

A Comparative Study of Introvert and Extrovert Personality Traits Among Secondary School Students

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Received: 16-01-2026

Revised: 05-03-2026

Accepted: 22-03-2026

ABSTRACT

The social interactions, way of learning, and approach to learning of secondary school students are influenced by many personality traits. Among these personality traits, the most common are introverted and extroverted personality types. In this research, we hope to learn about the differences in introverted and extroverted personality types in Boys and Girls in Secondary Schools. The researchers will conduct a quantitative study using a Standardized Personality Inventory to collect a random sample of the students. Additionally, It is believed that this study will lead to the development of guidelines for educators and policymakers on how to develop effective instructional strategies for all varieties of students with differing personality traits, as well as maximize the potential for Total Student Development.

Keywords: Personality Traits, Introversion, Extroversion, Secondary School Students, Educational Psychology

Personality is an influential factor in the social lives of students, their learning habits, and the overall success of their academic experience. One of the most commonly studied aspects of personality is the introverted-extroverted spectrum, as these two types tend to have the most noticeable effect on communication styles, involvement with groups, and management of emotions. Introverts often display qualities of being reflective, reserved, and tend to engage in solitary (or highly structured) types of activities; extroverts, on the other hand, show more outgoing characteristics, participate socially and enjoy stimulating settings.

During the secondary school years, students are at a crucial point in their lives. The growth of students as adolescents will ultimately have a positive or negative impact on their future educational and social endeavors. When teachers understand the differences in the ways introvert and extrovert personality characteristics are expressed in boys and girls, they will better be able to support students in their individual learning experiences. Though

considerable research has been conducted on the various personality types, there is a lack of research that specifically cites comparisons between the genders and how introvert and extrovert traits are expressed among students in the secondary school environment, especially within the context of the modern-day educational system.

Introvert Personality

The term introversion refers to a stable psychological tendency towards inward energy. This means introverted people primarily find motivation, emotional recovery, and mental focus through their internal thoughts and experiences, as well as through quiet or low-stimulation environments. Introverts tend to be more sensitive to outside stimuli, think deeply about information, and prefer

How to cite this article: Devi, N. and Sharma, S. (2026). A Comparative Study of Introvert and Extrovert Personality Traits Among Secondary School Students. *Educational Quest: An Int. J. Edu. Appl. Soc. Sci.*, 17(01): 59-63.

Source of Support: None; **Conflict of Interest:** None



significant, slow-paced social interactions instead of frequent or shallow ones. This trait influences how they think, feel, and behave, affecting their learning style, decision-making, and ways of interacting with others.

Extrovert Personality

The personality characteristic known as extroversion is the one that most presents itself as the outward flowing of one's energy. The extrovert is, thus, mainly an individual who gains the driving force, refreshment, and thinking activity from the outside world, that is, from the company of others, the hustle and bustle of the environment, and the activities going on around him or her. Extroversion also implies a number of accompanying traits that include but are not limited to sociability, expressiveness, assertiveness, and the need for high interaction with the environment. This personality feature, in its turn, influences the source of or methods through which the individual learns, makes decisions, communicates, and participates in social activities. Extroversion is recognized as a factor that leads to an increased social reinforcement sensitivity, greater participation in group tasks, and a preference for active behavior.

LITERATURE REVIEW

1. Muhammad & Sani (2025) examined how introvert and extrovert personality traits influence students' coping strategies and adaptability during educational disruption due to insecurity. They found that introverts and extroverts differ in their responses to learning challenges, with extroverts relying more on social interaction and introverts on structure and independence.

2. Abdullah & AlFaisal (2025), This study emphasized that both introverted and extroverted students can excel in language learning if appropriate strategies are applied. Extroverts benefit from social interaction, while introverts achieve through reflection and individual study. Success depends on aligning learning methods with personality type.

Febrianti *et al.* (2025), This study investigated speech error patterns. Introverts made fewer spontaneous errors due to careful speech planning but were hesitant in interactive activities. Extroverts spoke more freely but made more minor errors. It reinforces that both personality types have unique

strengths and weaknesses in language production.

4. Harahap & Mairi (2025), The study found a positive correlation between personality type and speaking ability. Extroverted students scored higher in fluency and confidence, while introverted students were more accurate but less willing to speak spontaneously. The research highlighted the importance of adapting speaking exercises to personality to maximize participation.

5. Aisyah & Harianto (2024), This research analyzed listening skill achievement in introverted students. Results revealed that introverts had higher listening comprehension scores due to their tendency to focus, reflect, and process information internally. The study emphasized that introverts excel in receptive language skills and benefit from quiet and structured learning environments.

6. Nurhikmah *et al.* (2024), This study explored instructional strategies to support introverted and extroverted learners. Teachers implemented differentiated teaching: group discussions and interactive activities for extroverts, and structured, reflective tasks for introverts. Findings confirmed that tailoring instruction to personality types increases engagement and improves learning outcomes.

7. Massam (2024), This study examined how introversion and extroversion affect students' academic achievement in science. Findings indicate that introverts performed better in tasks requiring focus and individual effort, whereas extroverts excelled in collaborative tasks. Gender differences also moderated outcomes, showing that both personality type and socio-demographic factors influence performance.

8. Isma *et al.* (2022), The study focused on speaking performance in language learning. Extroverted students performed significantly better in oral tasks due to greater participation and confidence. Introverted students were more hesitant, but showed careful and accurate responses. The study highlighted the need for supportive classroom activities to engage both personality types.

9. Hayati (2021), Hayati's study showed that extroverts favor interactive and group learning, while introverts excel in independent tasks. Personality influences learning strategies, motivation, and classroom behavior in English learning.

10. Travolta, Mulyadi & Imranuddin (2018) investigated differences in English listening scores between introverted and extroverted students, revealing that introverts scored significantly higher than extroverts in listening comprehension.

RESEARCH GAP

An in-depth look at the currently available literature shows that the studies on introversion and extroversion largely characterized the traits and focused on adults. Very few studies have been done on the developmental manifestations of these traits in the context of secondary school, thereby leaving them empirical attention. Several studies even if acknowledging the differences in personality traits of the adolescents, categorize them as introvert and extrovert, thus ignoring the situational and environmental aspects of these traits in a classroom, among peers, or during evaluations. Besides, the previous studies mostly employed psychology-based approaches without properly incorporating educational factors, such as teaching methods, norms of classroom interactions, and different types of assessments, that might give extroverted behaviors an upper hand over the introverted ones. Therefore, the academic lives of introverted secondary school students are still underreported in the empirical literature.

OBJECTIVES OF THE STUDY

- To identify the level of introvert and extrovert personality traits among secondary school students.
- To compare introvert and extrovert personality traits among secondary school students.

HYPOTHESES

- There is no significant difference between secondary school boys and girls with respect to introvert personality traits.
- There is no significant difference between secondary school boys and girls with respect to extrovert personality traits.

DELIMITATION

- The study on introvert and extrovert personality only secondary school students.
- There are 200 students in the sample.

METHODOLOGY

Survey methods were used to fulfill the study objectives.

Sample of the Study

In the present study sample of 200 students (100 boys and 100 girls) were taken using proportionate simple random sampling technique.

Tools For The Study

Introvert-Extrovert Personality Inventory developed by Dr. P.F. Aziz and Dr. Mrs. Rekha.

Statistical Techniques

Mean, standard deviation, and independent samples t-tests were statistically analyzed.

RESULTS

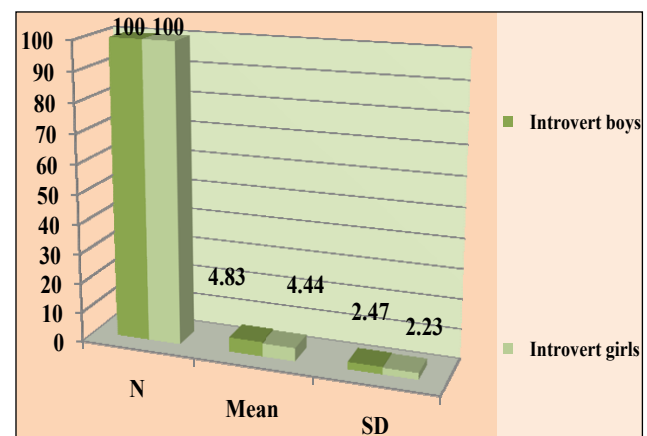
Introvert personality

The descriptive statistics and independent samples t-test results were analyzed to compare the levels of introvert personality traits among secondary school boys and girls.

Hypothesis: There is no significant difference between secondary school boys and girls with respect to introvert personality traits.

Table 1: Comparison of introvert personality between boys and girls secondary school students

Group	Variables	N	Mean	SD	t-value	df	p
Boys	Introvert	100	4.83	2.47	1.17	198	< .05
Girls		100	4.44	2.23			



Graph 1: Showing the Comparison of introvert personality between boys and girls secondary school students

Interpretation and Discussion

Results have shown that there is no significant difference in introvert personality traits between boys and girls in secondary schools, as evidenced by the $t = 1.17, p > 0.05$. Boys had a higher mean score, 4.83, as compared to girls, 4.44, which means boys had a slightly greater tendency to be introspective and reflective; this difference is not significant. This finding would support personality trait theory, which suggests that introversion is a person-specific attribute that depends on a combination of biological, cognitive, and environmental influences, not on gender. Both boys and girls seem to exhibit similar magnitudes of introvert traits in the secondary school level and point towards development of introverted tendencies influenced more by shared educational and social contexts than by sex-based differences.

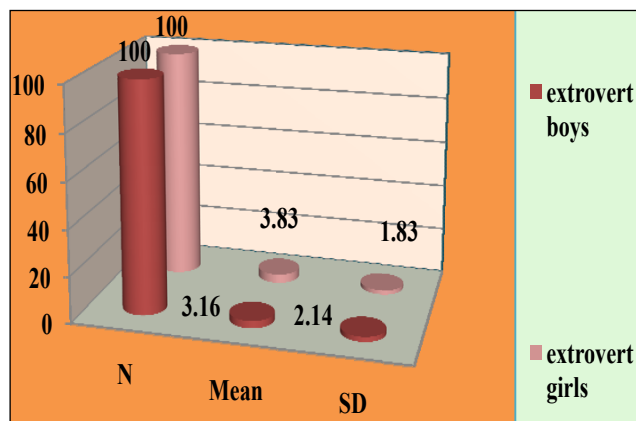
Extrovert personality

The descriptive statistics and independent samples t -test results were analyzed to compare the levels of Extrovert personality traits among secondary school boys and girls.

Hypothesis: There is no significant difference between secondary school boys and girls with respect to extrovert personality traits.

Table 2: Showing the Mean, SD, and T- value of 100 boys and 100 girls with respect to extrovert personality traits

Group	Variables	N	Mean	SD	t-value	df	p
Boys	Extrovert	100	3.16	2.14	2.37	198	< .05
Girls		100	3.83	1.83			



Graph 2: Showing the Comparison of extrovert personality between boys and girls secondary school students

Interpretation and Discussion

Analysis results identified a statistically significant difference in extroverted traits between boys and girls in secondary schools. The mean value for girls was higher ($M = 3.83, SD = 1.83$) than that for boys ($M = 3.16, SD = 2.14$). The results obtained from the independent samples t -test were found to be significantly different, with $t(198) = 2.37, p < .05$. This indicates that girls possess high traits of extroverted personality when compared with boys in the secondary school level. The null-hypothesis that asserts the equality of the population mean scores for extroverted traits between boys and girls can be.

DISCUSSION

This makes it possible for teachers to capitalize on group-specific strengths while accentuating their positive traits while diminishing their negative ones. Nurhikmah *et al.* in their study (2024) proved that differentiated instruction in which extroverted learners are engaged in interaction activities, while introverts are exposed to structured learning, leads to learning success. Although introversion is a consistent trait among both males and females, extroversion tends to vary slightly and has been observed to be higher in girls to some extent (Massam, 2024). It is clear that both social and environmental factors impact and moderate traits related to personalities and are not purely confined to gender. Introverted students perform better in reflective, concentrated, and solo activities. In studies conducted by Aisyah & Harianto (2024) and Travolta *et al.* (2018), it was observed that introverts tend to be more successful in comprehension skills because they are more careful in their thought process. Introverts commit fewer thoughtless speech errors (Febrianti *et al.* 2025) but might be reluctant when engaging in interactive or group work (Harahap & Mairi, 2025).

They also find their element in social learning situations that involve interaction and collaboration. These students are often ext. They display more fluency, confidence, and speaking output (Isma *et al.* 2022; Harahap & Mairi, 2025). However, extraverts may commit more minor errors owing to spontaneity (Febrianti *et al.* 2025), but these are offset by their participation or flexibility in group work.

CONCLUSION OF THE STUDY

This research project explored the presence of introvert and extrovert personality traits in secondary school students in terms of gender variations. Results indicated an absence of differences in introvert personality traits between boys and girls, which implies an equal presence of these traits in both boys and girls. This indicates that secondary school students in Pakistan are not affected by gender differences with regard to their introvert personality traits. However, a major difference emerged with regard to extrovert personality traits, where girls were found to score higher compared to boys. This shows that gender can influence the manifestation of extrovert personality traits among secondary school students. In conclusion, this research work supports the personality trait theory because it suggests that personality traits are shaped by a range of biological, cognitive, and social factors, rather than gender differences among others. This observation underscores the significance of understanding individual differences with regard to personality traits among students and the need for instructors to apply teaching approaches that can suit both introverts and extroverts.

EDUCATIONAL IMPLICATIONS OF THE STUDY

The results of the study have significant implications on the teaching and learning of senior secondary school pupils. The fact that boys and girls display the same level of introverted personality characteristics means that the teacher should reject the impression that introversion is a gender-related attribute. Training methods must be developed to cater to both introverted and extraverted pupils irrespective of their genders. The large difference found in extrovert personality traits, with girls scoring higher than boys, indicates that class participation and socialization might differ from one student to another. The teacher should, therefore, ensure a balanced classroom setting that promotes active participation alongside moments of quiet reflection, independent work, and writing. School counselors and faculty should also leverage their awareness of students' personalities in order to use these insights in academic counseling and teaching. Through flexible approaches and teaching methodologies in class, schools can promote students' engagement

and performance while taking into consideration their personalities.

SUGGESTIONS FOR FUTURE RESEARCH

Future studies might a larger sample size, including students from secondary schools in other regions or of other types, public or private, to improve generalization.

Future research may employ a longitudinal approach that aims to explore the developments of introverted and extroverted personality traits among secondary school students.

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