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# Girls' Self-Esteem Rates in Single Sex & Coed High Schools

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Fall 2010

## **Introduction: What Is Self-Esteem?**

High school is a critical time in a person's life. It's the time when you are trying to find yourself and build a strong personality with respect to the relationships you create with your peers, teachers, and parents. This is a time when puberty occurs and everybody's bodies are changing and developing. It's also a time when you start to notice the opposite sex. They're new and interesting and begin to distract you from other matters at school. It's also a stressful time academically when grades and test scores have the power to make or break your future endeavors. All these factors have the ability to affect your level of self-esteem. But what exactly is self-esteem? Self-esteem is how people feel about themselves. It's the confidence a person has in regards to their worth and capabilities. Someone with a high level of self-esteem has the confidence and faith that they can perform at their best abilities. They are satisfied with themselves as a person, believe they have good qualities, and like the person they've become. A person with low self-esteem is negative toward him or herself and doesn't possess a high level of self-worth. In past research, which I'll get into more a little later, researchers have conducted many experiments in order to test the levels of students' self-esteem. Because high school is such a crucial time for all aspects of life, the high school student is put under a lot of pressure and stress to perform at a certain level. These stressors and influences can have serious effects on students' self-esteem. Females, especially, are impacted by how their peers perceive them.

This brings me to the division of genders at school. Single sex schools have recently become popular institutions. Researchers continually argue that single-sex schools are extremely beneficial for girls in terms of academics, self-esteem and other

contributing factors. In the National Association for Single Sex Education, they support this argument by revealing the different learning methods boys and girls use to understand material in the classroom. They don't believe that all boys learn one way and all girls learn another way; however, they do believe there are certain approaches teachers should take when presenting new material to their female students versus their male students. The organization states, "because girls are so diverse and boys are so diverse, single-sex schools offer unique educational opportunities for girls, and for boys." This association is not trying to gender stereotype students but instead they are trying to implement beneficial ways of learning based on the individual student. (Single Sex Education) On the organization's website they posted an article from the Washington Post by Karen Houppert. In the article she explained, "One of the main advantages of a single-sex classroom is that the differences between boys and girls can be exploited to the benefit of both" (Houppert). They support the idea of single sex education and believe it is rewarding for all students.

This led me to my own research project I conducted. I was interested in these two factors I describe above, self-esteem and type of school, and how the two correlated with one another. In the present study I focused on girls' self-esteem rates at single sex and coed schools by measuring four specific domains of self-esteem: academics, appearances, peer relationships and overall self-worth.

**Thesis:** Students at both a single sex and coed school have high levels of self-esteem and that competition was a main theme between girls.

## **Past Research**

There has been a reasonable amount of research done in the fields of single-sex vs. coeducation as well as the self-esteem of females. Even though my research topic focuses on how these two factors correlate, most of the past research is based on one or the other with the exception of a couple of studies. In one study, Valerie Lee and Anthony Bryk (1986) examined whether single-sex secondary education was beneficial for students. They found statistically significant results in effects it had on academic achievements, future educational plans, measures of self-image, attitudes toward academics and sex role stereotyping. Researchers believe these positive effects were prominent in all girls' schools because they were free from social pressures from males and were instead able to reach their fullest potentials. They found that single sex schools for females helped improve students' attitudes on academics. Students showed more positive feelings when it came to academics and their relationships with other peers. In addition, the researchers revealed the significant effects single sex schools had on girls' self-concept. Lee and Bryk claim, "Adolescence is a critical period for the formation of attitudes about oneself" (394). Since high school is a crucial time, single sex schools help to prevent the opposite sex from influencing one's self-image. By eliminating this distraction and experiencing this positive environment, the researchers believe girls can then develop a constructive attitude about themselves, their academics and their social interactions.

In a similar experiment, Jacqueline Granleese and Stephen Joseph (1993) studied the differences in self-perceptions of girls in single-sex and mixed-sex schools. They focused on five particular fields in order to decipher which girls had a better global self-worth. This included physical appearance, behavioral conduct, academic competence,

social acceptance and athletics. The researchers found that overall there was no difference between girls at single-sex schools and mixed-sex schools; however, they did find differences within the five domains. Girls in coed schools had higher self-perceptions in physical appearance, athletics and social acceptance. On the other hand, girls in single-sex schools had higher self-perceptions in academic competence and behavioral conduct. Granleese and Joseph explain a potential reason for this is that, “single-sex education is advantageous to adolescent girls in fostering less rigid role requirements” (529). They believe gender stereotypes are less prominent in single-sex schools because they allow academic and social freedom without pressure from the opposite sex influencing sex-typed behaviors.

Contradictory to these studies and articles is a study done by Chouinarda Roch, Carole Vezeau, and Thérèse Bouffard (2008), they conducted an experiment based on students’ academic motivation in single-sex and coed schools. Researchers found that neither a mixed nor a single-sex environment had an affect on girls’ motivation in language arts and mathematics classes. Even though mathematics has been stereotyped to be a male dominated field, the study produced no significant results that a segregated environment for females enhanced their motivation. These results contradict the idea that the opposite sex has a negative impact on girls’ achievement motivation in language arts and mathematics.

In another study by Clare Daley (1999), she devised an experiment that focused on girls’ self-esteem at a single-sex school in their physical education classes. Although my research does not focus on solely this area, it is interesting to get a grasp on girls’ self-esteem in an area that boys are supposedly the best at. This article showed that girls

showed signs of fear and worry that they would not be good enough to be picked for a team and overall if they were good enough to participate. They cared a lot about what others thought about their performance in the specific activity.

Self-esteem is a crucial component of our characteristics and our personality. In a study by Fei Huang and Jian-Xin Zhang (2010), they examine the relationships between self-efficiency, self-esteem, and the positive and negative affects they have on Chinese adolescents. Despite the cultural difference, the experimenters found that boys have a higher self-efficiency than girls and that girls have a higher positive and negative affect on their self-esteem. This portrays how girls' self-esteem rates are greatly influenced by outside factors. Despite whether they are positive or negative affects, the girls' build their feelings about themselves in regards to other people and situations and their emotional state relies on how these affects impact their self-perceptions.

Lastly, in Perfect Girls, Starving Daughters by Courtney E. Martin (2007), she presents the vicious cycle of competition and insecurities between females. In chapter 10, "The College Years: Body Obsession Boot Camp", Martin focuses on girls' perceptions of their physical appearances and how it is a huge factor in their self-esteem. Martin gives an example of what this typical insecure girl may be thinking; "It reverberates in my head during a yoga class, where, ironically, I am supposed to be breathing in self-love and light: That girl is better at this than I am. I'm too fat and inflexible to look like that" (219). Although this chapter narrows in on college students, I believe it relates to the girls I'm focusing my research on as well: female high school students.

Although I have described several articles and studies that both support and undermine the division of gender in schools, my research concentrates on how separating

genders between schools affect the overall self-esteem of the female student and whether this division is ultimately beneficial. Since girls are constantly comparing and competing with one another, I was more concerned with how their relationships with each other affect their self-perceptions on academics, appearances, and overall self-worth.

Therefore, my overarching research question was: Do girls attending single sex schools have an overall lower self-esteem than girls attending coed schools?

## **Methods**

*Subjects:* 60 out of 437 female students from a single-sex catholic preparatory school and 10 female students out of 750 females and males from a co-ed public high school completed a survey of 25 questions. The students ranged from grades nine to twelve and were residents of the state of Connecticut.

*Procedures:* I first began my study by devising a survey of 25 questions regarding female students' self-perception. With the help of the Rosenberg Self-Esteem Scale, the Education Longitudinal Study (2002) and the Children of Immigrants Longitudinal Study (1991-2006), I was able to piece together questions that pertained to my areas of focus. This included questions based on female students' self-perceptions on academics, appearances, self-worth and peer relationships. Once I constructed my survey, I contacted one co-ed public high school and two all girls' high schools in Connecticut. I e-mailed the principal of each school asking permission to have 100 female students (from each school) complete my survey. I followed up the e-mails with phone calls to each principal and once permission was granted, I dropped off parent consent forms, student assent

forms and surveys to each school. Only one of the single sex schools decided to participate in my study leaving me with only one co-ed school and one all girls' school to complete my survey. Before I distributed the survey to the schools, I met with the principal of the coed school where we discussed the purpose of my project and the best possible routes to take in order to get the most surveys completed. I showed him a copy of my original survey I intended to hand out; however, he found three questions he wanted me to remove and a couple other questions he wanted me to reword. He explained that his students were experiencing social issues with their peers and the questions I originally had could potentially cause even more problems. He didn't want the survey to trigger lower levels of self-esteem for his students. After editing my survey, he agreed the questions were appropriate allowed his students to participate.

Teachers of each school reiterated to their students that parent consent and student assent forms must be filled out and signed before taking the survey. Each student was also informed that all the data I received would be kept confidential and anonymous. After several weeks or when the principal said the surveys were completed, I picked them up and conducted my research analysis.

In addition to the surveys, I met with three female students from the co-ed high school. They were each 15 years old and in their sophomore year. I already knew the three girls before I conducted the interview so they were comfortable having a discussion with me and responding to my questions. After having the parent consent and student assent forms filled out and signed, I explained to them their confidentiality and allowed them to choose pseudonyms for themselves since all the data I received was to be kept anonymous. I then conducted a focus group with the three girls where we had a

discussion on topics relevant to my study and asked them I questions similar to the ones on my survey. This allowed the girls to answer my questions further by going into more detail as to why they felt certain ways. The entire conversation was tape-recorded and transcribed.

## **Quantitative Results**

For all items, there was a response scale of 1 to 4: 1= *strongly agree*, 2= *agree*, 3= *disagree*, and 4= *strongly disagree*. I recoded the negatively worded items in my survey so that the lower scores would be more positive. I also categorized the questions into four sub-groups: Self-Esteem, Appearance, Peer Relationships and Academics. Therefore, a lower score represented a higher self –esteem, better self-image in terms of appearance, and positive feelings about academics and peer relationships.

I used independent samples *t*-test to test my hypotheses about the relationship between type of school and girls' overall self-esteem. There was no significant difference between girls at single-sex and coed schools in terms of self-esteem,  $t(68) = -.76, ns$ . Girls at the single-sex school had a mean of 1.78 ( $SD = .40$ ) and girls at the coed schools had a mean of 1.89 ( $SD = .63$ ).

There was also no significant difference in feelings about their appearance for girls at the single-sex ( $M = 2.10, SD = .50$ ) versus the coed school ( $M = 2.00, SD = .85$ ),  $t(68) = .50, ns$ . There were also no differences in feelings about peer relationships and academics,  $t(68) = -.81, ns$ , and  $t(68) = .39, ns$ , respectively. For peer relationships, girls at the single sex school had a mean of 1.96 ( $SD = .33$ ) and girls at the coed school had a mean of 2.05 ( $SD = .35$ ). Lastly, for academics, girls at the single sex school had a mean

of 2.08 ( $SD = .42$ ) and girls at the coed school had a mean of 2.03 ( $SD = .34$ ) See Figures 1 and 2.

**Figure 1:** *Self-Esteem Rates and Type of School*

Domain	School	N	Mean	Std. Deviation
Self-Esteem	Single Sex	60	1.78	0.395
	Coed	10	1.89	0.633
Appearance	Single Sex	60	2.10	0.500
	Coed	10	2.00	0.850
Peer Relationships	Single Sex	60	1.96	0.329
	Coed	10	2.05	0.352
Academics	Single Sex	60	2.08	0.419
	Coed	10	2.03	0.335

**Figure 2:** *Equality of Means*

Domain	t	df	Sig. (2-tailed)
Self-Esteem	-0.759	68	0.451
Appearance	0.502	68	0.617
Peer Relationships	-0.809	68	0.421
Academics	0.385	67	0.702

I also conducted a Pearson correlation coefficients test, which showed significant positive correlations among all four measures of self-worth. High scores on one variable

are related to high scores on the other and low scores are related to low scores. For example, people with higher self-esteem also have positive feelings about their appearance, peer relationships, and academics. The strongest relationship was between self-esteem and peer relationships,  $r(70) = .69, p < .001$ . Meanwhile, the weakest relationship was between appearance and academics,  $r(67) = .25, p < .05$ . See Figure 3.

**Figure 3:** *Relationships Between Domains*

		Appearance	Peer Relationships	Academics
Self-Esteem	Pearson Correlation	.654**	.687**	.516**
	Sig. (2-tailed)	0.000	0.000	0.000
	N	70	70	69
Appearance	Pearson Correlation		.413**	.249**
	Sig. (2-tailed)		0.000	0.039
	N		70	69
Peer Relationships	Pearson Correlation			.482**
	Sig. (2-tailed)			0.000
	N			69

### Qualitative Results

After holding a focus group with three 15 year-old sophomore girls at the co-ed school, Layla, Mya and Michaela, I found that these girls possessed relatively high levels of self-esteem. I asked these three girls very similar questions to the ones on the survey I created but in addition, had them explain their answers more in depth. These questions

focused on their self-perceptions of academics, peer relationships, appearances and self-worth. Overall, all three girls believed they possessed high levels of self-esteem when it came to the four domains I examined. When I asked the girls about their overall self-worth, both Layla and Michaela said they were satisfied with themselves academically, physically and socially and believed they possessed a good number of qualities. Layla explained, “I feel like I have good qualities, I mean... other people may think not, but I think I do. I’m satisfied with the way I come off to people or the way I act.” Mya, however, responded a little differently by saying, “maybe not completely but to a point where I feel like I have the self-esteem I need.” I was intrigued with Mya’s response and therefore, asked whether they thought their peers had high levels of self-worth. Michaela answered, “Some people may and may not cause some people might feel like they’re not good enough. It goes back to the whole comparing, like ‘oh I’m not as good as her.’” These responses, along with many others, brought me to several important complications in my results regarding competition between peers, the influence of boys, and discrepancies between domains.

Although the girls believed they had high levels of self-esteem, they also revealed their propensity to compete and compare themselves with other girls at their school. They expressed that they feel good about themselves the majority of the time but as Layla explains, “I feel like people make comments or judgments about you that could lower your self-esteem.” This was a main concern for all three girls. They worried about what their peers thought of them, which consequently reflected how they viewed themselves. This presented me with complicated findings in that even though girls thought they had high levels of self-esteem, they seemed to be building their identities around other

people's perceptions, which is ultimately detrimental. If someone were talking positively about them, their self-esteem would inflate and vice versa if they heard people saying negative things about them. Each girl did show signs of confidence; however, their self-esteem was greatly affected by other people's perceptions. I believe this is prevalent because sophomore year of high school is an impressionable time for an adolescent girl. In Girls and Boys in School: Together or Separate by Cornelius Riordan (1990), he explains that, "during and after puberty mixed-sex schools provide many distractions deleterious to academic and/or social outcomes." (41) Although Riordan makes his point solely towards co-ed schools, I also believe these issues are present in single-sex schools as well. During the high school years is when students are figuring out who they are and building their persona. Any outside influences, most importantly their peers, will have a huge impact on their self-perceptions.

In the study by Huang and Zhang (2010) that I discussed earlier, they revealed how girls' self-esteem is greatly affected, both positively and negatively. This indicates how girls build their feelings about themselves in regards to other people and situations. Therefore, their emotional state relies on how these positive and negative affects impact their self-perceptions. (Fei & Zang) Layla, Mya and Michaela all revealed examples of this when they explained how they continuously compare themselves to their female peers. Whether it's academically, physically, socially or athletically, they're always evaluating one another causing the fluctuation in their levels of self-esteem. Their self-esteem is either being built up or broken down because of these assessments of one another. Layla said, "if people are better than you, you're going to compare yourself to them." I then asked her, "What classifies someone as being better than you?" and she

responded, “like in sports if someone is in a higher ranking” and Mya added on, “or if someone has a better grade than you.” Although these are quantitative measures of “who is better” it still portrays how the girls constantly compare themselves to other girls in all aspects and how it positively or negatively affects their self-esteem.

In addition, the three girls constantly expressed their higher concerns with what their female peers thought opposed to their male peers. In terms of academics, Mya expressed, “I think girls will judge you more and the guys will... I think they care but they don’t at the same time. I feel like they’ll be the ones to make a stupid comment.” She believed the girls were more concerned with their self-image and how they portray themselves to the other females rather than to the boys who pay little attention to such things. This is contradictory to what many researchers believe, in that boys are the primary reason for the way girls dress and behave. In the Washington Post article I mentioned before, the author discussed how more schools are starting to separate their classrooms by gender especially in low-income neighborhoods. Although this article referred to a school that separates boys and girls in only specific classes in an elementary school, they still explained the decrease in distraction for both genders. By doing this, they believe they can focus on the needs of each student so that all students are at the same level academically. Houppert (2010) stated,

“Girls also are easily distracted by boys, who have a harder time sitting still and being quiet, Sax says. In an all-boys class, the boys may be loud and wiggly, but they’re learning. As long as there are no girls around to be distracted, he argues, why not let them wiggle?”

Again, despite the fact that this refers to an elementary school, researchers still apply these concepts to students in a coed high school. The issues and distractions students encounter still exist, they’re just based on different topics.

The power of boys sparked another complication in my experiment. Although the girls gave examples of how they worried about their female peers' perceptions and how they were their main competitors, I was able to see that the boys in their school still had a significant influence on them as well. Even though Layla, Mya and Michaela all indicated that they possessed higher levels of apprehension with female peers' perceptions rather than their male peers', the three girls also conveyed that they dress and behave in certain ways mainly because of their female peers. When I asked for them to explain further Layla answered, "if you see the way someone dresses and then everyone likes her or she gets the guys, then people are like, 'oh if I wear that, and I do that, and I look like that, then I could kind of have what she has.'" Although Layla explains that most girls' main focus is to be triumphant over the other girl, they still possess that underlying drive of competition to impress the guy. That if she behaves the same way as her successful female peers, she will also win over the guy.

I then asked the girls whether they dress and act a certain way to impress guys or if they feel as though girls behave and act in certain ways because they're trying to compete with girls? Michaela, Layla and Mya all together responded, "It's kind of both but sometimes it's to compete with girls cause girls are bitches. They want to be the best and they want the guys and to stand out." Again, the girls point out that they're most concerned with other girls yet, in the end, boys are still a crucial influence on how the girls behave. Ultimately, this shows how boys are still in the position of power. Whether the girls aware of this or not, they are concerned with what boys think of them. This brings into question, if boys weren't present at their school, would the girls still feel the

need to compete? (This is a question I would have liked to answer in a focus group with students from the single sex school.)

This led our discussion even further into the issue of competition between female students in high school. Layla expressed her overall main concern was competing with the other girls in her school while Mya and Michaela also agreed with Layla but explained that they think girls compete more when it comes to grades in school. Mya explained by saying, “I don’t think girls compare themselves clothing wise... they compete more academically.” As I explained above, girls are in constant comparison with one another; however, Martin portrayed a different speculation in Perfect Girls, Starving Daughters (2007) in that females are extremely competitive about appearances. Martin writes, “She’s skinner than I am, I hate her. I can’t eat tomorrow.” And, “I’m so relieved she’s getting fat. I’m much prettier than she is.” In this, Martin unveils what girls’ inner voices and thoughts about their peers would be. I found Layla, Mya and Michaela’s responses most compelling because they believed they were more competitive over academics than appearances.

All together, the girls expressed average levels of confidence when I questioned them solely about academics. All of them revealed their concerns with speaking out loud in a classroom full of peers in fear of getting the answer wrong. Layla explained her apprehension of her peers thinking she made a “stupid comment.” When I asked them whether they felt confident that they could perform well on tests if they worked hard enough, each girl responded differently. Michaela said, “Yeah, if I work hard, if I study and stuff yeah, then I probably can.” She seemed to believe that she could perform at her highest potential if she studied and tried her best to do well. Layla then responded, “Well

sometimes even if you try your hardest you might not get the grade you were hoping to get.” She sounded more insecure in that even if she tried her best, it was very possible she wouldn’t do well. Lastly, Mya said, “Its also disappointing when you did something and you thought you did really good on it and you tried really hard on it and you get a lower grade than you expected. It almost feels like you let yourself down.” Mya sounded fearful of disappointment and failure. That even if she tried her best, it wouldn’t be good enough. Ultimately, all three girls thought they could do well in their classes most of the time if they studied hard, but realistically knew it was possible to get a poor grade.

Overall, I believe each girl possessed a high level of self-worth, regardless of whether they succumbed to pressures of comparisons and competitions with their female peers, or felt the underlying drive to impress boys. All three girls believed they had good qualities and revealed their satisfaction with themselves as 15 year-old high school students.

## **General Discussion**

Through my research I found that girls at both the single sex and coed school had high levels of self-esteem and that competition was a main theme between girls. Competition remained a central component to the girls’ self-esteem, which I do believe can have negative impacts when building one’s identity. Regardless, each of the four domains I looked at had positive correlations to the girls’ high levels of self-esteem.

There were definitely some issues I encountered when conducting my research project. To start, I did not receive as many surveys as I had hoped from the co-ed school. I originally wanted to receive around 100 surveys from each school but since there were

so few responses from the co-ed school, there weren't any significant comparisons in my results. Another reason for the insignificant findings could have been due to the two types of schools I chose. Demographics were outside the scope of my study; however, they could have potentially impacted my results. The demographics of each school were extremely similar to one another in that the single-sex school was a non-residential Catholic private school where students had to pay tuition to attend. Of the 437 students, only 17% of them were students of color. The coed school that participated in my study was located in a suburb and the 2006-2007 Strategic School Profile (the most recently updated version) revealed about 16% of students were minorities. The fact that the majority of the students in the school were white, middle class students could have led to the high rates of self-esteem. In one particular study by Paul Richard Smokowski , Martica Bacallao, and Rachel Lee Buchanan (2009), they observed the self-esteem in 349 Latino adolescents in terms of acculturation measures, acculturation stressors, and family dynamics. Their results showed a correlation between time spent living in the US and adolescents low levels of self-esteem. With this research at hand, I again believe a possible reason for my results could be because of race and socioeconomic status.

Moreover, since I encountered so many issues when conducting my research, there are many things I would be interested in doing in terms of further research. First, I would distribute the survey I created to several single-sex and coed schools. That way I would receive more responses and hopefully have significant data. In addition, I would hold a focus group discussion with students from both a single-sex and coed school. Potentially, I would like to hold focus groups at several single-sex and coed schools to get a variety of responses. Furthermore, I would add open ended questions to the survey

so that students could explain their answers more in depth and give reasons as to why they responded the way they did. Lastly, I think it would be extremely interesting to observe and compare females' self-esteem to males' self-esteem at both single sex and coed schools.

### **Acknowledgments**

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## SURVEY

1. What is your age? \_\_\_\_\_
2. What high school do you currently attend? \_\_\_\_\_

CIRCLE ONE RESPONSE FOR EACH QUESTION.

3. I'm confident that I can do an excellent job on my tests.  
Strongly Agree    Agree    Disagree    Strongly Disagree
4. I'm certain I can understand most material presented in textbooks.  
Strongly Agree    Agree    Disagree    Strongly Disagree
5. I am easily overwhelmed by my schoolwork.  
Strongly Agree    Agree    Disagree    Strongly Disagree
6. If I decide not to get any bad grades, I can really do it.  
Strongly Agree    Agree    Disagree    Strongly Disagree
7. When studying, I keep working even if the material is difficult.  
Strongly Agree    Agree    Disagree    Strongly Disagree
8. If I want to learn something well, I can.  
Strongly Agree    Agree    Disagree    Strongly Disagree
9. I feel that I am a person of worth, at least on an equal basis with others.  
Strongly Agree    Agree    Disagree    Strongly Disagree
10. I feel that I have a number of good qualities.  
Strongly Agree    Agree    Disagree    Strongly Disagree
11. I am able to do things as well as most other people.  
Strongly Agree    Agree    Disagree    Strongly Disagree
12. I have a positive attitude toward myself.  
Strongly Agree    Agree    Disagree    Strongly Disagree
13. On the whole I am satisfied with myself.  
Strongly Agree    Agree    Disagree    Strongly Disagree
14. I wish I could have more respect for myself.  
Strongly Agree    Agree    Disagree    Strongly Disagree
15. At times I think I am no good at all.

Strongly Agree    Agree    Disagree    Strongly Disagree

16. I enjoy going to school.

Strongly Agree    Agree    Disagree    Strongly Disagree

17. I care what my peers think of me.

Strongly Agree    Agree    Disagree    Strongly Disagree

18. I wear certain things to impress my peers.

Strongly Agree    Agree    Disagree    Strongly Disagree

19. I feel comfortable being myself at school.

Strongly Agree    Agree    Disagree    Strongly Disagree

20. I constantly compare myself to my peers.

Strongly Agree    Agree    Disagree    Strongly Disagree

21. I make friends easily.

Strongly Agree    Agree    Disagree    Strongly Disagree

22. Most other kids like me.

Strongly Agree    Agree    Disagree    Strongly Disagree

23. I feel that I am good looking.

Strongly Agree    Agree    Disagree    Strongly Disagree

24. I am satisfied with how I look.

Strongly Agree    Agree    Disagree    Strongly Disagree

25. I like who I am.

Strongly Agree    Agree    Disagree    Strongly Disagree

## **FOCUS GROUP QUESTIONS**

1. How would you define self-esteem?
2. In general, do you feel as though you possess a high level or low level of self-esteem?
3. Are you concerned with what your peers think of you?
  - Do you compare yourself to them?
  - Do you act/dress certain ways because of them? Explain.
  - How do you think most girls at your school feel? Tell me a little bit about your experience with them.
4. Are you confident you can perform well on tests?
  - Do you feel more pressured to do better than your female or male peers academically?
  - If you want to learn something well, do you believe you can? Explain.
5. Overall, are you satisfied with yourself? Explain.
  - Do you feel you are a person of worth? Explain your definition of “worth”.
  - Do you have a positive attitude toward yourself? Do you think your peers see you in the same way? Explain.

## PARENT CONSENT FORM

Dear parent/guardian,

I'm currently a senior at Trinity College in Hartford, CT and I am in the process of writing my senior thesis for my Educational Studies and Psychology double major. For my project I am researching the difference between single sex education and co-education for girls in high school and how each environment affects the self-esteem of a female student. My research will be based on a survey I have designed and I will distribute to them to the students to fill out. The survey takes about 5-10 minutes to complete.

I am writing to ask your permission for your child to participate in my study. Your child has been selected as a potential participant because he/she is currently enrolled in a co-ed or a single-sex school. With your permission, participation will involve completing the survey I have devised by answering 28 questions regarding his/her self-esteem. Participation is completely voluntary and your child can withdraw at any time if he/she no longer wishes to participate, or at your request.

My faculty advisor, Kathleen Elliott and I will be the only ones who have access to the filled out surveys. All information I receive is confidential and anonymous. Names of the students will not be taken and I will delete any other identifying characteristics or details. Instead, I will use pseudonyms for everything. All data and materials will be kept in a locked cabinet in my room accessed only by my faculty advisor and me. Once I have completed my research project December 20<sup>th</sup>, I will destroy all documents.

Thank you for taking the time to read and consider this request. If you have any questions about my research my methods, or the survey I have created, please contact me through e-mail ([alexa.guglielmi@trincoll.edu](mailto:alexa.guglielmi@trincoll.edu)), or by telephone (860-748-9769). You can also contact my faculty advisor, Kathleen Elliott by e-mail ([Kathleen.elliott@trincoll.edu](mailto:Kathleen.elliott@trincoll.edu)) or by telephone (860-297-5202). If you have any questions regarding the study and human subjects guidelines you may also contact James Hughes from Trinity College's Institutional Review Board at ([james.hughes@trincoll.edu](mailto:james.hughes@trincoll.edu)).

Thank you again,

Alexa Guglielmi

**Authorization to Participate in the Research Study**

I, \_\_\_\_\_ (parent/guardian), give my permission for my child, \_\_\_\_\_ (student), to participate in the research project: *Girls' Self-Esteem Rates in Single-Sex and Co-ed Schools*. I give my permission for my child to participate in filling out the survey.

I have read the research guidelines and am aware of the study's subject and purpose. I understand that it involves topics related to school environments and the effects they have on self-esteem. I understand that my child will be included in descriptions of observations and that this material will be used by the researcher in the final analysis and write-up of the research.

Parent/gurdian signature: \_\_\_\_\_

Please print name here: \_\_\_\_\_

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

## **INFORMED CONSENT**

I, \_\_\_\_\_ (please print name), give my assent to participate in this research project.

This study involves the investigation of girls' self-esteem rates in single-sex and co-ed high schools. I understand that all of my responses in this study are completely confidential and will be used only for research purposes. Only Alexa Guglielmi and her faculty advisor Kathleen Elliott will see these documents. I also understand that my participation in this project is completely voluntary and I am free to withdraw my participation at any time without penalty.

The benefit of this project is to provide information related to educational environments and girls' self esteem. The potential risks are that the survey may provoke some uncomfortable feelings.

If I have any questions regarding this project or wish to have further information, I am free to contact Alexa Guglielmi at Trinity College (860) 748-9760 or her faculty advisor Kathleen Elliott in the Educational Studies Department at Trinity College (860) 297-5202.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date