Women make significantly less money for similar jobs, skills, training, and education, with an average of 77.4 cents for every dollar that a man makes. This research is done extensively by the Institute for Women's Policy Research (2011) and is compared with previous data. Although technically the amount has risen in the past few decades, the climb has begun to slow and have remained fairly constant in recent years. This study provides even more evidence towards the inequality of gender in the workplace.

When a woman begins her career, not only is she ostracized for potentially abandoning family values because of the motherhood mandate, but her struggles continue. When she receives a position, the glass ceiling keeps her from moving higher within the system. Even if she is able to overcome this barrier, she is most likely refused a pay equal to that of her male counterparts. The inequality that faces women in the workplace is a reflection of the explicit (outward opinion or belief) and implicit (unconscious/internal bias) attitudes that society has towards them.

Present Study

In this study, Allegheny College students will provide their implicit and explicit attitudes towards gender in the workplace through different measures that reveal associations of males and females with career and family. Specifically, I am measuring how these attitudes change depending on each student's party affiliation (Democrat, Republican, etc.) and political identity (liberal or conservative). Because students on college campuses tend to be slightly liberal, and because of my experiences with my peers, I expect to have a large percentage of participants identify as liberal or Democrat. However, I also hope to have a great enough representation of conservative or Republican students.

I propose that the explicit attitudes towards gender in the workplace will differ between students who identify as liberal/Democrat and those who identify as conservative/Republican. Because "traditional" values tend to be at the core of Republican and conservative individuals, their explicit attitudes may suggest a stronger association between male and career and between female and family. On the other hand, it would then be expected that the Democrat and liberal individuals have a less strict association between the two ideologies, perhaps associating females with career and males with family more frequently than the other participants. However, because gender in the workplace is a social issue, it is possible that the explicit attitudes of Republicans/conservatives may be liberal in nature (not conforming to their traditional norms of female with family and male with career); meaning that they may possibly share the same ideologies about gender as their peers. Because all participants will range closely in age (18-23 years), this may be a reason for common explicit attitudes.

When looking at the implicit attitudes of the participants, I expect to find that roughly all of the participants will associate male with career and female with family to the same degree. If

implicit associations reveal an internal bias, it would be expected that participants who are all apart of the same American society would yield similar results. Therefore, no matter how the students differ in political identity or party affiliation, they have all been pre-conditioned to associate male with career and female with family more strongly than females with career and male with family. This is because all participants have been influenced by our seemingly still patriarchal society, a social system that gives more agency, power, and authority to men.

Because this study takes place on Allegheny College's campus, it would be expected to see not only more liberal participants, but also liberal ideologies that associate women with career and men with family. However, it is apparent that despite the values that the college stands for, acts of discrimination have still taken place, even if done so by a small group or one particular individual. This is a testament to the implicit attitudes that still resonate within our society. Through this study I hope to show that although explicit attitudes show promise for equality, the implicit attitudes will reveal the underlying biases that students still hold. Hopefully, this will be support that despite the acceptance we believe to embody as an institution or as college students in general, we have been conditioned throughout our life to associate specific gender roles.

In summary, the goal is to compare different explicit attitudes with implicit attitudes and correlate that data to their party affiliations and political identities. In essence I hope to show that no matter how one person feels about gender in the workplace or how they portrays their beliefs, they will still show through the implicit test that they can be influenced by a sexist bias because of their background history and environment.

Previous Use of the IAT (Implicit Association Test)

The IAT is a computer-based measure that computes participants' response times while they associate key words with appropriate categories. In the IAT for Gender, which will be used in my study, participants complete a series of associations by differentiating key words into 2 categories. These categories change from "Male or Career" and "Female or Family" to "Male or Family" and "Female or Career". The categories that receive the fastest reaction times to the correct key words indicate the implicit attitudes of the participant.

In 1998, Greenwald et al. introduced the Implicit Association Test into the field of psychology. These authors not only designed the test but also measured its immunity to self-presentational forces, convergent validity, and discriminate validity. They concluded that the IAT was superior in measuring implicit associations compared to the chief automatic evaluation measure at the time, "the evaluative priming method" (Greenwald et al., 1998). The IAT has since been used as a common measure of implicit attitudes towards race and gender.

Since the introduction of the IAT into psychological literature, many studies have been conducted in response to criticism of the test's validity. In particular, construct validity of the test has been under question because it could be suggested that the IAT is not measuring attitudes, but perhaps cultural knowledge or salience of the topic, social knowledge structure (SKS) (Perugini et al., 2007). In respect to internal validity, the IAT has also been evaluated on fakeability (Kim, 2003), familiarity (Ottaway et al., 2001), cognitive fluency and age (McFarland & Crouch, 2002), experience with the IAT (Greenwald et al., 2003), order (Nosek et al., 2005), and test-retest reliability (Nosek et al., 2005). These factors have influenced my decision to include a secondary survey after the completion of the IAT where my participants are able to have input on such factors that may have affected their results.

Methods

Participants

A total of 51 participants were recruited from introductory psychology courses at Allegheny College in return for extra-credit in their course, as approved by their professor. However, one student was excluded from the study because he/she yielded no results during their IAT because too many errors had occurred. Of the 50 participants, 33 identified as female and 17 as male. Ages ranged from 18-23 years while all students were in their first, second, third, or fourth year as an undergraduate student. All participants indicated that their primary residence was in the United States of America, which is noteworthy because each of them can identify with U.S. gender norms. Eighty-six percent identified as white, while the other 14% identified as Black or African American, East Asian, or South Asian. The following numbers of participants identified with the following choices for party affiliation: Democrat (18), Republican (10), Independent (8), Unknown (3), Unaffiliated (10), and Other—Moderate (1). For political identity, 15 participants identified as “Strongly Liberal”, 20 as “Slightly Liberal”, 11 as “Slightly Conservative”, and 4 as “Strongly Conservative”. For both party affiliation and political identity, participants were not given definitions of these previous constructs, but instead were asked to identify themselves based upon their own knowledge or classification of the terms.

Materials

Each participant first signed a consent form that was previously reviewed and approved by the Institutional Review Board at Allegheny College (see Appendix A). The first survey that the participants completed was a series of questions that measured their explicit attitudes along with general demographic information (see Appendix B). This survey was completed online through a Google documents program. Formatting and questions for this survey were compiled

from the examples used on the Project Implicit website (https://implicit.harvard.edu/implicit/), which was founded by Dr. Anthony Greenwald and other researchers for educational outreach purposes at Harvard University. The Implicit Association Test used during this study can be found at www.understandingprejudice.org/iat. This site, which is run by the Social Psychology Network, is free for use by the public. A second, concluding survey was administered after the completion of the IAT (see Appendix C) and was also created through Google documents. The formatting and questions were again formulated from Project Implicit's studies. Both survey's responses were kept in an online database for later review by the researcher. At the completion of the study participants were verbally debriefed and given a written debriefing form that was previously reviewed and approved by the Institutional Review Board at Allegheny College (see Appendix D). The site random.org was used to produce a 5-digit randomly generated participant number that was connected to each survey and the results of the IAT.

Procedure

During recruitment, potential participants were given a cover story in order to prevent self-presentation biases for the explicit attitude measure. These students were verbally told that the purpose of the study is to measure word association reaction times while taking an Implicit Association Test. Before starting the introductory survey, each participant was notified by the experimenter that their results would be kept completely anonymous. It was explained that their results would only be connected to a 5-digit randomly generated number, which would never be associated with their name at any time. Participants were left in a solitary room behind a closed door, which ensured them of their anonymity. The experimenter was notified after the completion of the survey, who then instructed them to move onto the Implicit Association Test. Again, after the completion, the experimenter entered the room to record the results that were

displayed on the screen. The results had to be recorded by hand because there was no way to access the online database where the IAT score was kept. These results were still only associated with their corresponding participant number. Participants then completed the concluding survey. After receiving their debriefing form, participants were asked if they had questions about the study and were then free to leave.

Results

Implicit Attitudes

It was previously hypothesized that participants would not vary in their scores on the IAT, no matter their party affiliation or political identity. Table 1 presents the results of a correlation performed between the IAT score, party affiliation, and political identity. None of the three variables were significantly correlated with one another, supporting the original hypothesis. Despite this support, Table 2 and Table 3 yielded interesting results for the means of the participants separated by party affiliation and political identity respectively.

The first table of means, Table 2 shows the differences between participants based upon party affiliation. This table shows that the participants who identified as Democrats associated male with career and female with family more strongly than any other identifying group (M = 1.94, SD = .938). The second strongest associations were from Independent participants (M = 2.13, SD = .991), followed by Unknown (M = 2.40, SD = 1.506). The participants who yielded results closest to a slight or little to no association with male with career and female with family were Unaffiliated participants (M = 3.00, SD = 2.646) alongside the one identifying Moderate participant (M = 3.00, SD = .000). The two more moderate mean scores are from Republican participants (M = 2.70, SD = 1.337) and the previously mentioned Unknown group (M = 2.40, SD = 1.506).

The second table of means, Table 3 shows the differences between participants based upon political identity. Again, ironically the group to more strongly associate male with career and female with family were strongly liberal identifying participants (M = 1.93, SD = 1.100). The less liberal and more conservative that the participants identified as, the farther their scores moved towards only a slight association of male with career and female with family with strongly conservative identifying individuals (M = 3.00, SD = 1.826).

The progression from strong association to a slight to little or no gender association is important to note because it goes against the notion that Democrats do not associate gender roles more closely to cultural norms as would Republicans, who showed a .76 mean difference. This trend continued with political identity as the strongly liberal differed from the strongly conservative by 1.07. Although the original hypothesis was still supported by no apparent correlations, there still is an important difference between these scores and how this reflects upon the political identity and party affiliation of the participants.

Table 4, and last analysis of the IAT scores, shows the overall frequency each score was received by participants, without the separation of independent variables. These frequencies also support the original hypothesis, that no matter the difference in political identity or party affiliation most participants would show some kind of association leaning towards male with career and female with family. The strong association category received 16 of the 50 scores (32%), moderate received 16 as well (32%), and slight receiving 9 of the 50 scores (18%), all for a grand total of 82% of the scores. Only 18% of the scores were from little or no gender association or some kind of association for female with career and male with family.

Explicit Attitudes

Table 5 shows the correlations between the questions that measured explicit attitude on the survey along with party affiliation and political identity. Obvious correlations existed between personally associating females with family and male with family [$r(48) = .708$, $p < .01$], personally associating males with career and females with career [$r(48) = .340$, $p < .05$], personally associating females with family and females with career [$r(48) = .435$, $p < .01$], personally associating females with family and males with career [$r(48) = .451$, $p < .01$], personally associating males with family and females with career [$r(48) = .768$, $p < .01$], and personally associating males with family and males with career [$r(48) = .373$, $p < .01$]. A less obvious correlation existed between personally associating females with family and the participants' placement of family importance [$r(48) = .324$, $p < .01$] primarily because a correlation was not found between males with family and the participants' placement of family importance. Another less obvious correlation, with less significance lied with personally associating males with family and career importance [$r(48) = .332$, $p < .05$].

However, as a whole the participants' party affiliation and political identity did not correlate with any of the explicit attitude questions. This suggests that the second half of the hypothesis is not supported, that being that party affiliation and political identity would have an affect on explicit attitudes towards gendered norms.

Table 6 shows the first set of means found from the explicit attitude questions based on party affiliations. When asked about their association of females and males with family, the Republican group were more likely to strongly agree with both of the associations which supports their "traditional values". First with the numbers for females with family ($M = 1.70$, $SD = .949$). However, Democrats were only .19 points away from supporting the association just as

strongly (*M* = 1.89, *SD* = .758). Republicans also strongly agreed with the association of males with family (*M* = 1.50, *SD* = .527) which was .50 lower than the following group of Unaffiliated participants (*M* = 2.00, *SD* = 1.000) and the one Moderate participant (*M* = 2.00, *SD* = .000). This can suggest as strong importance of family within the Republican group. However, looking to the means of the personal importance of family, Republicans scored on the highest (*M* = 1.40, *SD* = .966) and with the largest standard deviation, along with the Unknown group (*M* = 1.40, *SD* = .966). This seems to suggest otherwise, as other groups like Unaffiliated (*M* = 1.00, *SD* = .000) and one Moderate participant (*M* = 1.00, *SD* = .000) had lower means, which signifies a stronger personal importance of family. Conversely, these two groups only had a combined N = 4, making up only 8% of the participants surveyed.

For personal association of males with career, the strongest were with the Unaffiliated group (*M* = 2.00, *SD* = 1.000) and Moderate participant (*M* = 2.00, *SD* = .000). The highest were Democrat participants (*M* = 2.61, *SD* = .850), which supports the previous hypothesis that expected Democrats to be less likely to associate males with career than other groups or the Republican group (*M* = 2.20, *SD* = .789). They were therefore the least likely to associate the two. But once more results go against the hypothesis as the Republicans were the most likely to associate females with career (*M* = 1.60, *SD* = .699), .40 points less than the following Unaffiliated group (*M* = 2.00, *SD* = 1.000) and Moderate participant (*M* = 2.00, *SD* = .000).

Lastly, career seems to be most important to the one Moderate participant (*M* = 1.00, *SD* = .000), the Republican group (*M* = 1.10, *SD* = 3.16), the Independent group (*M* = 1.25, *SD* = .463) and the Unknown group (*M* = 1.20, *SD* = .422). All of the previously explained means from this table will be further connected to the results in Table 7, which are again the mean scores found from the explicit attitude questions, but now based on political identity.

When asked about their association of females and males with family, the Strongly Conservative group were more likely to strongly agree with both of the associations, females with family (*M* = 1.50, *SD* = .577) and males with family (*M* = 1.75, *SD* = .500). This is similar to the previous mean results for Republicans and this probably because the participants who identified as strongly conservative most likely also identified as Republicans. Therefore, these participants may be an overlap in responses. Again, following similar trends the proceeding groups were the slightly (*M* = 1.90, *SD* =.718) and strongly (*M* = 2.00, *SD* = .926) liberal participants. These participants may also overlap with Democrat participants who were second to associate females with family in the previous table.

The slightly (*M* = 1.82, *SD* = .751) and strongly (*M* = 1.75, *SD* = .500) conservative participants were the most likely to associate males with family, just as the Republicans had done so previously, again supporting that these individuals would find family to be personally important. This time, strongly conservatives were able to continue to support this notion with the highest personal importance of family (*M* = 1.00, *SD* = .000). However, slightly liberal participants were not far behind in this strong association (*M* = 1.10, *SD* = .308).

To recap, it was originally hypothesized that liberal or Democratic participants would have a higher mean and lesser association for males with career and females with family. This was true as least partly for the Democrats in the association of males with career. Similar results for political identity showed strongly liberals with the highest mean and least association (*M* = 2.80, *SD* = .862) while the slightly conservatives have the strongest association (*M* = 2.18, *SD* = .751) just as Republican had the strongest.

The association of females with career was strongest by slightly conservative (*M* = 1.82, *SD* = .874) and strongly conservative (*M* = 2.00, *SD* = .000) individuals, just as the Republicans

had similarly associated, which goes against the previous hypothesis which would assume less of an association because of their strong association of females with family. In fact, they seem to propose that they associate both family and career strongly with females.

Lastly, the personal importance of career was strongest for slightly conservatives (M = 1.00, SD = .000). Following were slightly liberals (M = 1.40, SD = .503) and strongly liberals (M = 1.40, SD = .507), and concluding with the least personal importance of career with strongly conservatives (M = 1.50, SD = .577).

Differences Between Male and Female Participants

During the analysis of this data, it seemed appropriate to assess the differences between the participants' identifying sex in relation to the correlations between the implicit and explicit measures because of the study's focus on gender. Therefore, Table 8 and 9 were produced to show this data. The 50 participants were divided between 17 males (34%) and 33 females (66%). For both male and female participants no significant correlations were found for IAT score in conjunction with the explicit questions.

In Table 8, significant correlations were found for the males' association of females with family and males with family [$r(15) = .612$, $p < .01$] while the females' association was similar in Table 9 [$r(31) = .755$, $p < .01$]. These are consistent with the overall correlation of these associations when all participants were included. The men and women also shared two similar correlations: females with family and males with career, men —— [$r(15) = .543$, $p<.05$] women — [$r(31) = .433$, $p < .05$]; and males with family and females with career, men — [$r(15) = .802$, $p < .01$] women — [$r(31) = .769$, $p < .01$]. Both are consistent with earlier correlations and complimenting each other with the reverse of gender roles. Despite the similarities between the

sexes that were already correlated in Table 5, the males and females differed in correlations in other areas.

In Table 8 for male participants, there were correlations for the associations of male with family and family importance [$r(15) = .573$, $p<.05$], male with career and family importance [$r(15) = .588$, $p<.05$], and female with career and family importance [$r(15) = .685$, $p<.01$]. Not connected to family importance was the association of females with family.

In Table 9 for female participants, there were correlations for the associations of female with family and female with career [$r(31) = .419$, $p <.05$] and male with family and career importance [$r(31) = .444$, $p <.01$].

Discussion

After analyzing the multitude of mean scores and correlations of the different measures, the data has been able to partially support my hypothesis of differing explicit attitudes and similar implicit attitudes towards gender in the workplace dependent upon participants' party affiliation and political identities. It was confirmed that implicit attitudes measured by the IAT not only are similar across the independent variables, but also that they also leaned towards more of an association for male with career and female with family. The explicit attitudes did differ in relation to party affiliation and political identity, but not with complete certainty or an astounding outcome.

Limitations

The limitations that led to this result may stem from a self-presentation biases fueled by the political atmosphere of Allegheny College and student/peer discourse, the constricted population of participants, and overall methods.

Self-presentation bias was made aware as a potential confounding variable in the early stages of this study. In order to prevent such effects, participants were assured of anonymity through verbal instructions and by the written consent form. A cover story was created to prevent suspicion of the study's true nature, and explicit questions about gender, career, family, political identity, and party affiliation were carefully placed amongst filler questions about student life on campus and basic demographic information. Despite these efforts, participants may have been able to sense the political nature of the investigation. As participants' views of the study may have changed during its course, it could be likely that they tailored their answers to preserve their personal opinions and beliefs. Anxiety may have arose because one of their peers served as the experimenter with access to their data, or simply they may have felt compelled to display the liberal beliefs of the college or conceal conflicting views of such. When divided into party affiliations and political identities, the number of participants were quite small and overall not representative of such populations on campus.

Future Study

Because of time constraint and limited resources to particular populations, only 50 students participated in the study. With six difference party affiliations, participants were more widely dispersed through each category than previously hoped for. Future studies may address self-presentation bias with a more elaborate cover story, different questionnaire or set up, or perhaps less emphasis on anonymity in the verbal instructions that could have caused participants to be wary of what the data was being used to find. It would also be useful to expand the population of participants to other age groups that may hold different ideologies, a larger random sample, or populations that are politically active and aware of their affiliation and identity that would remove those who were unsure of such questions. Participants were given

forced choices for most questions in order to yield more significant results. Creating neutral responses could have eliminated some of the correlations that were not originally expected. Overall, this study would benefit from a much larger potential population, more time, and resources.

Significance to Allegheny College

Although Allegheny's liberal endeavors may have caused self-presentation bias and a larger population of liberal identifying individuals, most participants still showed implicit attitudes towards gender that conform to traditional gender roles and that would not have initially been expected from a population that explicitly rejects these ideals. This can bring perspective to college administrators and staff and show that although such diversity initiatives and equality programming are great advances towards a more inclusive campus and world, these attitudes are still very present in this younger generation.

The explicit attitudes that were expressed can help create a fuller understanding of how college students think about gender and how the college can create a strategic plan for moving past some explicit attitudes that restrict genders to their traditional roles. But by having open discourse about the implicit and explicit attitudes students hold, they can help foster a better learning environment on this issue and eventually change the ways in which future generations think about gender with respect to career and family.

References

About IDEA. (2012). *Allegheny College, Institutional Diversity, Equity & Access.* Retrieved February 1, 2012, from http://sites.allegheny.edu/idea/about-idea/

Bauer, D. (2011, September 28). *Developing: Homophobic slur found in dormitory*. Retrieved February 22, 2012, from http://alleghenycampus.com/2011/09/28/homophobic-slur-dormitory/

Campus Steering Committee. (2011). *Recommendations report of the climate steering committee*. Allegheny College, Meadville, PA. Retrieved from http://sitesmedia.s3.amazonaws.com/idea/files/2011/03/FINAL-Recommendations-Report_CSC_BOT-Presentation_Feb-3-2011.pdf

CAREs, Community Action Response Efforts. (2012). *Allegheny college, Institutional Diversity, Equity & Access.* Retrieved February 1, 2012, from http://sites.allegheny.edu/idea/allegheny-cares/

Civility Award. (2012). *Allegheny College, Civility Award*. Retrieved February 1, 2012, from http://sites.allegheny.edu/civilityaward/

Cotter, David A., Joan M. Hermsen, Seth Ovadia, and Reece Vanneman. (2001). The glass ceiling effect. *Social Forces* 80: 655-82.

Esposito, L., & Murphy, J. W. (2010). Post Civil Rights Racism and the Need to Challenge Racial/Ethnic Inequality beyond the Limits of Liberalism. *Theory In Action*, 3(2), 38-63.

Finder, A. (2007, February 28). *A fighter for colleges that have everything but status*. Retrieved February 22, 2012, from http://www.nytimes.com/2007/02/28/education/28face.html?pagewanted=print

Greenwald, A. G., McGhee, D. E., & Schwartz, J. L. K. (1998). Measuring individual differences in implicit cognition: The implicit association test. *Journal of Personality and Social Psychology, 74*(6), 1464-1480. Retrieved from http://faculty.washington.edu/agg/pdf/Gwald_McGh_Schw_JPSP_1998.OCR.pdf

Greenwald, A. G., Nosek, B. A., & Banaji, M. R. (2003). Understanding and using the Implicit Association Test: I. An improved scoring algorithm. *Journal of Personality and Social Psychology*, 85(2), 197-216. doi: 10.1037/0022-3514.85.2.197

Institute for Women's Policy Research. (2011, September 16). *Gender wage gap remains unchanged*. Retrieved from http://www.iwpr.org/press-room/press-releases/gender-wage-gap-remains-unchanged

Kim, D. Y. (2003). Voluntary controllability of the implicit association test (IAT). *Social Psychology Quarterly, 66*(1), 83-96. Retrieved from http://www.jstor.org/stable/pdfplus/3090143.pdf?acceptTC=true

McFarland, S. G., & Crouch, Z. (2002). A cognitive skill confound on the implicit association test. *Social Cognition, 20*(6), 483-510. doi: 10.1521/soco.20.6.483.22977

National Liberal Arts College Rankings. (2012). *U.S. News & World Report.* Retrieved February 12, 2012, from http://colleges.usnews.rankingsandreviews.com/best-colleges/allegheny-college-3230

Nosek, B. A., Greenwald, A. G., & Banaji, M. R. (2005). Understanding and using the implicit association test: Ii. method variables and construct validity. *Personality and Social Psychology Bulletin, 31*(2), 166-180. doi: 10.1177/0146167204271418

Ottaway, S. A., Hayden, D. C., & Oakes, M. A. (2001). Implicit attitudes and racism: Effects of word familiarity and frequency on the implicit association test. *Social Cognition*, 19(2), 97-144. doi: 10.1521/soco.19.2.97.20706

Perugini, M., O'Gorman, R., & Prestwich, A. (2007). An ontological test of the iat: Self-activation can increase predictive validity. *Experimental Psychology*, 54(2), 134-147. doi: 10.1027/1618-3169.54.2.134

Potter, L. T. (2012). Message from Chief Diversity Officer and Associate Dean of the College. *Allegheny College, Institutional Diversity, Equity & Access*. Retrieved February 1, 2012, from http://sites.allegheny.edu/idea/

Potter, L. T. (2011). Strategic diversity update. Unpublished manuscript, Office of Institutional Diversity, Equity & Access, Allegheny College, Meadville, PA. Retrieved from http://sitesmedia.s3.amazonaws.com/idea/files/2011/11/Strategic-Diversity-Update-Fall-2011.pdf

Project implicit. (1998). Retrieved from https://implicit.harvard.edu/implicit/

Riggs, J. M. (2005). Impressions of mothers and fathers on the periphery of child care. *Psychology of Women Quarterly*, 29, 58-62. doi: 10.1111/j.1471-6402.2005.00168.x

Russo, N. F. (1979). Overview: Sex roles, fertility and the motherhood mandate. In N. Russo (Ed.), *The Motherhood Mandate* (pp. 7-15). New York, NY: Human Sciences Press.

Statement of Community. (2012) *Allegheny College, Dean of Students.* Retrieved February 1, 2012 from http://sites.allegheny.edu/deanofstudents/student-conduct-system/statement-of-community/

Student Organization Directory. (2012) *Allegheny College, Student Involvement.* Retrieved February 1, 2012 from http://sites.allegheny.edu/studentinvolvement/student-organizations/gator-groups-2/

Student Organizations. (2012) *Muhlenberg College.* Retrieved February 20, 2012 from http://www.muhlenberg.edu/main/campuslife/activities/organizations/list.html

Tulloch, K. (2011, November 11). *Blackface halloween costumes trigger campus discussion on race*. Retrieved February 22, 2012, from http://alleghenycampus.com/2010/11/11/blackface-halloween-costumes-trigger-campus-discussion-race/

Up-and-Coming Colleges Offer Top Colleges New Competition. (2008). *U.S. News & World Report.* Retrieved February 12, 2012, from http://www.usnews.com/education/articles/2008/08/21/up-and-coming-colleges-offer-top-colleges-new-competition?page=2

Year of Sustainable Communities. (2012). *Allegheny College, Conference and Event Services*. Retrieved February 12, 2012, from http://sites.allegheny.edu/conference/year-of-sustainable-communities/

Table 1

Correlation Matrix of IAT Score, Party Affiliation, and Political Identity

Measure	1	2	3
1. IAT Score	—	.151	.224
2. Party Affiliation		—	.257
3. Political Identity			—

Note: *. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Table 2

Mean Score on the IAT of Participants Separated by Party Affiliation

Party Affiliation	N	Mean	Std. Deviation
Democrat	18	1.94	.938
Republican	10	2.70	1.337
Independent	8	2.13	.991
Unaffiliated	3	3.00	2.646
Unknown	10	2.40	1.506
Moderate	1	3.00	.000
Total	50	2.30	1.266

Note: Participants were scored on a nominal scale of 1 through 7:

1 — STRONG association of Male with Career and Female with Family
2 — MODERATE association of Male with Career and Female with Family
3 — SLIGHT association of Male with Career and Female with Family
4 — LITTLE or NO gender association with Career or Family
5 — SLIGHT association of Female with Career and Male with Family
6 — MODERATE association of Female with Career and Male with Family
7 — STRONG association of Female with Career and Male with Family

Table 3

Mean Score on the IAT of Participants Separated by Political Identity

Political Identity	N	Mean	Std. Deviation
Strongly Liberal	15	1.93	1.100
Slightly Liberal	20	2.35	1.387
Slightly Conservative	11	2.45	1.036
Strongly Conservative	4	3.00	1.826
Total	50	2.30	1.266

Note: Participants were scored on a nominal scale of 1 through 7:

1 — STRONG association of Male with Career and Female with Family
2 — MODERATE association of Male with Career and Female with Family
3 — SLIGHT association of Male with Career and Female with Family
4 — LITTLE or NO gender association with Career or Family
5 — SLIGHT association of Female with Career and Male with Family
6 — MODERATE association of Female with Career and Male with Family
7 — STRONG association of Female with Career and Male with Family

Table 4

Overall Frequencies of IAT scores

IAT Score	Frequency	Percent	Cumulative Percent
STRONG association of Male with Career and Female with Family	16	32.0	32.0
MODERATE association of Male with Career and Female with Family	16	32.0	64.0
SLIGHT association of Male with Career and Female with Family	9	18.0	82.0
LITTLE or NO gender association with Career or Family	6	12.0	94.0
SLIGHT association of Female with Career and Male with Family	2	4.0	98.0
MODERATE association of Female with Career and Male with Family	1	2.0	98.0
STRONG association of Female with Career and Male with Family	0	0.0	100.0
Total	50	100.0	100.0

Table 5

Correlation Matrix of Party Affiliation, Political Identity, and Explicit Attitude Questions

Variable	1	2	3	4	5	6	7	8
1. Party Affiliation	—	.257	.181	.093	-.130	.208	-.036	-.178
2. Political Identity		—	-.048	-.181	-.215	-.129	-.131	-.154
3. Female/Family ◊			—	.708**	.451**	.435**	.324**	.134
4. Male/Family ◊◊				—	.373**	.768**	.105	.332*
5. Male/Career ◊◊◊					—	.340*	.258	-.022
6. Female/Career ◊◊◊◊						—	.070	.263
7. Family Importance •							—	-.110
8. Career Importance ••								—

Note: *. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

◊ I associate females with family

◊◊ I associate males with family

◊◊◊ I associate males with career

◊◊◊◊ I associate females with career

• Family is important to me

•• Career is important to me

Participants rated their association on the following likert scale:

1 — Strongly Agree

2 — Slightly Agree

3 — Slightly Disagree

4 — Strongly Disagree

Table 6

Mean Score of Explicit Attitude Questions Separated by Party Affiliation

I associate females with family

Party Affiliation	N	Mean	Std. Deviation
Democrat	18	1.89	.758
Republican	10	1.70	.949
Independent	8	2.00	.756
Unaffiliated	3	2.33	1.155
Unknown	10	2.10	.994
Moderate	1	3.00	.000
Total	50	1.96	.856

I associate males with family

Party Affiliation	N	Mean	Std. Deviation
Democrat	18	2.11	.758
Republican	10	1.50	.527
Independent	8	2.25	.886
Unaffiliated	3	2.00	1.000
Unknown	10	2.20	.632
Moderate	1	2.00	.000
Total	50	2.02	.742

I associate males with career

Party Affiliation	N	Mean	Std. Deviation
Democrat	18	2.61	.850
Republican	10	2.20	.789
Independent	8	2.38	.518
Unaffiliated	3	2.00	1.000
Unknown	10	2.40	.843
Moderate	1	2.00	.000
Total	50	2.40	.782

I associate females with career

Party Affiliation	N	Mean	Std. Deviation
Democrat	18	2.11	.758
Republican	10	1.60	.699
Independent	8	2.50	.535
Unaffiliated	3	2.00	1.000
Unknown	10	2.50	.850
Moderate	1	2.00	.000
Total	50	2.14	.783

Family is important to me

Party Affiliation	N	Mean	Std. Deviation
Democrat	18	1.33	.594
Republican	10	1.40	.966
Independent	8	1.13	.354
Unaffiliated	3	1.00	.000
Unknown	10	1.40	.966
Moderate	1	1.00	.000
Total	50	1.30	.707

Career is important to me

Party Affiliation	N	Mean	Std. Deviation
Democrat	18	1.50	.514
Republican	10	1.10	.316
Independent	8	1.25	.463
Unaffiliated	3	1.67	.577
Unknown	10	1.20	.422
Moderate	1	1.00	.000
Total	50	1.32	.471

Note: Participants rated their association on the following likert scale:

1 — Strongly Agree
2 — Slightly Agree
3 — Slightly Disagree
4 — Strongly Disagree

Table 7

Mean Score of Explicit Attitude Questions Separated by Political Identity

I associate females with family

Political Identity	N	Mean	Std. Deviation
Strongly Liberal	15	2.00	.926
Slightly Liberal	20	1.90	.718
Slightly Conservative	11	2.18	1.079
Strongly Conservative	4	1.50	.577
Total	50	1.96	.856

I associate males with family

Political Identity	N	Mean	Std. Deviation
Strongly Liberal	15	2.13	.834
Slightly Liberal	20	2.10	.718
Slightly Conservative	11	1.82	.751
Strongly Conservative	4	1.75	.500
Total	50	2.02	.742

I associate males with career

Political Identity	N	Mean	Std. Deviation
Strongly Liberal	15	2.80	.862
Slightly Liberal	20	2.20	.696
Slightly Conservative	11	2.18	.751
Strongly Conservative	4	2.50	.577
Total	50	2.40	.782

I associate females with career

Political Identity	N	Mean	Std. Deviation
Strongly Liberal	15	2.13	.915
Slightly Liberal	20	2.35	.671
Slightly Conservative	11	1.82	.874
Strongly Conservative	4	2.00	.000
Total	50	2.14	.783

Family is important to me

Political Identity	N	Mean	Std. Deviation
Strongly Liberal	15	1.53	.915
Slightly Liberal	20	1.10	.308
Slightly Conservative	11	1.45	.934
Strongly Conservative	4	1.00	.000
Total	50	1.30	.707

Career is important to me

Political Identity	N	Mean	Std. Deviation
Strongly Liberal	15	1.40	.507
Slightly Liberal	20	1.40	.503
Slightly Conservative	11	1.00	.000
Strongly Conservative	4	1.50	.577
Total	50	1.32	.471

Note: Participants rated their association on the following likert scale:

1 — Strongly Agree
2 — Slightly Agree
3 — Slightly Disagree
4 — Strongly Disagree

Table 8

Bivariate Correlations with Only Male Participants (N=17) of Implicit and Explicit Measures

Variable	1	2	3	4	5	6	7
1. IAT Score	—	.048	.000	-.041	.266	-.219	-.185
2. Female/Family ◊		—	.612**	.543*	.468	.468	.000
3. Male/Family ◊◊			—	.266	.802**	.573*	.172
4. Male/Career ◊◊◊				—	.466	.588*	-.161
5. Female/Career ◊◊◊◊					—	.685**	.102
6. Family Importance •						—	-.213
7. Career Importance ••							—

Note: *. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

◊ I associate females with family

◊◊ I associate males with family

◊◊◊ I associate males with career

◊◊◊◊ I associate females with career

• Family is important to me

•• Career is important to me

Participants rated their association on the following likert scale:

1 — Strongly Agree

2 — Slightly Agree

3 — Slightly Disagree

4 — Strongly Disagree

Table 9

Bivariate Correlations with Only Female Participants (N=33) of Implicit and Explicit Measures

Variable	1	2	3	4	5	6	7
1. IAT Score	—	.048	.000	-.041	.266	-.219	-.185
2. Female/Family ◊		—	.755**	.433*	.419*	.244	.207
3. Male/Family ◊◊			—	.415*	.769**	-.137	.444**
4. Male/Career ◊◊◊				—	.334	.118	.097
5. Female/Career ◊◊◊◊					—	-.267	.320
6. Family Importance •						—	-.045
7. Career Importance ••							—

Note: *. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

◊ I associate females with family

◊◊ I associate males with family

◊◊◊ I associate males with career

◊◊◊◊ I associate females with career

• Family is important to me

•• Career is important to me

Participants rated their association on the following likert scale:

1 — Strongly Agree

2 — Slightly Agree

3 — Slightly Disagree

4 — Strongly Disagree

Appendix A

Consent Form

My name is Elizabeth Deemer. I am asking you to participate in my study observing the reaction times during a word association test, along with recording your responses on a survey about student attitudes towards campus climate and student organizations. The study is beneficial because I hope to validate previous research that confirms this test is accurate.

If you decide to participate, the study will take approximately 25 minutes to complete. First you will take an introductory survey to collect some basic data. You will then proceed to the Implicit Association Test, which will measure your reaction times to several word associations. There will also be another brief survey after the completion of the IAT. The survey and test will all be taken online and will be recorded with a randomly generated participant number. Your name will not be associated with your number or your results at any time.

There are no foreseeable risks or discomfort in the participation of this study.

Your participation in this study in anonymous, and any information that is obtained in connection with this study can only be disclosed with your permission or as required by law. If you decide to participate, you are free to withdraw your consent and to discontinue participation at any time without penalty. The Institutional Review Board at Allegheny College has reviewed and approved the present research.

By agreeing to participate in this research study, you will receive extra credit or credit for research participation in the class that you were recruited in for this study, if approved by your professor.

If you have any questions at this time or later, please contact me by email at deemere@allegheny.edu or contact my project advisor, Dr. C. Lockridge, by email at clockrid@allegheny.edu If you have questions concerning the rights of research participants you may contact the Chair of the Allegheny College IRB committee Jamie Lombardi by email at jalombar@allegheny.edu. If you feel you require psychological services following and/or because of this study, please contact the Allegheny College Counseling Center at (814) 332 – 4368.

You will be given a copy of this form to keep.

I agree to take part in this study as a research participant. By my signature I affirm that I am at least 18 years old and that I have received a copy of this Consent Form.

_____
Name of Participant (printed)

_____ _____
Signature of Participant Date

Appendix B

Initial Participant Survey

*Required

Participant #: _____*

1. Sex: (choose one) * Female Male

2. Age: (choose one) * 18 19 20 21 22 23 24

3. Ethnicity: (choose one) *

Hispanic or Latino
Not Hispanic or Latino
Unknown

4. Race: (choose one) *

American Indian/Alaska Native
East Asian
South Asian
Native Hawaiian or other Pacific Islander
Black or African American
White
More than one race – Black/White
More than one race – Other
Other
Unknown

5. Class Year: (choose one) *

First Year
Second Year
Third Year
Fourth Year
Fifth Year or Higher

6. Which party would you identify yourself as a member of? (choose one) *

Democrat
Republican
Independent
Unknown
Unaffiliated

Other _____

7. Country/Region of Primary Citizenship: (choose one) *

United States of America
Other:_____

8. Country/Region of Residence: (choose one) *

United States of America
Other:_____

9. I associate females with family (choose one) *

Strongly Agree	Slightly Agree	Slightly Disagree	Strongly Disagree
1	2	3	4

10. During your youth who was your primary caregiver? (choose one) *

Birth or adoptive mother
Birth or adoptive father
Step-mother
Step-father
Other relative
Other
N/A (I did not have a primary caregiver)

11. During your youth who was your secondary caregiver? (choose one) *

Birth or adoptive mother
Birth or adoptive father
Step-mother
Step-father
Other relative
Other
N/A (I did not have a secondary caregiver)

12. Family is important to me. (choose one) *

Strongly Agree	Slightly Agree	Slightly Disagree	Strongly Disagree
1	2	3	4

13. Religious Affiliation: (circle one) *

Christian—Protestant—Mainline Church
Christian—Protestant—Evangelical Church
Christian—Protestant—Historical Black Church
Christian—Catholic
Christian—Mormon
Christian—Jehovah's Witness
Christian—Russian Orthodox Church
Christian—Greek Orthodox Church
Christian—Other Orthodox Church
Christian—Other
Jewish—Reform
Jewish—Conservative
Jewish—Orthodox
Jewish—Other
Buddhist—Theravada
Buddhist—Tibetan
Buddhist—Other
Muslim—Sunni
Muslim—Other
Hindu
Unitarian
New Age
Native American Religion
Any Other Religion not list above
Unaffiliated—Atheist
Unaffiliated—Agnostic
Unaffiliated—Other
Don't Know

14. I associate career with males. (choose one) *

Strongly Agree	Slightly Agree	Slightly Disagree	Strongly Disagree
1	2	3	4

15. List the top 3 co-curricular activities or groups on Allegheny's campus that you consider yourself to be a member of: (rank in order of level of commitment and how often you meet a week or the number of hours spent devoted to each a week) *

Name of group/organization/sport Hours/times per week

1. _____

2. _____

3. _____

16. Do you hold any leadership positions in any of the groups you indicated above? (If yes please indicate which groups and the title of your position below) *

Name of group/organization/sport Title/position

1. _____

2. _____

3. _____

17. I associate family with males. (choose one) *

Strongly Agree	Slightly Agree	Slightly Disagree	Strongly Disagree
1	2	3	4

18. What is your major(s)? *

19. In what division does it fall? (choose two if you have two different majors) *

Social Sciences
Natural Sciences
Humanities
Self-Designed/Interdisciplinary

20. What is your minor(s)? (If you do not have a minor just write N/A) *

21. In what division does it fall? (choose two if you have two different minors) *

Social Sciences
Natural Sciences
Humanities
Self-Designed/Interdisciplinary
I do not have a minor

22. Political Identity: (choose one) *

Strongly Liberal	Slightly Liberal	Slightly Conservative	Strongly Conservative
1	2	3	4

23. I associate career with females. (choose one) *

Strongly Agree	Slightly Agree	Slightly Disagree	Strongly Disagree
1	2	3	4

24. How much do you support/agree with the following "Statement of Community" that the Dean of Students has adopted for Allegheny College's campus? *

"Allegheny students and employees are committed to creating an inclusive, respectful and safe residential learning community that will actively confront and challenge racism, sexism, heterosexism, religious bigotry, and other forms of harassment and discrimination. We encourage individual growth by promoting a free exchange of ideas in a setting that values diversity, trust and equality. So that the right of all to participate in a shared learning experience is upheld, Allegheny affirms its commitment to the principles of freedom of speech and inquiry, while at the same time fostering responsibility and accountability in the exercise of these freedoms. This statement does not replace existing personnel policies and codes of conduct."

Strongly Agree	Slightly Agree	Slightly Disagree	Strongly Disagree
1	2	3	4

25. I believe that the STUDENTS on this campus support/agree with the "Statement of "Community" (choose one) *

Strongly Agree	Slightly Agree	Slightly Disagree	Strongly Disagree
1	2	3	4

26. I believe that the PROFESSORS on this campus support/agree with the "Statement of Community" (choose one) *

Strongly Agree	Slightly Agree	Slightly Disagree	Strongly Disagree
1	2	3	4

27. I believe that the STAFF and ADMISSIONS REPRESENTATIVES support/agree with the "Statement of Community"? (choose one) *

Strongly Agree	Slightly Agree	Slightly Disagree	Strongly Disagree
1	2	3	4

28. Career is important to me. (choose one) *

Strongly Agree	Slightly Agree	Slightly Disagree	Strongly Disagree
1	2	3	4

Appendix C

Concluding Participant Survey

*Required

Participant #: _____ *

1. How many IAT's (Implicit Association Tests) have you performed before this one? (choose one) *

0 1 2 3-5 6+

2. In your opinion, which of these items influenced your score on the IAT? (check all that apply) *

_____ whether I am left- or right-handed
_____ how the groups or topics are portrayed in news or entertainment media
_____ my conscious knowledge about the topics
_____ knowledge about how others generally regard the topics
_____ the order in which the category sorting tasks were presented
_____ my greater familiarity with one group or topic than the other
_____ other: _____
_____ none of the above

3. The IAT does not reflect anything about my thoughts or feelings – unconscious or otherwise. (choose one) *

Strongly Agree	Agree	Disagree	Strongly Disagree
1	2	3	4

4. The IAT reflects something about my automatic thoughts and feelings concerning this topic. (choose one) *

Strongly Agree	Agree	Disagree	Strongly Disagree
1	2	3	4

5. Whether I like my IAT score or not, it captures something important about me. (choose one) *

Strongly Agree	Agree	Disagree	Strongly Disagree
1	2	3	4

6. My IAT score reflects the culture that I am exposed to, but not me, personally. (choose one) *

Strongly Agree	Agree	Disagree	Strongly Disagree
1	2	3	4

7. I found this experience to be: (choose one) *

1	2	3	4	5	6
Boring					Interesting

8. I found this experience to be: (choose one) *

1	2	3	4	5	6
Frustrating					Enjoyable

9. I found this experience to be: (choose one) *

1	2	3	4	5	6
Useless					Eye-Opening

10. What do you believe this study is trying to measure? *

11. Any other comments:

Appendix D

Debriefing Form

Thank you for participating in my study!

The purpose of this research is to compare the implicit and explicit attitudes towards gender in the workplace. The first survey evaluated your explicit or outward views on gender in the workplace; specifically, how you associated men and women with career and family. The Implicit Association Test is a word associations test but it is used to find underlying biases people may have by examining their automatic association between two concepts; in this case it was gender with family or career. The last survey was to help you identify why you think these biases might be present and give you a way to be an active participant in the results of the study.

The overall goal of the study is to see how the implicit and explicit attitudes differ amongst students who identify with differing political affiliations.

The previous consent form did not detail the true nature of this study because we wanted to insure that the participants would not have a self-presentation bias or try to tailor their answers to what they believed was the experimenter's hypothesis. This was also done to make sure that the participants felt comfortable giving their responses on the survey.

However, please note that the IAT DOES NOT mean one is inherently sexist. It simply measures automatic associations that could indicate an automatic bias. Research shows that automatic biases do not determine explicit behavior in all circumstances.

If you still wish to remove yourself from participation, your answers can be discarded at this time if you inform the experimenter.
Please do not discuss the study with other students until data collection is complete. If you have any further questions or concerns please contact the experimenter, faculty advisor or the counseling center.

Contact Information: Experimenter: Elizabeth Deemer E-mail: deemere@allegheny.edu
Faculty Advisor: Calion Lockridge E-mail: clockrid@allegheny.edu
Counseling Center (Reis Hall Room 304) - (814) 332-4368
IRB Committee Chair: Jamie Lombardi E-mail: jalombar@allegheny.edu

If you would like a copy of the results of this research study, please fill out and tear off the bottom portion of this debriefing statement and return it to the researcher.

I would like to receive a summary of the results of this study.

Yes _____ Box # _____

No _____