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## What's Good for the Goose is Good for the Gander? Implicit Bias and Self-Concept Toward Honors Students

Molly A. Balducci  
*Georgia Southern University*

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What's Good for the Goose is Good for the Gander?  
Implicit Bias and Self-Concept Toward Honors Students

An Honors Thesis submitted in partial fulfillment of the requirements for Honors in Psychology

By

Molly Balducci

Under the mentorship of Dr. Nicolette Rickert

ABSTRACT

This study looked to evaluate the current research on peer relationships, perceived social competence, and honors status among college students, with the hope of bridging the gap in research on honors college students and friendship. Participants were college-aged students attending a local university who took an online Implicit Bias Test to see if they held any biases toward words relating to the honors label. Participants also rated their social competence as well as their relationship with their peers. Independent samples t-tests were used to examine the differences in honors and non-honors students' perception of honors programs, peer relationships, and social competencies. Implicit Bias Test scores were measured using a D-score. Implications of findings for college students and programs are discussed.

Thesis Mentor: \_\_\_\_\_

Dr. Nicolette Rickert

Honors Director: \_\_\_\_\_

Dr. Steven Engel

April 2023  
Department of Psychology  
Honors College  
**Georgia Southern University**

## **What's Good for the Goose is Good for the Gander?**

### **Implicit Bias and Self-Concept Toward Honors Students**

Honors programs have been around since before World War II (Sederberg & Humphrey, 2008); however, how current honors programs have been modeled did not begin until 1960 at the University of Oregon. In *Peterson's Smart Choices: Guide to Honors Programs & Colleges* (Digby, 2005), they stated that there are nearly 600 honors programs across two- and four-year colleges. The National Collegiate Honors Council (National Collegiate Honors Council, 2022) summarized that

Honors education is characterized by in-class and extracurricular activities that are measurably broader, deeper, or more complex than comparable learning experiences typically found at institutions of higher education. Honors experiences include a distinctive learner-directed environment and philosophy, provide opportunities that are appropriately tailored to fit the institution's culture and mission, and frequently occur within a close community of students and faculty.

With this definition and others in mind, it leaves students wondering about what are some gaps within these ideas. Namely, do honors affect a student in college? While honors might offer a "close community of students and faculty" within the program, how does it affect honors students when interacting with other students outside of the program? Research has shown that students within honors programs, regardless of age, tend to perform better academically; however, they also tend to have more anxiety than the average student (Tong & Yewchuk, 1996). While studies on honors discrimination focus more on elementary to high school-aged students, it leaves a whole subsection of college-aged students out of current research.

College is one of the most pivotal points in a student's life. It is at this point that they are put into different environments, they are trying to make new friends, and keep on top of their academic studies, all while also trying to discover who they are as an individual. These transitions alone can leave a student vulnerable but when combined with the stress of an honors program - how does that affect a student? The answer is we do not know. Previous research has not adequately addressed college students and honors programs, which is problematic because it means that universities, college institutions, and students are not fully aware of the impact or consequences of these programs. The few studies that have examined honors college students have focused on academic performance and later career success (e.g., Bowman & Culver, 2018; Kool et al., 2016), not their social competencies or friendship experiences. Without research on how to properly integrate students into college honors programs as well as balance life, extracurricular activities, and friends, many honors students can be left feeling like their work-life balance is disorganized.

Honors programs offer a source of complex learning experiences for students who want the challenge, but a lack of research on honors and non-honors students' peer relationships and self-concepts has left a gap in the research on how to effectively navigate college academics and life. The current study aimed to try and bridge the gap in research for honors programs.

### **Friendship: Maker or Destroyer of Academic Success?**

Friendship is described as the "voluntary interdependence between two persons over time that is intended to facilitate socio-emotional goals of the participants and may involve varying types and degrees of companionship, intimacy, affection, and mutual assistance" (Hays, 1988, p. 395). Friendships are an integral part of growing up, especially within the academic realm. Students who feel ostracized from other students may not perform as well as their peers.

Friendship and the feeling of belongingness are something that every human being requires, therefore it is very important to see how friendships change over time, especially within an academic setting.

In college-aged students, the research focuses more on how friendship might work to help a student perform better academically. Bronkema and Bowman (2017, p. 271) described friendship as “mutually selected, involve a continuous mutual choice, depend on a mutually shared set of common knowledge, and include self-disclosure, trust, interpersonal perception, commitment, and mutual responsibility” (e.g. Cohen, 1983; Auhagen, 1991; Hinde, 1997).

They looked at how friendships might relate to a student’s academic performance. Their results found that students who had at least one friend on campus tended to have higher academic GPAs. Their results also found that these students were more likely to stick with college and graduate within six years. However, students who reported having friends in college were more likely to party. This can be important because time spent partying is negatively related to academic GPA as partying can distract a student from their academic work. Another study stated that freshmen entering college were more likely to continue their education into the next year if they had made friends on that campus (Goguen et al., 2010). They found that friendships from high school did not have any effect on a student’s college GPA; however, new college friendships that were considered trustworthy did have a positive effect on GPA in their first semester.

The research on friendship and GPA seemed to have found that when friendships are established within a new location they can have a positive effect on a student’s grades. Which makes sense, as humans are social creatures. The feeling of belongingness can be a positive factor in one’s life and carry over into other aspects. However, research has also shown that too

many friends can harm a student's grades, as the more friends a student has the more likely they are to engage in partying.

### **The Honors Label: The Effect on an Individual's Life**

The National Association for Gifted Children described giftedness as “students with gifts and talents perform—or have the capability to perform—at higher levels compared to others of the same age, experience, and environment...” (National Association for Gifted Children). Research on this topic has defined giftedness in a variety of ways and utilized differing labels to describe these individuals, including honors, gifted and talented, etc. The current study is focused on peer relationships and perceived social competence of college honors student populations, but draws on research spanning various grade levels to fully review this topic.

Researchers have previously looked at students in honors programs to see how they view their interactions with other students as well as their friendships. They have also looked at how honors students view themselves in terms of their academics, interpersonal relationships, and their emotional wellbeing.

### ***Honors/Gifted and Self-Concept***

Children across different age groups have experienced self-concept (i.e., “one’s description and evaluation of oneself, including psychological and physical characteristics, qualities, skills, roles and so forth;” American Psychological Association, 2022) in different ways, in part based on their label as honors or gifted student. Košir et al. (2016) looked into the self-concept of students within Slovenian elementary schools. Their results found that children in elementary school are not discriminated against for the gifted label. Their research focused on students’ academic (i.e, perception of one’s own academic abilities), general (i.e., perceptions of one’s self), and peer relationship (i.e., how one sees themselves in relation to their peers)

self-concepts. They found that gifted students scored higher on academic and general self-concepts than non-academically gifted students, while there was no significant difference in peer relationship self-concepts. Research from Hoge and Renzulli (1993) found that academically gifted children from elementary to high school on average display higher self-concept scores including academic self-concept. However, the effect of overall self-concept scores was relatively minute in comparison to non-academically gifted students.

Lee et al. (2012) found that gifted middle schoolers rated their interpersonal competence in a way that was comparable to students within the norming sample. Their results also looked into students and their social self-concepts. Of the academically gifted students that partook in the survey, they felt that they were happy with their friends, had no trouble making friends, were not made fun of for being in honors, did not hide their honors label, and that overall their self-concept was positive. Masden et al. (2015) found that gifted status predicted psychosocial competencies of sixth- through eighth-graders. They found that being identified as academically gifted was related to increased social-perspective coordination (i.e., the self-concept on the ability to form friendships and retain them and the ability to perform well academically).

Further, Shechtman and Silektor (2012) researched students ranging from 5th to 12th grade. They found that academically gifted students within a segregated classroom (i.e., gifted vs. non-gifted) scored higher on behavioral self-concept and lack of emotional anxiety than non-academically gifted students; however, academically gifted students, regardless of their program type, scored lower in terms of their physical self-concept (i.e., perception of their physical ability and appearance in terms of self-esteem).

Research on self-concepts and students' academic ability is plentiful but lacks in terms of older-aged students. While previous research has looked into self-concepts in students in

elementary and middle school, there is a lack of research on high school and college students. Future research should look into the self-concepts of high school and college students to see how these factors might change as a student matures as well as how they might affect a student later on in life.

### ***Honors/Gifted and Others' Perceptions of Social Competence***

Research has further found differences in how other people perceive honors/gifted students compared to non-honors/gifted students. For example, Bracken and Brown (2006) looked at students in kindergarten to 12th grade and how their teachers perceived them. They paired 45 academically gifted students with 45 non-academically gifted students based on race, gender, and grade level to gather their data. They found that academically gifted students were not statistically significantly different from non-academically gifted students in terms of internalized and externalized problem behaviors as identified by their teachers. However, they did find statistically significant differences with regard to perceived competence and executive functioning: teachers scored academically gifted students as having a higher level of perceived social competence and executive functioning than non-gifted students. Teachers also identified academically gifted students as having fewer behavioral problems compared to their non-gifted peers. Košir et al. (2016) found that when teachers were surveyed, they stated that academically gifted students in elementary school were more socially accepted than their non-gifted students.

However, McCallister et al. (1996) found in their review of previous research that empirical data on academically gifted students tend to be more positive (e.g., teacher reports and self-reports on self-concepts), whereas anecdotal research on academically gifted students tends to be more negative. Research on the social competence of honors students has been researched



in terms of how students interact within classroom settings at a younger age; however, there is not much research on how social competence is perceived in college-aged students.

### ***Honors/Gifted and the Effect on Friendship***

When examining if friendship and social competence affect a student, it is also important to see if the reverse has an effect. This section examines research on how honors and gifted labels may affect a student in their daily life when it comes to making new friends. Mainly, do students in these categories face any discrimination toward their labels?

In early childhood, intellectually gifted children may find themselves different from their peers in more ways than one. Gross (1989) found that especially gifted children often find themselves stuck in a dilemma of friendship or academics. The research found that children might struggle to balance these two desires, and instead forfeit one to engage in the other. This can be an issue as children who choose to satisfy their drive for academic excellence might risk all forms of friendship with peers their age, whereas children who pursue friendship might force themselves into a pattern of underachievement.

Košir et al. (2016) found, when looking at elementary schools in Slovenia, that there was no statistically significant difference between academically gifted students and non-academically gifted students in terms of positive friendship nominations. However, academically gifted students did receive fewer negative nominations than non-academic gifted students. Friendship nominations were determined by asking students to write down a list of three students that they liked the most and three students that they liked the least.

Masden et al. (2015) found that in terms of friendship qualities there was no statistically significant difference between academically gifted and non-academically gifted middle schoolers. Despite academically gifted students reporting that their friendships were of lesser

quality than non-academically gifted students, they still felt that they did not have any more or fewer friends. They also found that academically gifted students appeared to have more mature relationships.

The research for peer relationships and honors students again seems to focus on those in elementary and middle school. Despite the main focus being on younger children, the research seems to contradict itself. In some places research shows that honors students struggle to make like-minded friendships, while other researchers found that students do not see any difference in friendships in comparison to non-honors students. Peer relationships regarding honors programs are an area of research that needs further development within the college setting.

### **Implicit Bias and the Negative Effect of an Honor's Label**

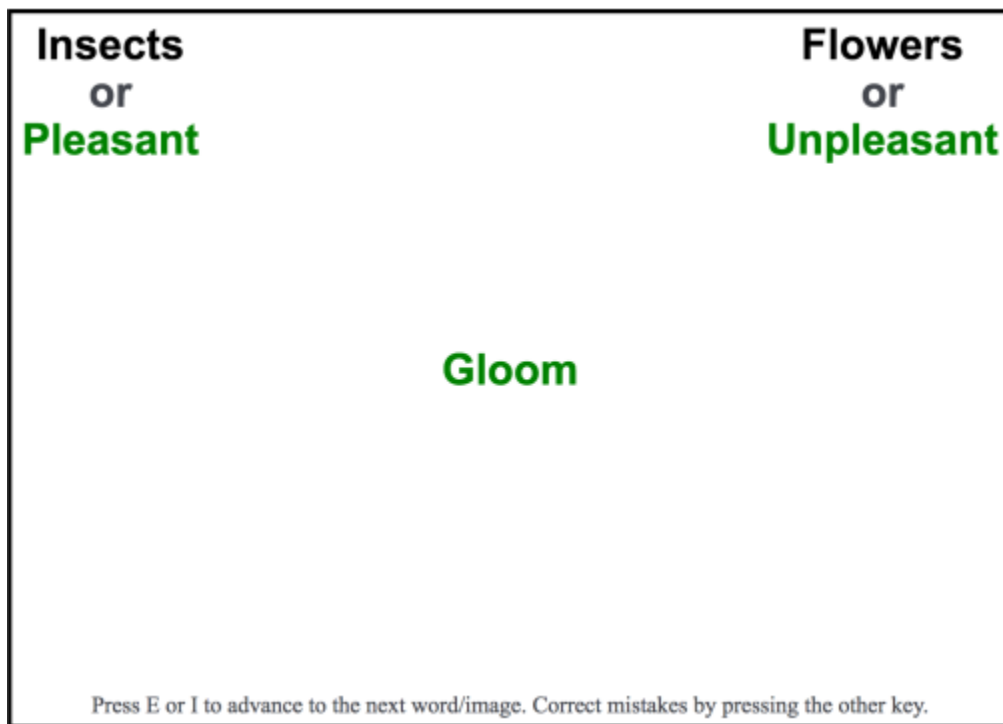
Implicit bias can be understood as “discriminatory behavior... to the extent that the person showing the behavior is unaware that their behavior is biased” and that “discrimination can be said to occur when a person’s behavior toward a target individual is influenced by the target’s group membership, including (but not limited to) the target’s race, gender, or sexual orientation” (Gawronski et al., 2020, p. 99).

Greenwald et al. (1998) describe in their research how an Implicit Association Test (IAT) works. IATs assess if there is an association or discrimination between a targeted concept. These tests consist of five different sections. In the first section, two categories will appear (i.e., flower vs. insect) in the top left and right corners of the webpage. Words will then appear in the middle of the screen, and participants are asked to tap the key that corresponds with the side that the category is on. If an error is made, a red ‘X’ will appear. In the second phase, the rules will stay the same; however, the categories have changed (i.e., pleasant vs. unpleasant). In the third section, the four categories are now combined. This time the keys will represent two categories

(i.e., insects or unpleasant vs. flowers or pleasant). The fourth section then swaps the sides that the categories initially appeared on (i.e., if flower was on the left it will now appear on the right and use the right key). In the fifth section, the categories are again combined but this time with the opposite from the third round (i.e., flowers or unpleasant vs. insects or pleasant). The reason for using IATs when looking at implicit bias is that they are expected to reveal more discrimination than a regular self-report might, in part because the bias is assumed to be implicit or something the person is unaware of (see Figure 1).

### Figure 1

*Example slide of an IAT question based upon research from Greenwald et al. (1998)*



### ***Implicit Bias in Relation to the Honors Label***

Wiley (2020) reviewed previous research conclusions to see if there is any relationship between the academically gifted label and discrimination or implicit bias toward the student. The articles that he used mainly focused on students ranging from kindergarten to twelfth grade. His

research found that the issue with gifted studies comes from a lack of research, small sample sizes, and selection bias, as well as response and observer bias. This can make research on gifted students ungeneralizable and limit the amount of findings because of the specificity of this research. Wiley looked into if there is any validity in the statement that academically gifted students are different from their peers. He found that there were different expectations for academically gifted students (e.g., teachers may expect higher quality work for honors students, parents may expect honors students to be more mature, etc.), but most research has concluded that academically gifted students are as well adjusted (i.e., socially and emotionally) as their peers (e.g., Bain & Bell, 2004; Bracken & Brown, 2006; Cross et al., 2008; Mueller, 2009). Despite the misconception that gifted students are more likely to struggle to make friends, Wiley also found that gifted students are *not* more socially inept (e.g., Pfeiffer, 2013). Further, being identified as gifted was not seen as negative within social situations (e.g., Lee et al., 2012).

Nonetheless, no study to date has examined implicit biases toward honor students using the IAT.

### **Current Study**

The purpose of this study was to look at differences in perceptions of honors and non-honors students. Specifically, the current study examined how honors and non-honors students believe they vary in terms of self-concept, peer relationships, and how they view honors academic programs. An Implicit Association Test (IAT) was used to see if there were any implicit biases from college-aged students toward words related to honors academic programs and the honors label.

Building on previous research, the current study sought to answer the following research questions:

1. Do honors and non-honors college students hold any implicit biases toward words related to honors programs?
2. Are there differences in how honors and non-honors students perceive themselves in terms of social competence and peer relationships?

Based on previous research, it was hypothesized that there would be no significant differences in terms of the IAT scores, in that students, regardless of honors status, would not hold *negative* implicit biases toward honors-related words. Rather, it was expected that honors students would have a more *positive* bias toward honors-related words compared to their non-honors peers. In terms of scholastic and academic ability, it was also hypothesized that honors students would be more likely to rate themselves higher than their non-honors counterparts. Finally, it was hypothesized that honors students would rate themselves as no different in terms of social competence and peer relationships than how non-honors students would rate themselves.

## Methods

### Participants

There were 340 participants that accessed this study; however, only 313 completed the survey in its entirety. Another 23 participants' data were excluded from the IAT results due to time taken. Participants within the timeout category were dropped from the overall IAT results due to excessive time in taking the IAT. Others were dropped due to excessive speed. Participants read through the informed consent and indicated that they were 18 years or older before completing the survey in its entirety.

The sample consisted of 70 (22.4%) males, 239 (76.4%) females, 2 (0.6%) non-binary individuals, 1 (0.3%) individual who identified as other, and 1 (0.3%) individual who preferred

not to say. There were 191 (61.0%) White participants, 74 (23.6%) who identified as Black/African American, 26 (8.3%) individuals who identified as multiracial, 13 (4.2%) who identified as Hispanic, 7 (2.2%) Asian or Pacific Islanders participants, 1 (0.3%) Native American participant, and 1 (0.3%) individual who identified as another race. With respect to year in college, 185 (59.1%) of participants identified as being in their first year, followed by 75 (24.0%) second years, 38 (12.1%) third years, 12 (3.8%) participants in their fourth year, and 3 (1.0%) individuals who were in their fifth year or higher. Participants who identified their GPA as 3.0-3.5 made up the largest group with 161 (51.9%) individuals, then 3.7-4.0 GPA with 77 (24.8%) participants, 2.0-2.5 GPA with 53 (17.1%) participants, 0.0-0.9 GPA with 14 (4.5%) individuals, and finally 1.0-1.5 GPA with 5 (1.6%) participants. There were 21 (6.7%) participants from the honors college and 292 (93.3%) who were from the non-honors student body.

### **Procedure**

All participants in this study were volunteers from Georgia Southern University. They were all within the honors and non-honors student population and were recruited through SONA, the honors college email updates, and the honors college group chat. The study required a computer with an internet connection. Participants went through SONA to access the study which took them to a Qualtrics survey study. Participants then read the informed consent, and, if they agreed, they were prompted to continue with the study. Participants first completed the IAT (described below). Participants were then asked to complete a survey targeting their feelings toward honors students and self-concept. After the IAT and the survey, participants were then directed to a debriefing page. All data was collected anonymously from participants.

### **Measures**

***Implicit Association Test (IAT)***

In the IAT, participants were prompted to match positive and negative words with words relating to honors and non-academically gifted terms ( $a = .86$ ). However, because there are not any specific lists of positive and negative words within an academic setting, this study consists of words that were identified by a mix of honors and non-honors students as being positive or negative. The list initially consisted of seventeen (17) words with examples like “helpful” and “stand-offish.” However, after review and input, the list was cut down to fourteen (14) words. This was due to the removal of words like “overachiever,” “perfectionist,” and “competitive,” which could not be unanimously identified as either positive or negative. Participants used the mouse or touchpad and keyboard, specifically the E, I, and Spacebar keys, to complete the IAT as well as using the keyboard and mouse to respond to survey questions. This newly created IAT for detecting bias surrounding honors students/programs was pilot-tested before being used in the current study. Positive D-scores within this test indicated a positive bias between Target A (honors status label) and positive words and a negative bias between Target B (non-honors status label) and negative words. A negative D-score indicated a negative bias between Target A (honors status label) and negative words and a positive bias between Target B (non-honors status label) and positive words.

***Friendship Qualities Scale***

Participants were asked to use a 5-point rating system (1 = *not true*, 5 = *really true*) to answer 14 questions about their friendships ( $a = .91$ ). This scale was revised to account for all of a participant's friends and looked specifically at the companionship (4 items;  $a = .85$ ), security (5 items;  $a = .77$ ), and closeness (5 items;  $a = .91$ ) subscales. Questions from this scale included

“My friend and I spend all our free time together” and “I feel happy when I am with my friend.”

A higher score within this section denoted higher quality friendships.

### ***Inventory of Parent and Peer Attachment–Revised***

Looking specifically at the Peer Questionnaire, participants used a 3-point scale (1 = *always true*, 2 = *sometimes true*, 3 = *never true*) to answer questions about their current friendships ( $a = .93$ ). This questionnaire contained 25 questions with statements such as, “I like to get my friends’ opinions on things I am worried about” and “I wish I had different friends” (reverse-coded). Within this section, a lower score pointed to a stronger positive peer attachment.

### ***Self-Perception Profile for College Students***

Using a revised version of the Self-Perception Profile for College Student, Scholastic Competence (4 items;  $a = .72$ ), Social Acceptance (4 items;  $a = .73$ ), Close Friendships (4 items;  $a = .74$ ), Intellectual Ability (4 items;  $a = .71$ ), and Global Self-Worth scale (6 items;  $a = .80$ ), participants looked at two separate statements and applied which one they felt best represents them. Questions from this scale included options like “Some students like the kind of person they are BUT Other students wish that they were different” and “Some students do very well at their studies BUT Other students don’t do very well at their studies.” Within this survey, a lower score indicated a more positive outlook in each of the subscales.

### ***Demographics***

Demographics were collected within the study. These included information about the participant’s honors status in college, sex, race/ethnicity, year in school, and GPA.

## **Results**

Preliminary analyses with correlations and descriptives were conducted. In relation to friendship and social scales (Friendship Qualities Scale, Peer Attachment, Social Acceptance,



and Close Friendship), all independent domains and scales were correlated at  $p < .01$ . In terms of overall General Self-Worth, it was correlated at  $p < .01$  level except for the IAT D-score. GPA was correlated to everything except the IAT D-score, Social Acceptance, and General Self-Worth. An individual's D-score from their IAT was not statistically significantly correlated with any of the other variables.

Independent samples t-test were used to examine the differences between honors and non-honors students' perception of their peer relationships and social competencies. All scores related to the IAT were measured using a D-score analysis from Greenwald et al. (2003) as the reference; independent samples t-tests were used to examine differences between honors and non-honors students on this D-score for implicit biases and all other outcome variables of interest.

**Table 1**  
*Correlation among Study Variables*

<b>Domain</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>	<b>9</b>
<b>1. D-s</b>	-								
<b>2. SC</b>	-.11	-							
<b>3. IA</b>	-.02	.49**	-						
<b>4. FQS</b>	-.09	-.05	-.04	-					
<b>5. SA</b>	.06	.12*	.19**	-.26**	-				
<b>6. CF</b>	-.03	.22**	.24**	-.41**	.42**	-			
<b>7. PA</b>	-.02	.15**	.11*	-.65**	.23**	.43**	-		
<b>8. GSW</b>	.08	-.17**	.27**	.30**	.41**	.33**	.39**	-	
<b>9. GPA</b>	.08	.20**	-.21**	-.25**	.02	-.21**	-.27**	-.10	-

*Note.* D-s=Individual IAT D-score. SC=Scholastic Competence. IA=Intellectual Ability. FQS=Friendship Qualities Scale. SA=Social Acceptance. CF=Close Friendships. PA=Peer Attachment. GSW=Global Self Worth.

\*  $p < .05$ , \*\*  $p < .01$

### ***IAT Differences***

For the IAT, independent samples t-tests were used to measure the results overall as well as across honors and non-honors students. The overall IAT analysis for the sample included a D-score mean of .69 and standard deviation of .40 and showed that students overall showed a positive bias toward honors students ( $t(289) = 29.12, p = .00001, d = 1.71$ ). When examining individual differences in D-scores or implicit biases, an independent samples t-test demonstrated that there was no statistically significant difference between participants within the honors college ( $M = .763, SD = .28$ ) and their non-honors counterparts ( $M = .69, SD = .41; t(288) = .79, p = .44, d = .19$ ).

### ***Academic Self-Concept***

In terms of Self Perception Scales, there was the overall Self Perception scale, Scholastic Competence subscale, Intellectual Ability subscale, and the General Self-Worth subscale. A series of independent samples t-tests were used to examine differences between honors and non-honors status on each of these scales. With regard to their overall self-perception score (Scholastic Competence, Social Acceptance, Close Friendships, Intellectual Ability, General Self-Worth), participants within the honors college ( $M = 1.20, SD = .31$ ) did statistically significantly perceive their Scholastic Competence as higher than their non-honors counterparts ( $M = 1.44, SD = .36; t(311) = -2.95, p = .003, d = .67$ ). For Intellectual Ability, participants within the honors college ( $M = 1.31, SD = .38$ ) had marginally statistically significantly greater perceptions of their intellectual ability than their non-honors counterparts ( $M = 1.47, SD = .36; t(309) = -1.91, p = .06, d = -.43$ ). The t-test performed for the Scholastic Competence subscale revealed that participants within the honors college ( $M = 1.41, SD = .27$ ) did not statistically significantly differ from their non-honors counterparts ( $M = 1.41, SD = .24; t(311) = -.05, p =$

.96,  $d = -.01$ ). In terms of General Self-Worth, the independent samples t-test demonstrated that participants within the honors college ( $M = 1.45$ ,  $SD = .41$ ) did not statistically significantly differ from their non-honors counterparts ( $M = 1.37$ ,  $SD = .33$ ;  $t(311) = 1.03$ ,  $p = .31$ ,  $d = .23$ ).

### ***Friendship Differences***

After gathering the results, the individual survey results were averaged together (i.e., individual responses to the 14 questions within the Friendship Qualities Scale) to see mean differences across the grouping variables (honors and non-honors status), utilizing a series of independent samples t-tests. Participants within the honors college ( $M = 1.68$ ,  $SD = .39$ ) did not statistically significantly differ on their perceptions of Social Acceptance from their non-honors counterparts ( $M = 1.47$ ,  $SD = .38$ ;  $t(309) = 2.45$ ,  $p = .02$ ,  $d = .55$ ); non-honors students stated feelings of higher Social Acceptance than those within the honors college. However, participants within the honors college ( $M = 3.74$ ,  $SD = .72$ ) did not statistically significantly differ from their non-honors counterparts ( $M = 3.89$ ,  $SD = .73$ ) on the perception of the quality of their friendships ( $t(311) = -.87$ ,  $p = .38$ ,  $d = -.20$ ). In the Peer Attachment scale from the Inventory of Parent and Peer Attachment, honors college students ( $M = 1.59$ ,  $SD = .31$ ) also did not statistically significantly differ from non-honors students ( $M = 1.53$ ,  $SD = .34$ ;  $t(310) = .71$ ,  $p = .48$ ,  $d = .16$ ). The Close Friendship subscale revealed participants within the honors college ( $M = 1.39$ ,  $SD = .38$ ) did not statistically significantly differ from their non-honors counterparts ( $M = 1.34$ ,  $SD = .35$ ;  $t(310) = .72$ ,  $p = .47$ ,  $d = .16$ ).

### ***GPA Differences***

An independent samples t-test was used to examine differences between honors and non-honors status in terms of their institutional GPA. This analysis revealed that participants within the honors college ( $M = 4.67$ ,  $SD = .58$ ) did statistically significantly differ from their

non-honors counterparts ( $M = 3.85$ ,  $SD = .94$ ;  $t(308) = 3.91$ ,  $p = .001$ ,  $d = .88$ ). Honors college students had higher GPAs on average compared to non-honors students.

**Table 2***Results of Study Variables*

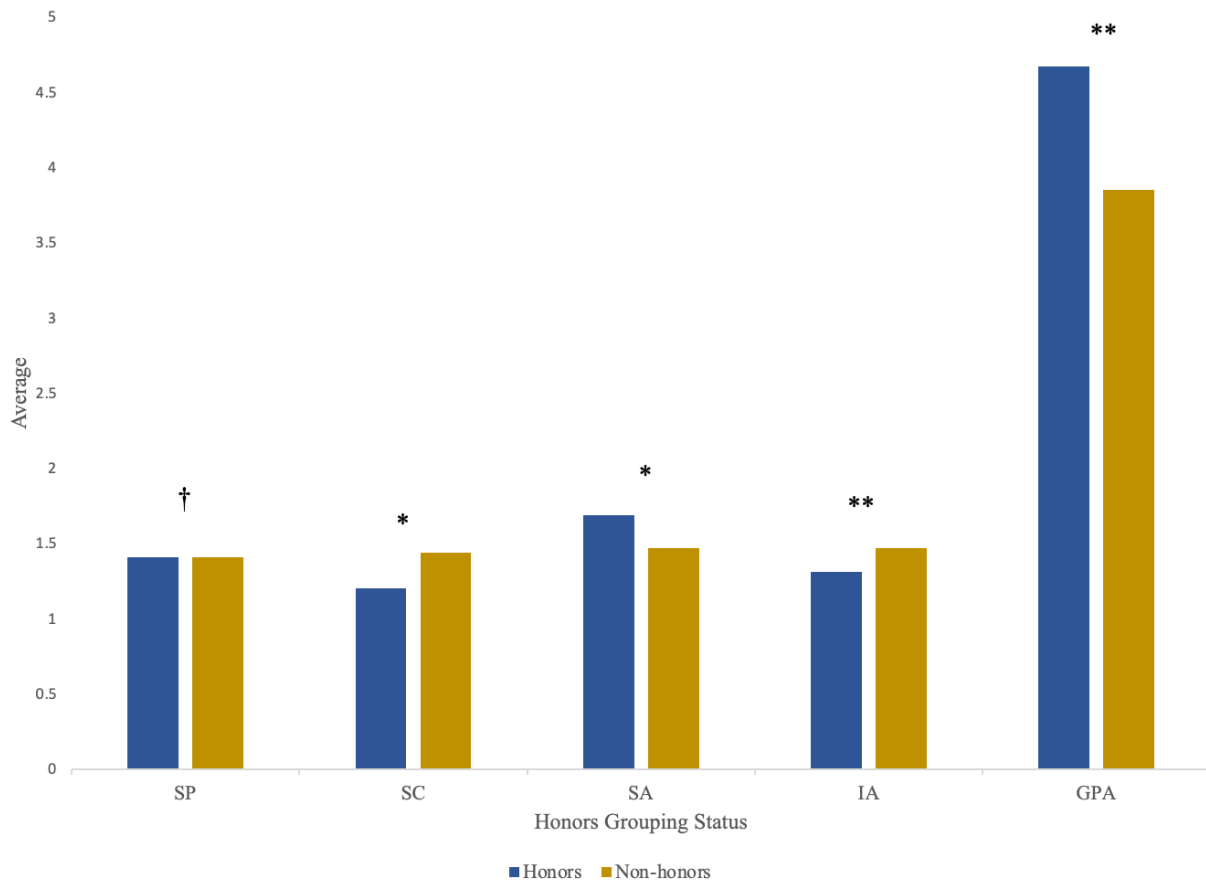
	Sample	H	NH	df	<i>t</i>	Cohen's <i>d</i>
	<i>M (SD)</i>	<i>M (SD)</i>	<i>M (SD)</i>			
FQS	-	3.74 (.72)	3.89 (.73)	311	-.87	-.20
PA	-	1.59 (.31)	1.53 (.34)	310	.71	.16
SP	-	1.41 (.27)	1.41 (.24)	311	-.05†	-.01
SC	-	1.20 (.31)	1.44 (.36)	311	-2.95*	.67
SA	-	1.68 (.39)	1.47 (.38)	309	2.45*	.55
CF	-	1.39 (.38)	1.34 (.35)	310	.72	.16
IA	-	1.31 (.38)	1.47 (.36)	309	-1.91**	-.43
GSW	-	1.45 (.41)	1.37 (.33)	311	1.03	.23
GPA	-	4.67 (.58)	3.85 (.94)	308	3.91**	.88
D-s	-	.76 (.28)	.69 (.41)	288	.79	.19
IAT	.69 (.40)	-	-	289	29.12**	1.71

*Note.* *M* and *SD* represent mean and standard deviation. H and NH are used to indicate honors and non-honors status. FQS=Friendship Qualities Scale. PA=Peer Attachment. SP=Self Perception. SC=Scholastic Competence. SA=Social Acceptance. CF=Close Friendships. IA=Intellectual Ability. GSW=General Self Worth. D-s=Individual IAT D-score.

†  $p < .06$ , \*  $p < .05$ , \*\*  $p < .01$

**Figure 2**

*Barcharts for All Statistically Significant Differences Between Honors and Non-Honors Students*



*Note.* SP = Self Perception. SC=Scholastic Competence. SA=Social Acceptance. IA=Intellectual Ability.

†  $p < .06$ , \*  $p < .05$ , \*\*  $p < .01$

### Discussion

Given limited research on college-aged students and their experiences with the honors label, this study looked to investigate the differences in implicit biases about honors status, friendships, and self-concepts between honors and non-honors students. Research surrounding the honors label in relation to friendship only covers elementary and middle school, and even they seem to conflict in nature (Gross, 1989; Košir et al., 2016; Masden et al., 2015). In terms of

implicit biases and the honors label, there has not been any research using an IAT to examine them. With these findings, we aimed to address the gaps in current research by focusing on honors and non-honors college students and identifying the biases that might impact these students.

The first hypothesis of this survey stated that honors and non-honors students would differ on their implicit biases such that honors students would have a more positive bias toward the honors label than non-honors students; but neither group would hold a negative bias. This hypothesis was partially supported: There were no group differences on the IAT, and the entire sample held a positive bias toward the honors label. Both groups had a positive bias toward honors status when paired with positive words. While previous research has never explicitly looked at implicit biases through the IAT with honors and non-honors students, some research has shown that honors students are not discriminated against for the honors label (Košir et al., 2016). The lack of research further extends to honors status and its effects within college. Research within this field has typically focused on the ways that an honors label affects a student's self-perception.

Our second hypothesis stated that in terms of scholastic and academic ability, honors students would be more likely to rate themselves higher than their non-honors counterparts. Looking at the results from the Scholastic Competence subscale, Intellectual Ability, and GPA, our data did support these findings. Research from Hoge and Renzulli (1993) found that honors/gifted students displayed higher self-concept scores within an academic subscale; however, the score from this study, overall, was not that significantly different from non-honors students. The Intellectual Ability subscale found a marginally significant difference ( $p = .06$ ) between honors and non-honors students with a medium effect size. In the current study, honors

students rated their self-perception of their intellectual ability higher than non-honors students. Our research supported this finding with the Scholastic Competence subscale and GPA each significantly differing with honors students rating themselves as higher on both compared to non-honors students. The Scholastic Competence subscale showed a medium effect size while GPA had a large effect size.

Finally, we hypothesized that honors students would rate themselves as no different in terms of social competence and peer relationships than their non-honors counterparts. Our data from the Friendship Qualities Scales, Inventory of Parent and Peer Attachment Revised, the Social Acceptance, and Close Friendship subscale for the most part supported these findings. There was a statistically significant difference and a medium effect size for the Social Acceptance subscale such that honors students rated themselves as having less social acceptance than their non-honors counterparts. Overall, previous research has found that gifted students are well adjusted both socially and emotionally, not any more socially inept, and that the honors/gifted label is not perceived as negative within social situations (Wiley, 2020; Bain & Bell, 2004; Bracken & Brown, 2006; Cross et al., 2008; Mueller, 2009; Pfeiffer, 2013; Lee et al., 2012).

### **Limitations and Future Directions**

While the current study expands on the sparse literature comparing honors and non-honors students, it does have several limitations that can be addressed in future studies. One limitation of this study is that it was conducted within a single time period. Because this survey is only taken once by each participant there is no way to tell if their responses are indicative of their entire experience within college or if their perceptions of themselves and the honors label might change over time. This result is also confounded with the issue that the survey was mainly

composed of first year students. Future research could look to expand upon this research by using a longitudinal survey to see if honors and non-honors students' self-perceptions, quality of friendships, and GPA change over time from their first year to graduation. This research could also look to identify changes in implicit biases toward the honors label overtime.

Another limitation of this study was a lack of proper definitions and validated lists of positive and negative words within an academic setting. Currently there are a lot of different definitions and labels used to describe honors students (e.g., gifted, talented, etc.). The same, however, cannot be said for non-academic honors students. When looking at the research there is a distinct lack of conversation and group names to apply and use for those that are not in honors programs within their school. Because of this, it greatly limits the words and labels that were available to use within the IAT. Another issue is the lack of academic-specific positive and negative words that have been validated. Consequently, our study used a pilot tested group of words. Future research could look to identify one formal definition for what honors means within an academic setting while also building a formal definition for non-honors. In addition, future research could investigate validating a specific set of positive and negative words within an academic setting. By addressing both, this could greatly expand the minimal research on academic perception of honors and non-honors students in college and allow for IATs to be used within future academic settings.

Due to the nature of the IAT it must be taken on a computer. This was a major limitation for this survey as it limited how and when participants could access the survey (e.g., no mobile devices). It also limited how the survey was able to be distributed, strictly through links that participants would be able to access on their computers. It also relied heavily on the assumption that college students would have their own personal computers or access to a computer lab,



which is not the case for every student. Future research could set up a research lab where students could sign up and take the survey to remove issues of having access to a computer. Perhaps the biggest limitation is that only 21 honors students participated in the study compared to 292 non-honors students. While the number of honors students is proportionally smaller across the university, future research could look to offer more incentives for honors students to participate within the survey, as it is possible that the statistical power to detect group differences might increase with a larger, more evenly sized sample of honors versus non-honors students.

Finally, future research could look into expanding to different groups or looking into different demographic variables. A future study could see what differences might arise if a third grouping variable, such as students with disabilities, were added. Research from Colangelo et al. (1987) looked at sex differences between these three groups and found overall differences between them in terms of self-concept. Future research could look to further expand upon this research with academic and intellectual self-concept and an IAT based survey.

### **Implications**

This study sought to increase our understanding of friendship concepts, self-concepts, and implicit biases within a collegiate setting between different academic groups (i.e., honors and non-honors). The results of our study did not find any statistical significant differences between honors status and IAT scores or between friendship concepts (except Social Acceptance), however, it did find significant differences between academic factors like GPA and Scholastic Competence.

### ***Biases and Academic Implications***

The understanding of biases within the educational environment, especially at the collegiate level, can help to provide a more inclusive learning environment. The research from

this study showed how both honors and non-honors students tended to associate positive words with the honors status. Using this information, colleges and universities should look into the association between perceived academic ability and perceived self-worth. Acknowledging the divide between honors and non-honors status, professors and university administrators could look to identify ways to bridge the gap. Identifying biases within the school system, differences between class styles, and biases within teachers and professors are just a few of the issues between honors and non-honors students might arise.

Looking at academic differences within the collegiate setting can also lead to a more inclusive environment. Honors students, within this study, rated themselves higher in terms of intellectual ability and scholastic competence compared to how non-honors students perceived themselves. Their GPAs were also seen to be higher than non-honors students. Looking at these findings, professors and university administrators should look toward identifying what factors cause these differences, such as whether they are intrinsic (i.e., internal drive to acquire knowledge) or extrinsic (i.e., external drive to acquire good grades). Identifying differences can help to bridge the academic gap.

### ***Social Implications***

In the study, the only statistically significant social finding was that honors students stated having less social acceptance. Colleges and universities should look to identify differences between honors and non-honors students to see why these situations come about. Figuring out the root cause (i.e., differing environmental pressures, workload, or perceived difference between the two groups) can allow for better socialization of honors students. Through better coping strategies or changing of expectations, universities and colleges can look out for honors students and ensure that they are still being offered the social aspect of college.

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