

Friendship Preferences and Friendship Quality among Indian School Students: A Comparison of Online and Offline Friendships

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Abstract

Friendships form an important part of the development of any individual, especially young children and adolescents. With the advent of new technology, friendship among children and adolescents is no longer limited to people they meet in daily life; it also includes people they meet online through social media, gaming websites, text messages, or voice and video calls. The present study examined the friendship preferences of students in Grades 6-12 and whether friendship preferences changed between early and late adolescents in Grades 6-8 and Grades 9-12. The study also examined perceived friendship quality and compared the two friendship preferences on the dimensions of Companionship, Help, and Emotional Closeness/Intimacy. A quantitative, non-experimental, cross-sectional survey design was adopted, which selected and adapted items from the Friendship Qualities Scale (FQS) and the Friendship Quality on Social Network Sites Questionnaire (FQSNS). Data were collected from 227 students across Grades 6-12. Participants were grouped based on friendship preferences for offline or online based on which friendship they found to be more meaningful. Chi-square tests were used to examine overall friendship preference and its association with grade group, while Mann-Whitney U tests were used to compare friendship-quality dimensions between the two preference groups. The findings showed that 166 students (73.1%) preferred offline friendship, whereas 61 (26.9%) preferred online friendship, with the difference being statistically significant, $\chi^2(1) = 48.57$, $p < .001$. No significant difference was found in Companionship between the two preference groups, $U = 4781.50$, $p = .518$. Significant differences were found in Help, $U = 1883.00$, $p < .001$, and Emotional Closeness/Intimacy, $U = 2587.50$, $p < .001$, with higher scores reported by the offline-preference group. Friendship preference also did not differ significantly between Grades 6-8 and Grades 9-12, $\chi^2(1) = 0.61$, $p = .436$. The findings indicate that friendship preference and perceived friendship quality may vary across specific dimensions, highlighting the importance of considering both online and offline contexts when understanding adolescent friendships.

Keywords: Adolescent Friendships, Online Friendship, Offline Friendship, Friendship Preference, Friendship Quality, Companionship, Help, Emotional Closeness, School Students

CHAPTER 1

INTRODUCTION

1.1 Background of the Study

Friendships form an important part in the development of any individual, especially young children and

adolescents. Friendship gives them a chance to explore and understand who they really are beyond their immediate family and relations. Hence, friendships become integral for any child's development, especially in their growing years. Friendships don't just provide fun and entertainment but are also a source of emotional and social support.

As children grow, their relationship with their families and peers goes through considerable changes. They start spending more time with their peers and seek more approval from them. While younger kids may seek bonding over shared interests or similar activities, older adolescents look for qualities like trust, support and closeness. The quality of friendships plays a very important role in the growth and development of an individual and how he fares in the world.

With the advent of new technology, friendship in children and adolescents is not limited to people that they meet in their daily lives but also people that they meet online through various means like social media, gaming websites, text messages, or voice and video calls. Friendship is no longer restricted to those with whom we interact face-to-face. Individuals today can stay connected even if they are physically apart. Hence, they are now in constant touch with each other through text messages, voice or video calls. This has enabled friendships that can be primarily formed and maintained through means where individuals might not meet in person regularly.

With the increase in this hyper-connection of individuals across the globe, we come to questions like: does communication through digital platforms give us the same experience as that of direct in-person interaction? Can qualities like companionship and support be felt the same way in the case of online and offline or in-person friendships?

Various research has already been conducted which show that online connection, where an in-person friendship already exists, definitely helps in boosting the friendship quality. Research also suggests that friendship quality is dependent on the primary mode of communication that is adopted to maintain the friendship.

The quality of any friendship is multidimensional and depends on various factors. There have been scales developed to check for these dimensions in the case of both offline friendships and online friendships.

Some of the factors studied for friendship quality are companionship, help and emotional closeness/intimacy. Companionship refers to the experience of having someone with whom a person can spend time, participate in common activities or shared interests. During adolescence, companionship can provide a sense of belonging and reduce feelings of social isolation. Help refers to the availability of support, assistance and guidance from friends during academic, personal or social difficulties. Emotional closeness or intimacy refers to the feeling of being understood, cared for and emotionally connected to another person.

These dimensions can be felt in different ways in the case of friendships maintained through offline or online modes. For example, a friendship maintained primarily online might provide companionship as communication can happen at any time and is easy. Also, communicating online might be felt as more comfortable for certain individuals. On the other hand, an individual might feel more comfortable reaching out to an offline friend when they are in need of support or assistance.

It is extremely important not to assume that one form of friendship is better than the other, as both of them serve different purposes and individual preferences may change depending on the situation and their own personalities.

In this study, we are trying to understand the friendship preferences (online vs offline) in the case of school-going students of Grades 6-12 with particular attention towards the three specific dimensions of friendship

quality which are Companionship, Help and Emotional Closeness/Intimacy. With the help of this study, we are trying to understand whether the students prefer offline or online friendships and the qualities that are being perceived in these preferred modes of friendship. Additionally, we also try to check if these preferences change with age.

1.2 Theoretical Background of the Study

Bukowski, Hoza, and Boivin (1994) proposed that friendship qualities are multi-dimensional, and the five dimensions that were identified in the study are companionship, help, security, closeness, and conflict. The study suggested that the mere presence of friendship does not determine its quality, but it is the experiences and functions that it provides which are important. Companionship means spending time together doing activities that are liked by both individuals. Help and closeness reflect the support and connection felt. This framework forms the basis of the current study as it examines dimensions like companionship, help and emotional closeness/intimacy for the quality of friendship.

Sullivan's Interpersonal Theory says that relationships are at the centre of human development and it gives importance to friendships during adolescence. According to Sullivan (1953), during adolescence there is a high need for intimacy and interpersonal relationships. Friendships give them opportunities for sharing experiences together, expressing thoughts and feelings, and developing a sense of understanding and acceptance. With regard to the current study, this theory is relevant as it explains the importance of emotional closeness and intimacy in adolescent friendships and why the nature and preference in friendship might change as children grow in age and maturity.

Attachment Theory, proposed by Bowlby (1969) and later developed through the work of Ainsworth, stresses how emotional bonds and the need for security and support form an integral part of any relationship. This theory initially focused on the relationship that children have with their primary caregivers. However, its concepts were later applied to the relationships that adolescents have with their peers and friends. It discussed concepts of emotional support, reassurance, acceptance and a sense of security within a relationship. This theory is relevant to the current study as it contributes to understanding of dimensions of friendship quality like help and emotional closeness/ intimacy.

Valkenburg and Peter (2007) used stimulation and displacement hypotheses to understand the relationship between online communication and adolescent well-being. The findings of this research showed that online communication, especially with existing friends, contributes positively towards friendship quality. This study highlights that online communication helps in the maintenance of friendship and can affect the friendship quality.

Social Penetration Theory, by Altman and Taylor, reflects on how friendships move from high-level interactions to more intimate layers of friendships. The theory suggests that regular communication, specifically of more personal information, helps move friendship from superficial to stronger bonds, meaning that the means of communication also play a role in how emotional closeness is developed in friendships. With regard to the current study, it helps in improving our understanding of emotional closeness/ intimacy in friendships and how friendship experiences change when it comes to means of communication, which can be online or offline.

When we look at these theories and studies together, we get a wider perspective of adolescent friendship. The Friendship Quality framework highlights the dimensions that need to be observed while understanding the quality of friendship, while theories like Attachment theory and Sullivan's theory explain the dimensions more clearly. Also, the Penetration theory helps us understand how the means of communication affect the perceived quality of friendships. Together, these theories form a basis for

whether the students' preference for online or offline friendship might be related to the way in which the dimensions of friendship, like companionship, help and emotional closeness/intimacy, are perceived.

1.3 Need and Significance of the Study

In today's world, where individuals are connected across the globe, friendships can occur between people who have never met face-to-face. Also, people are now connected throughout the day even when they are physically apart. Friendships that were formed in person can also be maintained through online means. Hence, the same friendship can move between online and offline spaces easily. Viewing online and offline friendships in absolute terms might not give us a complete understanding of the spectrum of friendships in the current scenario. Some individuals may prefer friendships that are formed through online channels while others may lean more towards in-person friendships.

Hence, there is a need to understand the preferences of adolescents when it comes to the formation and maintenance of friendships. In order to understand the preferences and the perceived quality of friendships, it is important to look at dimensions like companionship, help, and closeness/intimacy. The understanding of preferences in friendship, whether online or offline, by adolescents and what they perceive to be the quality of these friendships will provide a better understanding from not just the development perspective of adolescents but also help in developing programs for school counselling and various well-being initiatives. Understanding the different functions that friendships serve can help counsellors approach these relationships without automatically assuming that online friendships are harmful or that offline friendships are always healthier.

This study can also help in the development of digital well-being programs for adolescents, as instead of simply telling them to reduce their screen time, this can redirect their time spent on screens to more productive and useful channels. Since online communication is already a big part of growing up, there is a need to adapt well-being programs in a way that they are more accepted and integrated in the adolescent's life.

If we look from an academic perspective, this study will help us understand and compare the preferences and perceived quality of friendship between early and late adolescents, which provides a better understanding of why a particular mode of friendship is preferred over another. This study does not claim to understand that one mode of friendship is better than the other. It simply seeks to understand the perceived reasons that can affect an adolescent's choice and preference.

CHAPTER 2

2.1 Review of Literature

- **Bukowski, Hoza, and Boivin (1994)** developed the Friendship Qualities Scale (FQS), which is one of the most influential measures of friendship quality among children and adolescents. The scale identified five dimensions of friendship quality: companionship, help/aid, security, closeness, and conflict. The authors mentioned that companionship, help, and closeness are distinct but related components of positive friendship quality and are associated with stronger, more stable friendships. The study established a theoretical foundation for understanding friendship quality during adolescence and is considered one of the most widely used frameworks in friendship research.
- **Valkenburg and Peter (2007)** examined the impact of online communication on adolescent well-being by testing the stimulation versus displacement hypotheses through an online survey of 1,210 Dutch adolescents aged 10–17 years. The study indicated that online communication, particularly instant messaging with existing friends, enhanced well-being by increasing time spent with friends

and improving friendship quality, but communication with strangers in public chatrooms showed no significant effect on well-being. The findings highlight that the psychological impact of online interaction depends largely on how digital communication supports existing social relationships.

- **Subrahmanyam and Greenfield (2008)** studied adolescents' online communication and its influence on interpersonal relationships, showing that digital communication tools are largely used to reinforce existing friendships and romantic relationships while also shaping peer, family, and social interactions. The review highlights both benefits (such as social support, information access, and reduced social anxiety) and risks (including exposure to harmful content and reduced parent–child communication), emphasising the complex role of electronic media in adolescent social development. However, this work is a narrative review of existing research by Valkenburg and Peter (2007), not exactly a primary survey.
- **Angelini, Gini, Marino, and Van Den Eijnden (2024)** examined the relationship between social media features, active social media use, and perceived friendship quality among 751 adolescents (mean age = 16.2 years). The study focused on three dimensions of friendship quality: companionship, intimacy, and validation and investigated how social media characteristics such as availability, visualisation, and quantifiability influenced these dimensions. The findings showed that perceived availability of the social media positively predicted friendship quality both directly and indirectly through active social media use. Adolescents who engaged more frequently in social media behaviours, such as interacting with and supporting friends online, reported higher levels of companionship, intimacy, and validation in their friendships. The study suggests that social media can strengthen friendship quality when used to maintain meaningful peer interactions and highlights the importance of digital communication in contemporary adolescent relationships.
- **Antheunis, Valkenburg, and Peter (2012)** examined the quality of online, offline, and mixed-mode friendships among users of a social networking site through a survey of 2,188 Dutch participants. The study found that while the quality of all friendship types improved over time, offline friendships generally remained stronger than purely online ones, while mixed-mode friendships (originating online but extending offline) became comparable to offline friendships. Perceived similarity was the strongest predictor of online friendship quality, and social attraction for offline and mixed-mode friendships. This showed how both digital and face-to-face interactions shape friendship quality differently.
- **Parker and Asher(1993)** examined friendship quality and peer adjustment among school-aged children and adolescents. Their findings indicated that adolescents who reported supportive and companionable friendships experienced lower loneliness, greater social competence, and better emotional adjustment. The study highlighted companionship as an important protective factor contributing to psychosocial well-being and successful peer relationships.
- **Verswijvel et al. (2018)** developed and validated the Friendship Quality on Social Network Sites Questionnaire (FQSNS), specifically designed to measure friendship quality in digital environments. Using a large adolescent sample, the researchers identified five dimensions of online friendship quality: satisfaction, companionship, help, intimacy, and self-validation. Their findings showed that companionship, help, and intimacy can be reliably measured in online friendships and are important indicators of friendship quality regardless of whether friendships originate online or offline. The study provides strong empirical support for examining these dimensions within digital friendship contexts.

- **Parvez (2019)** researched the impact of social networking sites on interpersonal relationships among teenagers. The findings concluded that social networking platforms facilitated friendship maintenance and increased opportunities for interaction and companionship. Adolescents reported that social networking sites helped them remain connected with peers and strengthen existing relationships. However, excessive online engagement was also associated with reduced face-to-face interactions. The study suggests that digital platforms play an increasingly important role in providing companionship during adolescence.
- **Pradhan et al. (2018)** examined the relationship between perceived friendship quality, life satisfaction, and emotional wellbeing among adolescents through a quantitative study conducted with Indian students. The findings indicated a significant positive association between perceived quality of friendships and adolescents' life satisfaction and emotional wellbeing, suggesting that supportive peer relationships play an important role in psychological adjustment during adolescence. The study highlights the importance of fostering healthy friendships as a factor contributing to adolescents' emotional stability and overall wellbeing.

2.2 Critical Review

Friendships play an important role in the social and emotional development of adolescents, and both online and offline friendships provide companionship, help and emotional connection. Existing studies have examined these dimensions of friendship quality and have also explored the role of online communication in maintaining friendships and supporting adolescent wellbeing. However, the findings do not suggest whether online or offline friendships provide better quality experiences when talking specifically about friendships. Some studies have highlighted the benefits of online communication in maintaining relationships and increasing interaction, while others have reported stronger friendship quality in offline relationships. A limitation in the existing literature is that although companionship, help and intimacy have been studied as important dimensions of friendship quality, there is limited research directly comparing these dimensions between students who prefer online friendships and those who prefer offline friendships. Further, inclination towards friendship preference between early and later adolescence has received relatively less attention. This indicates the need to examine friendship preference together with the specific friendship-quality dimensions of companionship, help and emotional closeness/intimacy.

2.3 Research Gap

Existing research on adolescent friendships and online–offline peer interactions is largely based on Western or mixed cultural samples, with limited focused evidence on Indian school students, particularly those in Classes 6–12, which spans from early to late adolescence. While several studies have explored outcomes such as well-being, loneliness, or social adjustment, fewer investigations directly examine adolescents' friendship mode preferences and the perceived reasons underlying these choices, for example, companionship, help, emotional closeness/intimacy, especially within structured school contexts. Additionally, developmental comparisons between early adolescents (Classes 6–8) and late adolescents (Classes 9–12) remain underexplored in Indian samples despite known differences in peer orientation, digital exposure, and psychosocial needs across these stages. Additionally, there is a practical gap in translating such evidence into school counselling applications; systematic insights into friendship preferences and perceived relationship quality could help educators and counsellors design targeted peer-support programs and digital well-being interventions suited to Indian school environments.

CHAPTER 3

3.1 Problem Statement

The present study aims to examine friendship preferences among school students and compare their perceived companionship, help and emotional closeness/intimacy across online and offline friendship preference groups. The study also examines whether friendship preferences differ between early adolescents (Classes 6–8) and late adolescents (Classes 9–12).

3.2 Aim

The present study aims to examine friendship preferences and perceived friendship quality among school students, with specific focus on companionship, help and emotional closeness/intimacy in relation to online and offline friendships.

3.3 General Objective

To examine friendship preferences and perceived friendship-quality dimensions among Indian school students (Classes 6–12).

3.4 Specific Objectives

1. To identify the predominant friendship preference (online vs offline) among Indian school students (Classes 6–12).
2. To compare companionship and help between students who prefer online friendships and those who prefer offline friendships.
3. To compare perceived emotional closeness/intimacy between students who prefer offline friendships and those who prefer online friendships.
4. To examine whether friendship preference differs between early adolescents (Classes 6–8) and late adolescents (Classes 9–12).

3.5 Hypothesis

- **H₀₁:** There is no significant preference for online or offline friendships among Indian school students studying in Classes 6–12.
- **H₀₂:** There is no significant difference in perceived companionship and help between students who prefer online friendships and those who prefer offline friendships.
- **H₀₃:** There is no significant difference in perceived emotional closeness/intimacy between students who prefer offline friendships and those who prefer online friendships.
- **H₀₄:** There is no significant difference in friendship preferences (online vs offline) between early adolescents (Classes 6–8) and late adolescents (Classes 9–12).

RESEARCH METHODOLOGY

3.6 Research Design

The present study adopted a **quantitative, non-experimental, cross-sectional survey research design** with a comparative component to examine friendship preferences (online vs. offline) and perceived friendship-quality dimensions among school students.

The study aims to collect self-reported data on students' friendship preferences and their perceptions of companionship, help and emotional closeness/intimacy within their friendships. These are measured using structured questionnaires based on established measures such as the Friendship Qualities Scale (FQS) and the Friendship Quality on Social Network Sites Questionnaire (FQSNS).

3.7 Population and Sample

3.7.1 Target Population

The target population for the study consisted of **Indian school students studying in Classes 6 to 12**, representing both early adolescence (Classes 6–8) and late adolescence (Classes 9–12).

3.7.2 Sampling Method

A **non-probability sampling method**, specifically **convenience sampling**, was used due to accessibility and feasibility within school environments. Students who were available during the study period and whose parents permitted the survey were included.

3.7.3 Sample Size

The study included a sample of **227 students**, ensuring representation across both age groups (early and late adolescents).

3.7.4 Inclusion Criteria

- Students enrolled in Classes 6 to 12
- Students within the age range of approximately 11–18 years
- Students who have access to both online and offline modes of communication
- Students who provided assent and whose parents/guardians provided consent

3.7.5 Exclusion Criteria

- Students below Class 6 or above Class 12
- Students with limited exposure to digital communication (to ensure relevance to online friendship context)
- Incomplete or improperly filled questionnaires

3.8 Tools / Instruments Used

The present study used selected and adapted items from two standardised measures of friendship quality: the **Friendship Qualities Scale (FQS)** and the **Friendship Quality on Social Network Sites Questionnaire (FQSNS)**. The FQS measures friendship quality in general/face-to-face friendships, while the FQSNS measures friendship quality in social networking environments. The dimensions relevant to the present study are companionship, help and emotional closeness/intimacy.

3.8.1 Friendship Qualities Scale (FQS)

Author: William M. Bukowski, Betsy Hoza, and Michel Boivin

Publication Date: 1994

What it measures:

The Friendship Qualities Scale (FQS) measures friendship quality across five dimensions: companionship, conflict, help/aid, security and closeness. The scale consists of 23 items. For the present study, the dimensions of **companionship, help and closeness** are used.

Reliability:

The FQS demonstrated good internal consistency, with Cronbach's alpha coefficients ranging from **.71 to .80** across its five dimensions.

Validity:

Construct validity was established by factor analysis, which supported the five-dimensional structure of the scale. Further validity was supported by differences in friendship-quality ratings between mutual and non-mutual friendships and between stable and less stable friendships.

3.8.2 Friendship Quality on Social Network Sites Questionnaire (FQSNS)

Authors: Karen Verswijvel, Wannes Heirman, Kris Hardies, and Michel Walrave

Publication Date: 2018

What it measures:

The Friendship Quality on Social Network Sites Questionnaire (FQSNS) measures friendship quality in social networking environments across five dimensions: satisfaction, companionship, help, intimacy and self-validation. For the present study, the dimensions of **companionship, help and intimacy** are used.

Reliability:

The FQSNS demonstrated good internal consistency, with Cronbach's alpha values ranging from **.87 to .94** across the five dimensions. For the dimensions used in the present study, the reported values were **.94 for companionship, .91 for help and .94 for intimacy**.

Validity:

Construct validity was established through exploratory and confirmatory factor analyses. The five-factor model showed good fit with **CFI = .98, TLI = .97, RMSEA = .07 and SRMR = .03**. The factor structure was also supported across different age and sex groups.

3.9 Procedure

3.9.1 Data Collection Process

The data collection was carried out systematically as follows:

1. **Permission and Access** Approval was obtained from parents/guardians to conduct the study among students.
2. **Consent Process** Informed consent was obtained from parents/guardians, and assent was obtained from participating students before data collection.
3. **Administration of Questionnaire** The questionnaire was administered through a secure digital form (online mode).
4. **Instructions to Participants** Students were clearly instructed about the purpose of the study and how to respond to the questionnaire. They were encouraged to answer honestly.
5. **Data Collection Duration** The questionnaire took approximately **5-7 minutes** to complete.
6. **Collection and Screening** Completed responses were collected and screened for completeness and accuracy before analysis.

3.9.2 Ethical Considerations

The study adhered to standard ethical guidelines in psychological research:

- **Informed Consent:** Participation was voluntary, and consent was obtained from both students and their guardians.
- **Anonymity and Confidentiality:** No personally identifiable information was collected. All responses were kept confidential and used solely for research purposes.
- **Right to Withdraw:** Participants were informed that they could withdraw from the study at any point without any consequences.
- **Non-harm Principle:** The study involved minimal risk, as it focused on general perceptions of friendships.
- **Data Protection:** Collected data were securely stored and accessed only by the researcher.

CHAPTER 4

RESULT ANALYSIS

4.1 Demographic Details of the Participants

The survey was filled out by a total of 227 students, of whom 102 participants were from Grades 6-8, and 125 participants were from Grades 9-12. Out of the 102 participants who were from Grades 6-8, 72 mentioned that they preferred Offline friendships and found them to be more meaningful, while 30 mentioned that they preferred online friendships. Out of the 125 participants from Grades 9-12, 94 mentioned that they preferred Offline friendships and found them to be more meaningful, while the remaining 31 mentioned that they found Online friendships to be more meaningful.

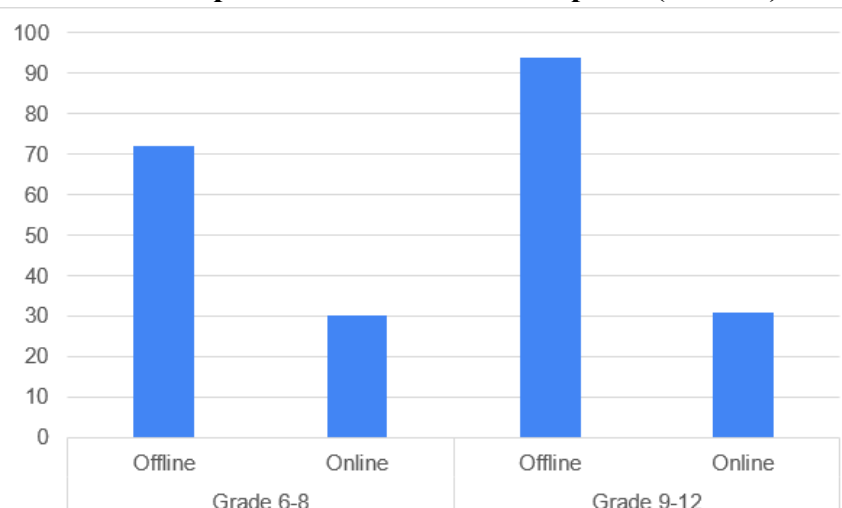
The sample consisted of **130 female participants and 97 male participants**. For the school type, 158 participants were from private schools, 38 were from international schools, and 31 were from government schools. Also, 210 participants reported that they regularly owned or used a smartphone, while 17 participants reported that they did not.

4.2 Descriptive Statistics

Table 1
Friendship Preference of the Participants (N = 227)

Grade Group	Friendship Preference	Total (N)	Mean	Standard Deviation
Grade 6-8	Offline	72	46.92	6.17
	Online	30	41.37	7.73
Grade 9-12	Offline	94	47.15	7.02
	Online	31	40.58	7.45

Graph 1
Friendship Preference of the Participants (N = 227)



Descriptive statistical analysis was conducted to examine the friendship preference and perceived friendship quality using the three dimensions included in the study, namely **Companionship, Help, and Emotional Closeness/Intimacy**. These dimensions were selected from the Friendship Qualities Scale (FQS) and the Friendship Quality on Social Network Sites Questionnaire (FQSNS), depending on the friendship preference of the participants. The methodology of the study identifies these three dimensions as the friendship-quality variables that are examined in the present research.

Each dimension consisted of four items rated on a five-point Likert scale. The scores of the four items were combined to obtain a composite score for each dimension. Therefore, the possible score for each dimension ranged from **4 to 20**, with higher scores indicating a greater level of the respective dimension of friendship quality. The combined score for perceived friendship quality ranged from 12 to 60.

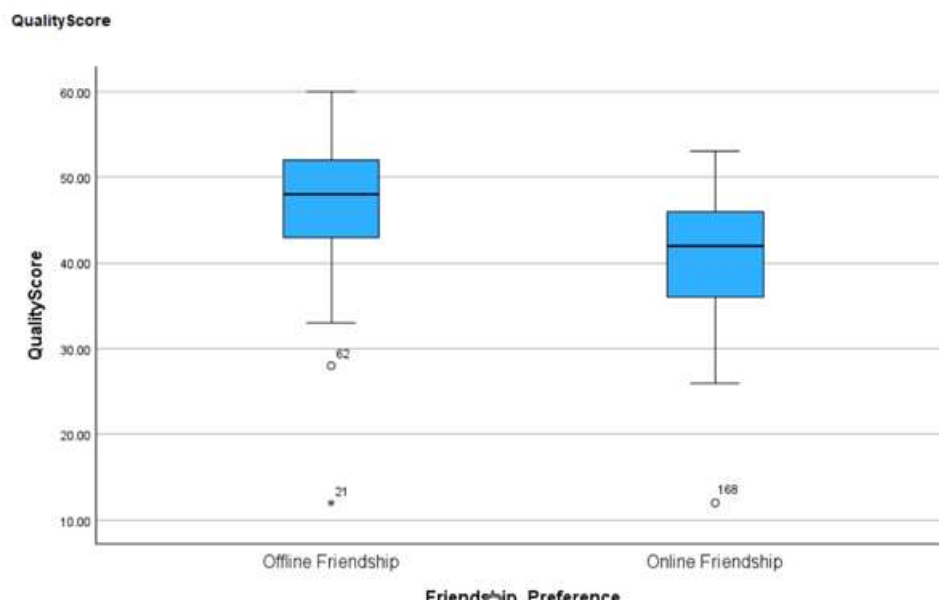
The mean and standard deviation were calculated to understand the distribution of friendship preferences among the students, specifically to identify any differences between those in Grades 6-8 and Grades 9-12. These are presented in Table 1 in Section 4.1.

4.3 Normality Testing and Assumption Analysis

Table 2
Shapiro–Wilk Test of Normality

Dimension	Offline W	Offline p	Online W	Online p
Companionship	.93	<.001	.91	<.001
Help	.948	<.001	.971	.155
Emotional Closeness/ Intimacy	.952	<.001	.984	.601

Graph 2
Boxplot of Friendship-Quality Scores by Friendship Preference



Normality testing was **not required for Hypotheses 1 and 4**, because those hypotheses involved categorical frequency data. For **Hypotheses 2 and 3**, the Shapiro-Wilk test was done to check the normality of the data. Using the conventional $\alpha = .05$ criterion, in the case of friendship preference being Offline and Online, the values of friendship quality score for each of the dimensions were checked. The values showed a significant deviation from normality. The assumption of normality was not consistently satisfied for the friendship-quality dimensions across the offline- and online-preference groups.

4.4 Selection of Statistical Tests

Normality testing was not required for Hypotheses 1 and 4 since these involved categorical frequency data and hence the tests used for these were chi-square, specifically chi-square goodness-of-fit and chi-square test of independence respectively. For hypotheses 2 and 3, since the Shapiro-Wilk test showed a significant departure from normality, Mann-Whitney U tests were conducted.

4.5 Inferential Statistical Analysis

The inferential statistical tests were conducted to address the objectives and hypotheses of the study. The analyses examined the overall distribution of friendship preference, the association between friendship preference and grade group, and differences in the three friendship-quality dimensions between students who preferred online and offline friendships.

The level of statistical significance was set at $\alpha = .05$. A p -value below .05 was considered statistically significant.

4.5.1 Overall Friendship Preference

The first objective of the study was to identify the predominant friendship preference among the participants. The participants were asked to indicate whether they considered **online friendship or offline friendship** more meaningful.

Out of the 227 participants, **166 (73.1%)** reported offline friendship as more meaningful, while **61 (26.9%)** reported online friendship as more meaningful. These frequencies were subjected to a **Chi-square goodness-of-fit test** to determine whether the observed distribution differed significantly from an equal distribution of online and offline preferences.

Table 3 Chi-Square Goodness-of-Fit Test for Overall Friendship Preference

Friendship Preference	Expected Total	Observed Total	Percentage
Offline	113.5	166	73.1 %
Online	113.5	61	26.9 %
Total	227	227	100 %

The Chi-square goodness-of-fit test indicated a statistically significant difference in the distribution of friendship preference, $\chi^2 (1) = 48.57, p < .001$. The observed frequency of offline friendship preference was considerably higher than the expected frequency, whereas the observed frequency of online friendship preference was lower than expected.

Thus, the distribution of friendship preference was statistically different from an equal preference for online and offline friendships.

4.5.2 Friendship Preference Across Grade Groups

The fourth objective was to examine whether friendship preference differed between students in **Grades 6–8** and **Grades 9–12**.

The distribution of friendship preference across the two grade groups was as follows:

Table 4 Friendship Preference Across Grade Groups

Grade Group	Offline Friendship	Online Friendship	Total
Grade 6-8	72 (70.6 %)	30 (29.4 %)	102
Grades 9-12	94 (75.2 %)	31 (24.8 %)	125

Total	166	61	227
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A **Chi-square test of independence** was conducted to determine whether friendship preference was associated with grade group.

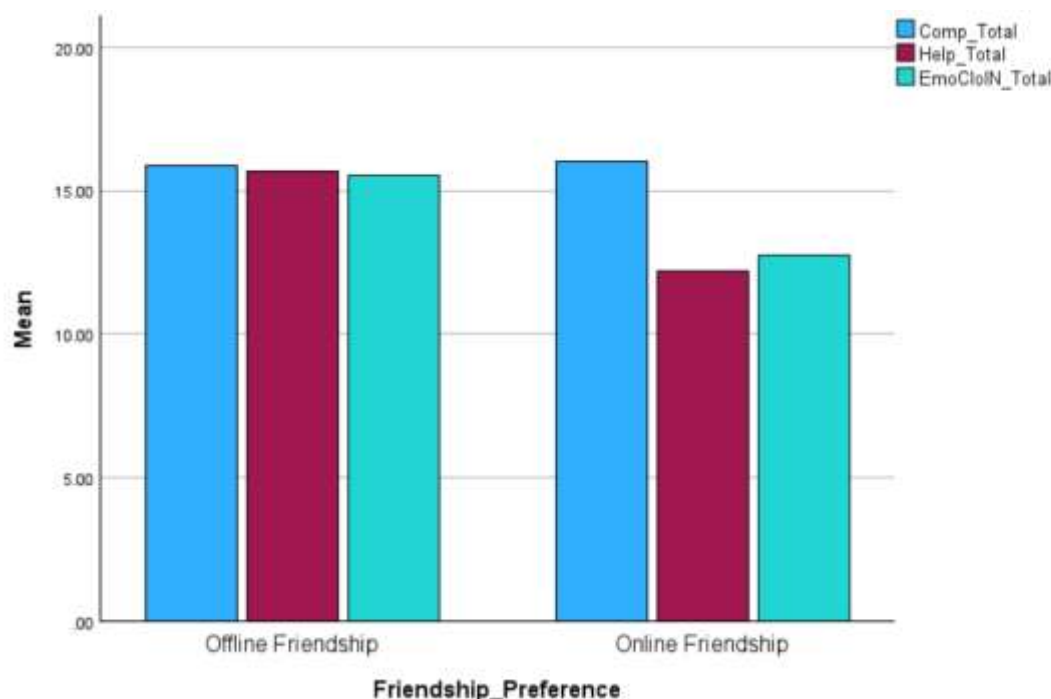
The analysis did not show a statistically significant association between grade group and friendship preference, $\chi^2(1) = .608$, $p = .436$.

Although the proportion of students reporting offline friendship was slightly higher in Grades 9–12 (75.2%) than in Grades 6–8 (70.6%), the difference was not statistically significant.

4.5.3 Comparison of Perceived Friendship Quality Between Online and Offline Friendship Preference Groups

Table 5
Mann-Whitney U for Perceived Friendship Quality

Dimension	Offline N	Online N	Mann-Whitney U	p-value	Result
Companionship	166	61	4781.50	0.518	Not Significant
Help	166	61	1883.00	<.001	Significant
Emotional Closeness/ Intimacy	166	61	2587.50	<.001	Significant



The analysis showed that the difference in Companionship scores between the two groups was **not statistically significant**. Therefore, the results did not indicate a statistically significant difference in perceived Companionship between students who preferred offline friendships and those who preferred online friendships. However, for Help and Emotional Closeness/ Intimacy, the values show statistical

significance and hence the results show a difference in perceived levels in these dimensions in case of online and offline friendship preferences.

4.5.4 Summary of Inferential Results

For ease of interpretation, the major inferential results are presented together below.

Table 6
Summary of Inferential Statistical Results

Analysis	Statistical Name	Test	Test Statistic	p-value	Result
Overall Friendship Preference	Chi-Square goodness of fit test		$X^2(1) = 48.57$	$< .001$	Significant
Friendship Preference in Grade Groups	Chi- Square test of Independence		$X^2(1) = 0.61$	0.436	Not Significant
Companionship: Offline vs Online	Mann-Whitney U		4781.5	0.518	Not Significant
Help: Offline vs Online	Mann-Whitney U		1883.00	$< .001$	Significant
Emotional Closeness/Intimacy: Offline vs Online	Mann-Whitney U		2587.50	$< .001$	Significant

The inferential analysis therefore showed three statistically significant findings. First, the overall distribution of friendship preference differed significantly between online and offline friendship. Second, perceived Help differed significantly between the online- and offline-preference groups. Third, the two groups differed significantly in Emotional Closeness/Intimacy.

In contrast, the difference in Companionship between the two groups was not statistically significant, and friendship preference did not differ significantly between the Grades 6–8 and Grades 9–12 groups.

4.6 Summary of Results

The present study examined friendship preferences and perceived friendship quality among **227 school students from Grades 6–12**. Participants were divided into two grade groups: 102 students from Grades 6–8 and 125 students from Grades 9–12.

The descriptive findings showed that **offline friendship was the more commonly reported friendship preference**, with 166 participants (73.1%) identifying offline friendship as more meaningful, compared with 61 participants (26.9%) who selected online friendship. For Hypothesis 1, analysis showed a significant difference, $\chi^2(1) = 48.57$, $p < .001$, with a greater proportion of students preferring offline friendship as compared to online friendship.

For hypothesis 2, the dimensions of companionship and help were compared using the Mann-Whitney U test since Shapiro-Wilk showed significant departure from normality. No statistical difference was found for the dimension of Companionship, $U = 4781.50$, $p = .519$, but a significant statistical difference was found in the dimension of Help, $U = 1883.00$, $p < .001$, with the offline-preference group reporting higher scores for Help.

For hypothesis 3, the Mann-Whitney U tests were conducted since the Shapiro-Wilk test showed significant departure from normality. The scores showed a statistically significant difference in perceived Emotional Closeness/ Intimacy scores between the offline and online preference groups, with the offline group showing higher scores than the online ones, $U = 2587.50$, $p < .001$.

For Hypothesis 4, a chi-square test of independence was conducted to check if friendship preferences changed with the grade groups. The result was not found to be statistically significant, $\chi^2(1) = 0.61$, $p = .436$, which means that friendship preference did not change significantly with age or grade.

CHAPTER 5

5.1 Discussion of Hypotheses

The present study examined friendship preferences and perceived friendship quality among school students in Classes 6–12. The study focused on three dimensions of friendship quality, namely Companionship, Help, and Emotional Closeness/Intimacy, and examined these dimensions in relation to students' preference for online or offline friendships. The study also examined whether friendship preference differed between students in Grades 6–8 and Grades 9–12. The following section discusses the findings obtained for each of the four hypotheses.

5.1.1 Hypothesis 1: Friendship Preference

Hypothesis 1: H_{01} : There is no significant preference for online or offline friendships among Indian school students studying in Classes 6–12.

The first hypothesis examined whether students showed a significant preference for one mode of friendship over the other. Out of the 227 participants, 166 students (73.1%) reported that they considered offline friendships more meaningful, whereas 61 students (26.9%) reported that they considered online friendships more meaningful. The Chi-square goodness-of-fit test showed that this difference was statistically significant, $\chi^2(1) = 48.57$, $p < .001$.

The finding therefore indicates that offline friendship was significantly more preferred than online friendship among the students who participated in the study. The result suggests that although online friendships form an important part of adolescents' social experiences, offline friendships hold greater perceived importance for most of the students in the present sample.

This finding is relevant to the changing nature of adolescent friendships, where online communication has become increasingly integrated into everyday social interaction. However, the significant preference for offline friendships in the present study suggests that digital communication may not necessarily replace face-to-face friendships. Rather, students may continue to value the direct interaction, shared activities and physical presence associated with offline friendships.

Conclusion for H_{01} : Since the difference in the observed frequencies of online and offline friendship preference was statistically significant ($p < .001$), **H_{01} was rejected**. The findings indicate a significant preference for offline friendships over online friendships among the participants.

5.1.2 Hypothesis 2: Companionship and Help

Hypothesis 2: H_{02} : There is no significant difference in perceived companionship and help between students who prefer online friendships and those who prefer offline friendships.

The second hypothesis examined two dimensions of friendship quality, namely, Companionship and Help, between students who preferred online and offline friendships.

For **Companionship**, the mean score for students in the offline-preference group was 15.89 ($SD = 2.83$), while the mean score for the online-preference group was 16.02 ($SD = 3.41$). The difference between the

two groups was not statistically significant, $U = 4781.50$, $p = .518$. Thus, there was no sufficient evidence to conclude that perceived Companionship differed between students who preferred offline friendships and those who preferred online friendships.

For **Help**, the offline-preference group had a mean score of **15.66 (SD = 2.71)**, compared with **12.21 (SD = 2.88)** for the online-preference group. The Mann–Whitney U test indicated a statistically significant difference between the two groups, $U = 1883.00$, $p < .001$. The offline-preference group therefore reported higher perceived levels of Help than the online-preference group.

Since Companionship and Help produced different statistical outcomes, the findings provide only **partial support for the null hypothesis**. There was no significant difference in Companionship, but there was a significant difference in Help.

Conclusion for H₀₂: The null hypothesis was **retained for Companionship**, as the difference between the online- and offline-preference groups was not statistically significant. However, the null hypothesis was **rejected for Help**, as the offline-preference group scored significantly higher than the online-preference group.

5.1.3 Hypothesis 3: Emotional Closeness/Intimacy

Hypothesis 3: H₀₃: There is no significant difference in perceived emotional closeness/intimacy between students who prefer offline friendships and those who prefer online friendships.

The third hypothesis examined whether students who preferred offline friendships differed from those who preferred online friendships in their perceived level of emotional closeness/intimacy.

The offline-preference group had a mean Emotional Closeness/Intimacy score of 15.50 (SD = 2.79), while the online-preference group had a mean score of 12.74 (SD = 3.17). The Mann–Whitney U test indicated a statistically significant difference between the two groups, $U = 2587.50$, $p < .001$. The offline-preference group therefore reported higher perceived Emotional Closeness/Intimacy than the online-preference group.

The offline-preference group therefore reported higher levels of emotional closeness/intimacy than the online-preference group. This finding suggests that face-to-face friendships may be perceived as providing stronger emotional connection, warmth and interpersonal closeness among the students in the present sample.

Conclusion for H₀₃: Since the difference in Emotional Closeness/Intimacy between the two friendship preference groups was statistically significant ($p < .001$), **H₀₃ was rejected**. The offline-preference group reported significantly higher Emotional Closeness/Intimacy than the online-preference group.

5.1.4 Hypothesis 4: Friendship Preference and Grade Group

Hypothesis 4: H₀₄: There is no significant difference in friendship preferences (online vs offline) between early adolescents (Classes 6–8) and late adolescents (Classes 9–12).

The fourth hypothesis examined whether friendship preference differed according to grade group. The participants were divided into two groups: Grades 6–8 and Grades 9–12. In Grades 6–8, 72 students (70.6%) preferred offline friendships and 30 students (29.4%) preferred online friendships. In Grades 9–12, 94 students (75.2%) preferred offline friendships and 31 students (24.8%) preferred online friendships. Although the proportion of students preferring offline friendship was slightly higher among students in Grades 9–12, the Chi-square test of independence did not show a statistically significant association between grade group and friendship preference, $\chi^2(1) = 0.61$, $p = .436$.

The finding indicates that the preference for online or offline friendship did not differ significantly between the two age/grade groups in the present sample. Both groups showed a clear tendency towards offline fri-

endship, and the difference between them was relatively small.

This suggests that the transition from early to later adolescence did not substantially alter the overall friendship mode preference of the students in this sample. Although adolescents' social needs and interaction patterns may change as they grow older, these developmental changes did not result in a statistically significant shift from offline to online friendship preference in the present study.

Conclusion for H₀₄: Since the association between grade group and friendship preference was not statistically significant ($p = .436$), **H₀₄ was retained**. The findings do not provide sufficient evidence of a significant difference in online versus offline friendship preference between Grades 6–8 and Grades 9–12.

5.1.5 Overall Interpretation of the Hypotheses

Taken together, the findings show that friendship preference and friendship quality are related in different ways across the dimensions examined. Offline friendship was significantly more preferred overall, and students who preferred offline friendships reported significantly higher levels of Help and Emotional Closeness/Intimacy. However, the two preference groups did not differ significantly in Companionship. This suggests that online friendships may provide a similar sense of companionship, while offline friendships may be perceived as stronger in terms of assistance and emotional closeness.

No significant difference was observed in friendship preference between Grades 6–8 and Grades 9–12. Thus, within the present sample, age/grade group did not appear to be a major factor determining whether students preferred online or offline friendships.

Overall, the findings suggest that **online and offline friendships should not necessarily be viewed as completely interchangeable or as universally better or worse than one another**. Different modes of friendship may fulfil different relational needs. In the present study, online friendships appeared comparable to offline friendships in companionship, whereas offline friendships were associated with higher perceived help and emotional closeness/intimacy.

5.2 Overall Conclusion

The present study examined friendship preferences and perceived friendship quality among Indian school students from Grades 6–12, with particular focus on the three dimensions of **Companionship, Help, and Emotional Closeness/Intimacy**. The study also determined whether students' preference for online or offline friendships differed between Grades 6–8 and Grades 9–12.

The findings indicate that **offline friendship was the predominant preference** among the participants. A substantial majority of students reported that they considered offline friendships more meaningful than online friendships. This shows that despite the increasing role of digital communication in adolescents' lives, face-to-face friendships continue to have an important place in their social experiences.

The comparison of friendship-quality dimensions provided a more detailed picture. The results showed **no significant difference in Companionship** between students who preferred online friendships and those who preferred offline friendships. This suggests that online friendships can provide adolescents with a comparable sense of social company and interaction. However, **significant differences were found in Help and Emotional Closeness/Intimacy**, with students who preferred offline friendships reporting higher scores on both dimensions. Thus, while online friendships may provide companionship, offline friendships may be perceived as giving more help and emotional connection.

The study also examined whether friendship preference differed between early adolescents in Grades 6–8 and late adolescents in Grades 9–12. No statistically significant difference was found between the two groups. Both groups showed a greater preference for offline friendships, suggesting that the preference for

offline versus online friendship did not change substantially across the two developmental groups represented in the study.

Overall, the findings highlight that adolescent friendship in the present digital context is **not simply a choice between online and offline relationships**. Rather, different forms of friendship may provide different types of relational experiences. The results of the present study suggest that online friendships can fulfil the need for companionship, and offline friendships may be perceived as stronger sources of help and emotional closeness/intimacy. At the same time, the findings do not imply that online friendships are inherently less meaningful, as the absence of a significant difference in companionship demonstrates that meaningful social connection can also occur through online interaction.

In conclusion, the present study contributes to an understanding of how school students perceive online and offline friendships and shows that **friendship preference is predominantly offline in the present sample, while the quality of friendship varies across specific relational dimensions**. The findings particularly demonstrate that companionship may be experienced similarly across friendship modes, whereas help and emotional closeness/intimacy are more strongly associated with offline friendship preference. These findings provide a basis for further research into the changing nature of adolescent friendships in the context of increasing digital communication.

5.3 Comparison of Findings with Previous Research

- **Valkenburg and Peter (2007):** The study found that online communication can improve the quality of adolescents' existing friendships by increasing interaction. This is partly supported by the present findings, as there was no significant difference between online- and offline-preference groups in **Companionship**, suggesting that online friendships can provide a similar sense of companionship.
- **Subrahmanyam and Greenfield (2008):** The authors highlighted both the benefits and limitations of digital communication for adolescent relationships. The present study supports this balanced view, as online friendships appeared comparable in companionship, but the offline-preference group reported higher levels of **Help** and **Emotional Closeness/Intimacy**.
- **Antheunis et al. (2012):** The study reported stronger friendship quality in offline friendships compared with purely online friendships, although mixed online-offline friendships could show similar quality. The present findings are broadly consistent with this, particularly for **Help and Emotional Closeness/Intimacy**, where the offline-preference group scored significantly higher.
- **Verswijvel et al. (2018):** Their research on friendship quality on social networking sites identified **companionship, help and intimacy** as important dimensions of online friendship quality. The present study supports the relevance of these dimensions and further shows that the difference between online and offline preferences was not significant for companionship, while differences were observed for help and emotional closeness.
- **Parvez (2019):** The study found that social networking sites helped teenagers maintain relationships and stay connected with friends. This agrees with the present finding that online friendships can provide companionship, although the current study found offline friendships to be stronger in perceived help and emotional closeness.
- **Nesi et al. (2018):** The authors discussed how social media has changed the way adolescents communicate and maintain peer relationships. The present findings support this idea, as online friendship was meaningful to a proportion of participants; however, offline friendship remained the preferred mode for most students.

- **Coli et al. (2023):** The study showed that emotional connection and trust can develop within online social interactions. The present study does not completely support this finding, as students who preferred offline friendships reported significantly higher **Emotional Closeness/Intimacy**. However, the findings do not suggest that emotional connection is absent from online friendships.
- **Finding Friends: The Role of Loneliness on the Formation of Online Friendships Among Adolescents:** This research highlighted the role of loneliness in the development of online friendships among adolescents. The present study did not directly measure loneliness, so a direct comparison cannot be made. However, the finding that a substantial proportion of students preferred online friendships suggests that online friendships remain an important part of adolescents' social relationships.
- **The study on teens' online friendships being as meaningful as face-to-face friendships (UCI, 2017):** The study reported that adolescents could experience online friendships as meaningful as face-to-face friendships. The present findings partly agree with this, particularly for **Companionship**, where no significant difference was found between the two preference groups. However, the present study found significant differences in Help and Emotional Closeness/Intimacy favouring the offline-preference group.
- **Alsarrani et al. (2022):** Their systematic review found that friendship quality is positively related to several aspects of adolescent wellbeing. Although wellbeing was not directly measured in the present study, the findings support the importance of examining friendship quality through specific dimensions rather than looking only at whether a friendship is online or offline.
- **Pradhan et al. (2018):** The study conducted among Indian adolescents found a positive relationship between friendship quality and emotional wellbeing and life satisfaction. The present study did not measure wellbeing, but it similarly demonstrates that friendship quality is multidimensional, with different patterns emerging for companionship, help and emotional closeness.

Overall, the findings of the present study are **partly consistent with previous research**. Earlier studies have shown that online friendships can provide meaningful interaction, companionship and emotional connection, which is supported by the present finding that there was no significant difference in companionship between the two groups. At the same time, the higher levels of Help and Emotional Closeness/Intimacy reported by the offline-preference group are in line with research suggesting that face-to-face friendships may provide stronger forms of support and closeness. Thus, the present study adds to the existing literature by showing that the differences between online and offline friendships may depend on the specific aspect of friendship quality being considered.

5.4 Implications of the Study

The present study has implications for understanding adolescent friendships in the context of increasing digital communication. The findings indicate that online and offline friendships may fulfil different aspects of friendship quality rather than one mode being uniformly better than the other.

5.4.1 Theoretical Implications

The study contributes to the understanding of friendship quality as a **multidimensional construct**. The findings showed that the three dimensions examined, namely Companionship, Help, and Emotional Closeness/Intimacy, did not show the same pattern across online and offline friendship preferences. While no significant difference was found for Companionship, significant differences were observed for Help and Emotional Closeness/Intimacy. This suggests that examining friendship as a single overall construct

may overlook differences in the specific functions that friendships serve.

The findings also add to the growing understanding of how digital communication is influencing adolescent friendships. The fact that online-preference students reported levels of companionship similar to those of offline-preference students suggests that meaningful social connection can occur through online interaction. At the same time, the higher Help and Emotional Closeness/Intimacy scores among the offline-preference group indicate that face-to-face interaction may continue to have an important role in certain aspects of friendship.

5.4.2 Practical Implications

The findings have practical relevance for **parents, teachers, school counsellors and mental health professionals** working with adolescents. Since online friendships were meaningful to a proportion of the participants, parents and educators may benefit from avoiding an entirely negative view of online friendships. Instead, adolescents can be encouraged to maintain healthy boundaries and develop positive relationships both online and offline.

For **school counsellors**, the findings highlight the importance of exploring the quality and function of a young person's friendships rather than focusing only on the number of hours spent online. Counselling conversations can consider whether adolescents feel supported, included and emotionally connected in their friendships.

The findings may also be useful in developing **school-based programmes on healthy digital relationships and peer relationships**. Such programmes could help students understand the differences between companionship, support and emotional closeness, while encouraging healthy communication and appropriate use of digital platforms.

For parents, the findings suggest that maintaining opportunities for **face-to-face interaction, shared activities and emotional communication** remains important during adolescence, even when online communication is a regular part of students' social lives.

5.5 Limitations of the Study

The present study has certain limitations that should be considered when interpreting its findings.

1. **Sample characteristics:** The study was conducted among school students from Grades 6–12, and therefore the findings may not represent adolescents from all educational, geographical or socioeconomic backgrounds in India.
2. **Sample size:** Although the study included 227 participants, the number of students in the online-preference group was considerably smaller than the offline-preference group. This difference in group size should be considered when interpreting comparisons between the two groups.
3. **Self-report data:** The study relied on participants' self-reported responses. Responses may therefore have been influenced by individual perceptions, social desirability or the participants' understanding of their own friendships.
4. **Cross-sectional design:** Data were collected at one point in time. Consequently, the study cannot determine how friendship preferences or friendship quality may change as adolescents grow older.
5. **Preference rather than direct comparison:** Participants were grouped according to whether they preferred online or offline friendships. The study therefore does not directly compare the online and offline friendships of the **same individual**. The findings should consequently be understood as differences between friendship-preference groups rather than as evidence that one mode of friendship is objectively better than the other.

6. **Limited dimensions of friendship quality:** The study focused specifically on Companionship, Help and Emotional Closeness/Intimacy. Other aspects of friendship quality, such as trust, conflict, self-disclosure, acceptance and satisfaction, were not examined.
7. **Use of different measures:** The online and offline preference groups were assessed using the relevant friendship-quality measures for each mode. Differences in the structure and wording of the measures should therefore be kept in mind when interpreting direct comparisons between the two groups.
8. **Limited developmental grouping:** The participants were divided into Grades 6–8 and Grades 9–12. This broad grouping may not capture smaller developmental differences that occur across individual adolescent age groups.

These limitations do not invalidate the findings but indicate that the results should be interpreted within the context of the sample, measures and methodology used in the study.

5.6 Scope for Future Research

The present study provides several possibilities for further research on adolescent friendships in the digital age.

1. **Larger and more diverse samples:** Future studies could include a larger number of participants from different regions of India, including students from different types of schools and varied socioeconomic backgrounds. This would improve the generalisability of the findings.
2. **Direct comparison of online and offline friendships:** Future research could assess both an adolescent's online and offline friendships rather than classifying participants according to their preferred mode. This would allow researchers to determine whether the same individual experiences differences in companionship, help and emotional closeness across the two friendship contexts.
3. **Longitudinal research:** Studies following adolescents over several years could examine whether friendship preferences change with age and whether increasing use of digital platforms influences friendship quality over time.
4. **Additional dimensions of friendship quality:** Future research could include dimensions such as trust, self-disclosure, acceptance, conflict, loyalty, satisfaction and perceived support to obtain a more comprehensive understanding of adolescent friendship quality.
5. **Role of social media and digital platforms:** Future studies could examine whether friendship quality differs depending on the type of platform used, such as messaging applications, social networking sites, gaming platforms or other online communities.
6. **Psychological and social factors:** Future research could examine factors such as loneliness, self-esteem, social anxiety, emotional wellbeing and social support alongside friendship preference. This could help explain why some adolescents prefer online friendships while others prefer offline relationships.
7. **Qualitative research:** Interviews or focus groups with adolescents could provide a deeper understanding of why they prefer online or offline friendships and what they consider important in maintaining meaningful friendships.
8. **Influence of family and school environment:** Future studies could also examine whether parental attitudes, school environment, peer culture and opportunities for face-to-face interaction influence adolescents' friendship preferences and perceived friendship quality.

Overall, future research can build on the present study by moving beyond a simple online-versus-offline comparison and examining **how different friendship contexts meet different social and emotional needs during adolescence.**

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