

# [Gender differences in academic achievement](https://assignbuster.com/gender-differences-in-academic-achievement/)

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Gender Differences in Academic Achievement Lashear C. Price Cleveland State University Author Note Lashear C. Price, Department of Psychology, Cleveland State University. Address Correspondence to: Lashear C. Price, Department of Psychology, Cleveland State University, 2121 Euclid Ave, Cleveland, OH 44115. E- mail: lashear\_07@yahoo. com Abstract In recent years, researchers have debated whether social bias exists between boys and girls regarding social skills and academic achievement. While most studies have shown that girls are more intelligent and experience fewer social problems than boys, the current study will hope to find otherwise. Many articles have been reviewed to see if there is a difference between boys and girls on academic achievement tests and social skills. Results supported the idea that both boys and girls score high on academic and standardize tests. Gender Differences in Academic Achievement Gender differences in academic achievement have been around for years. Numerous studies have examined the relationship between boys’ and girls’ academic achievement on standardize tests, reading skills, verbal and spatial skills, and mathematic tests. Most studies have shown that, on average girls do better in school than boys. Girls score higher and get better grades and have better social skills than boys. The following articles presented below will show that both boys and girls outperform each other on certain standardized tests. However, there were not significant results to prove one gender outperformed the other on all standardized tests. A research done by Abdi (2010) studied gender differences on social skills, problem behaviors, and academic competences on kindergarten children. Abdi (2010) obtain 292 girls, 318 boys, 610 parents, and 228 teachers in her experiment. The parents and teachers rated the social behaviors of students by using a rating scaled called the Social Skills Rating System (SSRS). This particular test rated the child’s internalizing problems (behaviors that direct problematic energy towards the self), externalizing problems (behaviors that direct problematic energy outwards), hyperactivity subdomains, and academic competence. The results from Abdi (2010) studied showed that according to parents and teachers, girls scored higher than boys on all subscales of social skills (except self-control). Girls also outscored boys on academic competences; however there were no sex differences according to teachers between girls and boys on internalizing. Boys did score higher than girls on externalizing and hyperactivity behavior problems, which is considered, not a good rating to have. Overall, Abdi (2010) study showed some bias against boys in regards to behavior problems and social skills on academic achievement, because boys scored higher on externalizing and hyperactivities behavior problems. Mallinauskiene, Vosylis, and Zukauskiene’s (2011) study supports the previous study in girls scoring better than boys on academic achievement and standardize tests. Their study examined the relationship between internalizing self-report problem behavior syndrome (anxiety/depression, delinquent behavior, aggressive behavior, and somatic complaints) and mean measures of academic achievement (reading & spelling, and arithmetic performance). Mallinauskiene, et al. (2011) studied adjustment problems from childhood to adolescence. There were a total of 136 boys and 162 girls in grades six through eight. Participants completed the Youth Self-Report (YSR) scale that measured their own behavior in eight problem areas. The areas on the scale consisted of withdrawn, somatic complaints, anxious/depressed, social problems, thought problems, attention problems, delinquent, and aggressive behaviors. There were three summary scales calculated for total problems, internalizing and externalizing behaviors. Results from the Mallinauskiene, et al. (2011) study indicated significant differences between boys’ and girls’ academic achievement, girls scoring higher than boys on academic achievement in all grades. There was no significant effect of anxiety/depression, social withdrawal, and aggressiveness on academic achievement, but they did find significant differences of academic achievement in high and low delinquency and somatic complaint groups. Results showed that boys and girls showing higher delinquent behaviors and or having more somatic complaints have a lower academic achievement than the rest. However, they did find some interaction effects of problem behavior, gender and grade on academic achievement. There were decreases of academic achievement among girls who exhibit less aggressiveness, while academic achievement stayed the same with girls who were more aggressive. For boys who exhibit more aggressive, academic achievement decreased, and academic achievement stayed the same for boys who exhibit less aggressiveness. Overall, their study showed that academic achievement is bigger in non-delinquent group in all age groups, plus there are interaction effects associate with problem behavior, gender and grade on academic achievement. Klein, Adi-Japha, and Benizri (2010) study focused on gender differences in relation to verbal, spatial, mathematics, and teacher-child mathematics interaction variables. There were a total of 80 children (40 boys and 40 girls) between the ages of five to six years old. Participants were evaluated on mathematic performance, verbal tests, spatial skill tests, and mathematic communication. Results from their study showed that there were no gender differences on verbal, spatial, and mathematical thinking. Klein, et al. (2010) did find that girls scored higher on the verbal analogies than boys, but the results were not statistically significant. However, their finding showed that boy’s mathematical achievement was related to their spatial reasoning, whereas girls' mathematical achievement was related to their verbal skills. Even though Klein, et al. (2010) found no significant differences between girls scoring higher than boys on achievement tests, she did found that girls scored higher on verbal analogies tests than boys. Kim, Plake, and Wise’s (2009) study support the previous study done by Klein, et al. (2010) that showed one gender over the other scoring higher on different mathematical subtests. The purpose of the Kim, et al. study was to investigate the mathematical components of elementary school children achievement for differential items performance between boys and girls. There were two tests used from the California Achievement Test (CAT). The MC subtest consisted of 40 items that measured addition, multiplication, and division skills. The MCA subtest measured skills in understanding and using mathematics concepts and applying problem solving operations in various contexts. There were a total of 726 boys and 721 girls taking the California Achievement Test in grades 4, 5, and 6. Their findings showed that girls outperformed boys on the MC, but boys outperformed girls on the MCA across grades. Overall, there was no a mathematics objective, ability levels, or item locations that favored one sex group throughly across grades. A study by Lynn and Mikk (2009) study showed that girls outscored boys on reading achievement tests. The purpose of their study was to make a further contribution to international sex differences in reading ability by examining sex differences in means and variances in the three PISA (Program for International Student Assessment) and the PIRLS studies. The PISA test measured reading, mathematical and scientific literacy of students near the end of compulsory education. Their results found that girls from all countries scored higher than boys on all three tests that were done. The average raw score for girls was 0. 42 outperforming boys by 0. 25 on all three PIRLS reading assessment tests. The Lynn and Mikk (2009) study did not support the hypothesis that boys score just as high as girls on achievement tests. Lowe, Mayfield, and Reynolds’s (2003) study did support the opposing hypothesis that boys score higher on academic tests just like girls. Lowe, et al. (2003) studied 637 males and 642 females between the ages of five to 19 years of age, each student took part in the Test of Memory and Learning (TOMAL) standardize test. The TOMAL test measured information on specific and general aspects of memory, such as memory of stories, world selective reminding objective recall, digits forward, paired recall, visual recall, etc. They found that boys outscored females on the sequential recall, complex memory factor, and spatial memory factor. Females outscored boys only on visual sequential memory and facial memory. For this reason, their results were not significant enough to show that one gender scored higher than the other on all tests that were given. Al-Ali, Singh, and Smekal (2008) studied gender differences in social anxiety, social skills, aggression, and stress and correlations between social anxiety and social aggression, and stress. Three hundred students (150 boys and 150 girls) participated in the experiment. Al-Ali, et al. used the Liebowitz Social Anxiety Scale (LSAS) assessment test to assess the severity of social anxiety through evaluation of fear and avoidance in social situations. The Albert Social Skills Scale (ASSS) were used to measure social skills. An Aggression and Stress Scale were used as well that measured components of aggression and various domains of stress. Results showed that there was a difference between male and female students for all variables except social skills. The Al-Ali, et al. study contradicted other studies about girls having better social skills than boys, they found that both genders have problems with social skills and social high on certain achievement tests. Summary and Conclusions Some of the articles stated above can confirm the hypothesis that not only do girls outscore and receive better grades on academic achievement tests, but boys score just as high as girls in some other areas. Some studies have shown that boys do score higher than girls on standardized tests. Lowe, et al. (2003) did found that boys scored higher than females on sequential recall tests, complex memory factor and spatial memory factor tests. Klein, et al. (2010) found that boy’s scored high on mathematical achievement tests because of spatial reasoning and not verbal skills. Klein, et al. (2010) did not find any significant difference between girls and boys on achievement tests. However, there was more than enough evidence to support previous studies that, on average girls do better in school than boys. Abdi (2010) study showed that girls outscored boys on academic competences and had better social skills than boys. Lowe, et al. (2003) did found that boys scored higher than females on sequential recall tests, complex memory factor and spatial memory factor tests. Klein, et al. (2010) found that boy’s scored high on mathematical achievement tests because of spatial reasoning and not verbal skills. However, their study found no significant difference between girls and boys on achievement tests. Abdi (2010) study showed that girls outscored boys on academic competences and had better social skills than boys. Lowe, et al. (2003) study showed that females outscored boys on visual sequential memory and facial memory tests. Some limitations and future research addressed in the articles stated above was that most did not search the living conditions and activities of girls and boys to find some explanation to the higher test scores of boys and girls. Lynn and Mikk (2009) was the only study that examined the living conditions and activities of girls and boys. What they found was that boys more often had more DVD/VCR players at home which could have probably contribute to lower scores. Girls often had study desks in their rooms, classic literature and poetry in their homes, and more regular lessons in language, which could have contributed to their higher test results in reading. One of the laminations on the Abdi (2010) study was teacher scored girls higher on academic competence because of gender role expectations, and that teachers expected more academic competence from girls than boys. A limitation from the Lowe, et al. (2003) study was that their findings in changes were inconsequential. There was no consistent pattern of alteration, and the difference in magnitude of loading was small. One limitation in Klein, et al. (2012) study was that they did not contrast verbal with spatial skills, if this was done they probably could have gotten different results. In regards to bias against social skills and academic achievement amongst children and adolescents, research has shown that both genders score high on academic achievement and standardize tests. The National Center for Education Statistics found that females outscored males on reading literacy in every country, but boys began to perform better than girls on science tests and mathematical tests (as cited in Zembar and Blume, 2009). References Abdi, B. (2010). Gender differences in social skills, problems behaviors and academic competence of Iranian kindergarten children based on their parents and teachers ratings. 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