International Journal for Multidisciplinary Research (IJFMR)
E-ISSN: 2582-2160 ● Website: www.ijfmr.com ● Email: editor@ijfmr.com

# Quality of Friendship and Perceived Peer Pressure among Adolescents with Substance Use Disorder

**Stella Yangzee Sherpa[1], Rita Rani Talukdar[2]**

[1]PhD Scholar, Psychology, Gauhati university
[2]Professor (Head of Department), Psychology, Gauhati University

**Abstract**

The quality of friendship and peer interactions may play an important role in adolescent substance use. The present study examined and compared friendship quality and perceived peer pressure among adolescents with and without substance use disorder (SUD). The study employed a quantitative, cross-sectional comparative design. A total of 80 adolescents aged 15–19 years participated, comprising 40 adolescents with SUD and 40 adolescents without SUD. Participants were selected using purposive sampling and assessed using a semi-structured proforma for sociodemographic information and history taking. SUD was established using the ICD-10 clinical descriptions and diagnostic guidelines. Friendship Quality Scale, and Peer Pressure Inventory were administered to assess family environment, friendship quality, and perceived peer pressure, respectively. Data were analysed using descriptive statistics and the Mann–Whitney U test. Significant differences were observed between the two groups across all dimensions of friendship quality and peer pressure. Adolescents with SUD reported lower levels of companionship, help, security, and closeness and higher levels of friendship conflict. They also showed higher scores on peer conformity, peer involvement, and misconduct, whereas adolescents without SUD showed higher scores on family and school involvement. The findings highlight the importance of friendship quality and peer-related experiences in understanding adolescent substance use and may provide a basis for future research and development of peer- and relationship-focused prevention and intervention approaches.

**KEYWORD:** Quality of Friendship, Adolescent, Substance Use Disorder, Peer Pressure, ICD-10

## I. INTRODUCTION

Adolescence is a developmental period characterised by increased curiosity, identity formation, novelty seeking, and risk-taking, which may increase vulnerability to substance use. This vulnerability is shaped by interacting developmental, psychological, family, and social factors, including substance availability, family difficulties, individual characteristics, and peer influences.

Early initiation of substance use is associated with a greater risk of persistent substance-related problems. Approximately 15.2% of individuals who begin drinking at age 14 subsequently develop alcohol abuse or dependence, compared with 2.1% among those who begin at age 21 or later. Similarly, approximately 25% of individuals who begin abusing prescription drugs at age 13 or younger may develop a substance use disorder later in life (National Institute on Drug Abuse [NIDA], 2014)

The importance of this developmental period is further reflected in national data showing substantial levels of substance use and substance use disorders among individuals aged 18–25 years (Substance Abuse and Mental Health Services Administration [SAMHSA], 2019).

**Peer Relationships and Adolescent Substance Use**

Peer relationships become increasingly influential during adolescence as young people seek autonomy, social acceptance, and belonging. Association with deviant or substance-using peers has been consistently associated with increased problem behaviour through social learning, peer pressure, behavioural reinforcement, and normalisation of substance use (Allen et al., 2011; Dishion et al., 1995; Dishion et al., 2004; Dishion & Owen, 2002).

Peer influence is also reciprocal. Dishion and Owen (2002), examining adolescents from 13–14 years to young adulthood (22–23 years), found that substance use was associated with both peer influence and peer-selection processes, suggesting that adolescents may both adopt behaviours from their peers and select friendships that support continued substance use.

Longitudinal research further demonstrates the importance of peer networks. A systematic review of studies using Add Health data found that friendship networks were associated with adolescent alcohol use, while longitudinal evidence indicated that adolescents embedded in networks where alcohol use was common were more likely to initiate and continue drinking (KC et al., 2015; Burk et al., 2012). Similarly, Urberg (1997), in a longitudinal study of 1,028 students from sixth, eighth, and tenth grades, found significant influences of both close friends and friendship groups on cigarette and alcohol use.

Importantly, peer influence extends beyond whether friends use substances. The quality and nature of interpersonal interactions may also be relevant. Poulin, Dishion, and Haas (1999) highlighted the importance of friendship interaction patterns in understanding peer influence, while Hussong and Hicks (2003) reported that relationship quality, peer substance involvement, and emotional distress interact in adolescent substance use. Deutsch et al. (2015) further demonstrated that both perceived and actual friends' substance use were associated with substance-use outcomes, although their influence varied across substances.

The broader social context may also contribute to vulnerability. Savolainen et al. (2018), in a sample of 1,200 participants aged 15–25 years, found that excessive drug use was associated with weaker peer-group identification and psychological distress. Tung (2019), in a sample of 9,421 adolescents, similarly found that exposure to abuse was associated with higher externalising behaviours, including substance use, and altered sensitivity to parental and friendship relationships.

Overall, the literature indicates that peer relationships are relevant to adolescent substance use, but peer influence is not limited to exposure to substance-using friends. Friendship quality, interpersonal interactions, peer-group identification, and perceived peer pressure may also be important dimensions of the adolescent's social environment.

**Research Gap and Rationale**

Although research has established associations between peer relationships and adolescent substance use, comparatively less attention has been given to the quality and specific dimensions of friendship interactions. Existing research has predominantly examined peer substance use, peer influence, and deviant peer affiliation, with fewer comparative studies examining dimensions such as companionship, help, security, closeness, and conflict alongside perceived peer pressure among adolescents with and without substance use disorder. Examining these dimensions comparatively may provide a more specific

understanding of the interpersonal context associated with adolescent substance use and identify peer-related factors relevant to prevention and intervention.

## II. AIM

To examine and compare the quality of friendship interactions and perceived peer pressure among adolescents with and without substance use disorder.

## III. OBJECTIVES

- To compare the quality of friendship interactions among adolescents with and without substance use disorder.
- To compare perceived peer pressure among adolescents with and without substance use disorder.

## IV. METHODOLOGY

### Design

The study employed a quantitative, cross-sectional comparative design to examine and compare the quality of friendship interactions and perceived peer pressure among two independent groups of adolescents, comprising adolescents with substance use disorder and adolescents without substance use disorder

### Inclusion Criteria

Participants were eligible for inclusion if they:

- Were adolescents aged 15–19 years.
- Were Indian nationals and able to communicate in Hindi or English.
- Were educated/literate and able to understand and respond to the study measures.
- Met criteria for SUD according to ICD-10 clinical descriptions and diagnostic guidelines..

### Exclusion Criteria

Participants were excluded if they had been medically diagnosed with:

- Intellectual disability.
- Psychotic disorder/psychosis.

### Sample

A sample of 40 adolescent with substance use disorder was chosen for the study from the age range of 15 to 19 from rehabilitation and OPD of private clinics. And a comparison group of 40 participants were selected through purposive sampling from schools in Guwahati.

### Tools

#### 1. Friendship Quality Scale (FQS)

The Friendship Quality Scale (FQS) was developed by Bukowski, Hoza, and Boivin (1994) to assess the quality of adolescents' relationships with their best friends. The scale assesses five dimensions of friendship quality: companionship, conflict, help, security, and closeness. The original scale demonstrated a distinct but related five-dimensional structure with evidence of good internal consistency. In the present study, the scale was described as a 30-item measure assessing friendship quality, including emotional support, conflict resolution, mutual help, and sharing. The reported Cronbach's alpha was 0.94, and the factor structure explained 38.77% of the common variance. The original validation study also provided evidence supporting the construct validity of the scale through differences between mutual and non-mutual friendships and between stable and non-stable friendships.

**2. Peer Pressure Inventory (PPI)**

The Peer Pressure Inventory (PPI) was developed by Brown and Clasen (1986) to assess perceived peer pressure across different areas of adolescent functioning. The inventory consists of 53 items covering five dimensions: peer conformity, family involvement, peer involvement, school involvement, and misconduct. In the present study, the inventory was used to assess perceived peer pressure across these domains. The available study document does not report specific psychometric coefficients such as Cronbach's alpha, test–retest reliability, factor-analytic findings, or validity coefficients for the inventory; therefore, no additional psychometric values are reported here.

**Procedure**

The study employed a quantitative, cross-sectional comparative design to examine friendship quality and perceived peer pressure among adolescents with and without substance use disorder. The sample comprised 80 adolescents aged 15–19 years, including 40 adolescents with substance use disorder and 40 adolescents without substance use disorder. Adolescents with substance use disorder were recruited purposively from the OPD of a rehabilitation centre and clinics in Guwahati, Assam, while the comparison group was recruited from schools. Participants were required to be Indian adolescents aged 15–19 years, educated, and able to communicate in Hindi or English. Adolescents with psychosis or intellectual disability were excluded. Substance use disorder was established using the ICD-10 clinical descriptions and diagnostic guidelines.

After obtaining informed consent from parents and the participants, a semi-structured proforma was administered to obtain sociodemographic information and relevant clinical and substance-use history. Participants were then administered the Friendship Quality Scale and Peer Pressure Inventory. The items were explained when necessary to ensure that participants understood the instructions and content. Descriptive statistics were used to summarise the data, and the Mann–Whitney U test was used to compare the two groups.

**Data Analysis**

SPSS was used for descriptive analysis in order to analyze the data obtained for evaluating the objectives of the research. Findings for all the research objectives have been explained, with the help of accompanying tables in the sections that follow. They have been discussed in accordance with the outline presented.

## V. RESULTS

**Friendship Quality Scale (FQS)**

The Friendship Quality Scale (FQS), developed by Bukowski, Hoza, and Boivin (1994), is a 30-item measure assessing dimensions of friendship quality, including companionship, help, security, closeness, and conflict. The scale has demonstrated good internal consistency, with a Cronbach's alpha of **.94**. In the present source, the scale was reported to show a one-factor structure explaining 38.77% of the common variance, with a mean total score of **120.04 (SD = 19.32)**..

Table 1 presents the mean and standard deviation of the five dimensions of friendship quality among adolescents with and without substance use disorder. Significant between-group differences were observed across all five dimensions using the Mann–Whitney U test (**p < .001**).

Adolescents without substance use disorder reported higher mean scores than adolescents with substance use disorder on **companionship** (17.38 vs. 13.25), **help** (16.83 vs. 11.15), **security** (18.75 vs. 15.88), and **closeness** (19.03 vs. 16.30). In contrast, adolescents with substance use disorder reported higher

**conflict** scores than adolescents without substance use disorder (16.08 vs. 13.40). Thus, adolescents with substance use disorder reported lower levels of positive friendship characteristics and higher levels of interpersonal conflict.

**Table 1 Descriptive Statistics For Variables in Friendship Quality Scale**

| Variables | Adolescent with substance use disorder (n=40) Mean(±SD) | Adolescent without substance use disorder (n=40) Mean(±SD) | p value |
|---|---|---|---|
| Companion | 13.25(2.17) | 17.38(1.5) | 0.000 |
| Help | 11.15(1.81) | 16.83(1.92) | 0.000 |
| Security | 15.88 (3.09) | 18.75(2.06) | 0.000 |
| Closeness | 16.30 (2.27) | 19.03(1.86) | 0.000 |
| Conflict | 16.08 (1.51) | 13.40(2.38) | 0.000 |

Mann-Whitney Test $p \leq 0.0$

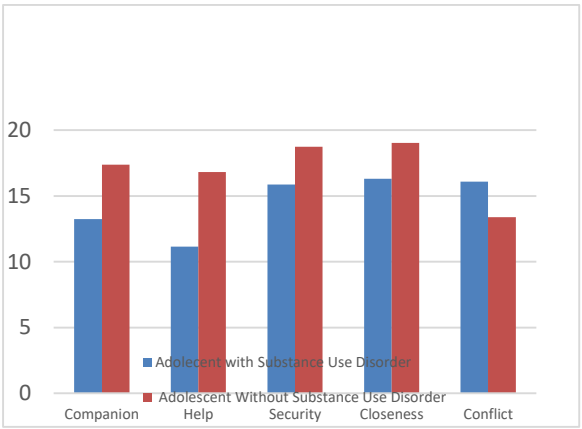


**Figure 4 Depicting the Mean Scores of the Dimension of Friendship Quality Scale**

**Peer Pressure Inventory**

The Peer Pressure Inventory (PPI), developed by **Brown and Clasen**, consists of 53 items assessing perceived peer pressure across five domains: **peer conformity, family involvement, peer involvement, school involvement, and misconduct**. The inventory uses a scoring system ranging from −3 to +3, with zero representing no perceived pressure. Subscale scores are derived from the relevant item responses.

Table 2 presents the mean and standard deviation of the five dimensions of perceived peer pressure among adolescents with and without substance use disorder. Significant between-group differences were observed across **all five dimensions** using the Mann–Whitney U test (**p < .001**).

Adolescents with substance use disorder had higher scores for **peer conformity** (10.22 vs. 3.50), **peer involvement** (12.57 vs. 9.50), and **misconduct** (12.12 vs. 1.47). In contrast, adolescents without substance use disorder had higher scores for **family involvement** (4.15 vs. −7.85) and **school involvement** (8.62 vs. −5.25).

**Table 2 Descriptive Statistics for variables in Peer Pressure Inventory**

| Variables | Adolescent with substance use disorder (n=40) Mean(±SD) | Adolescent without substance use disorder (n=40) Mean(±SD) | p value |
|---|---|---|---|
| Peer conformity | 10.22(4.61) | 3.5(2.29) | 0.000 |
| Family involvement | -7.85(4.83) | 4.15(4.14) | 0.000 |
| Peer involvement | 12.57 (4.62) | 9.5(3.38) | 0.000 |
| School involvement | -5.25(2.64) | 8.62(5.96) | 0.000 |
| Misconduct | 12.12(4.72) | 1.47(4.81) | 0.000 |

Mann-Whitney Test $p \leq 0.05$

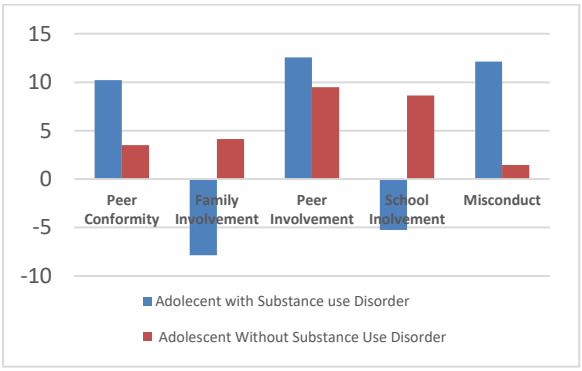


**Figure 5 Depicting the Mean Scores of each Dimension of Peer Pressure Inventory**

## VI DISCUSSION

The findings indicate significant differences in friendship quality between adolescents with and without substance use disorder. Adolescents with substance use disorder reported significantly lower levels of **companionship, help, security, and closeness**, along with significantly higher levels of **conflict**. These findings suggest that adolescents with substance use disorder may experience less supportive and secure friendships and greater interpersonal conflict than adolescents without substance use disorder.

The findings are consistent with previous research suggesting that the quality of peer relationships is relevant to adolescent substance use. Dishion et al. (1995) described friendships among antisocial adolescents as being characterised by greater conflict, coercive interactions, dominance, and other negative behaviours. Similarly, previous research has suggested that lower levels of friendship intimacy and support may be associated with greater substance-use risk. Such relationships may provide fewer opportunities for positive social support and may increase exposure to negative interactions and deviant behaviours.

The higher conflict scores observed among adolescents with substance use disorder are particularly noteworthy. Conflictual friendships may contribute to negative affect and interpersonal stress, potentially increasing vulnerability to maladaptive coping behaviours. At the same time, because the present study used a cross-sectional design, the findings **cannot establish whether poor friendship**

**quality contributes to substance use or whether substance use contributes to poorer friendship quality**. The relationship may also be reciprocal, as suggested by previous research on peer selection and peer socialisation.

Significant group differences were also observed across all five dimensions of the Peer Pressure Inventory. Adolescents with substance use disorder showed higher scores on **peer conformity, peer involvement, and misconduct**, whereas adolescents without substance use disorder showed higher scores on **family involvement and school involvement**. These findings suggest differences in the social contexts and sources of perceived pressure experienced by the two groups.

The higher peer conformity and misconduct scores among adolescents with substance use disorder are consistent with literature indicating that peer influence and association with deviant peer groups are important factors in adolescent substance use. Peer environments may reinforce substance-related and other risk behaviours through social learning, conformity, and normalisation of such behaviours. Conversely, the relatively higher family and school involvement scores among adolescents without substance use disorder may indicate stronger involvement with conventional social institutions, although the direction and meaning of these PPI scores should be interpreted according to the instrument's scoring manual.

Overall, the findings suggest that adolescents with substance use disorder differ from their peers not only in the **quality of their friendships** but also in their **experiences of peer-related pressure**. Lower companionship, help, security, and closeness, together with greater friendship conflict, peer conformity, peer involvement, and misconduct, point to the importance of considering the broader interpersonal environment when understanding adolescent substance use.

## VII. CONCLUSION

The study found significant differences in friendship quality and perceived peer pressure between adolescents with and without substance use disorder. Adolescents with substance use disorder reported lower levels of companionship, help, security, and closeness, along with higher levels of friendship conflict. They also reported higher scores on peer conformity, peer involvement, and misconduct, whereas adolescents without substance use disorder showed higher levels of family and school involvement. Overall, the findings highlight the importance of peer relationships and the broader interpersonal environment in understanding adolescent substance use. However, given the cross-sectional design, the findings do not permit conclusions regarding the direction or causality of these relationships. The study contributes to the existing body of research on adolescent substance use and interpersonal functioning and may serve as a useful reference for future academic and research work, particularly in developing further investigations into peer relationships and substance use among adolescents

## VIII. LIMITATIONS

The study has several limitations. First, the **cross-sectional design** prevents establishing causal relationships or determining the direction of associations between friendship quality, peer pressure, and substance use disorder. Second, the **relatively small sample size** of 80 adolescents, with 40 participants in each group, may limit the generalisability of the findings. Third, the use of **purposive sampling** may have introduced selection bias and reduced the representativeness of the sample. Fourth, the use of **self-report measures** may have been influenced by recall bias, social desirability, or subjective perceptions.

Fifth, participants with and without substance use disorder were recruited from different settings, which may have introduced differences in their social, educational, or environmental contexts beyond substance-use status. Finally, the study focused primarily on friendship quality and peer pressure and did not comprehensively examine other potentially relevant factors, such as family functioning, individual psychological characteristics, and broader social influences.

## IX. FUTURE DIRECTIONS

Future research could employ **longitudinal designs** to examine how friendship quality and peer pressure influence the initiation and progression of substance use over time and to clarify the reciprocal relationship between peer relationships and substance use. Studies with **larger and more representative samples** drawn from multiple settings would improve generalisability. Future research could also examine potential differences according to **gender, type of substance used, severity and duration of substance use, and developmental stage**. Incorporating qualitative methods may provide a deeper understanding of adolescents' experiences of friendship, peer pressure, and social support. Further studies could also examine whether strengthening supportive friendships, reducing peer-related risk, and increasing positive family and school involvement can contribute to prevention and intervention efforts for adolescent substance use.

## REFERENCES

1. Joseph P. Allen Joanna Chango David Szwedo Megan Schad Emily Marston (2011). Predictors of Susceptibility to Peer Influence Regarding Substance Use in Adolescence https://doi.org/10.1111/j.1467-8624.2011.01682.x
2. National Institute on Drug Abuse. (2014). Principles of adolescent substance use disorder treatment: A research-based guide. National Institutes of Health. https://archives.nida.nih.gov/sites/default/files/podat-guide-adolescents-508.pdf
3. Substance Abuse and Mental Health Services Administration. (2019). Key substance use and mental health indicators in the United States: Results from the 2018 National Survey on Drug Use and Health. Center for Behavioral Health Statistics and Quality. https://www.samhsa.gov/data/ World Drug Report (2018) Drugs And Age Drugs and associated issues among young people and older people. (United Nations publication, Sales No. E.18.XI.9), https://www.unodc.org/wdr2018/prelaunch/WDR18_Booklet_4_YOUTH.pdf
4. Dishion, T.J. Capaldi, D. Spracklen, K.M, Li, F (1995). Peer ecology of male adolescent drug use. Development and Psychopathology, 7,803–824.
5. Dishion, T.J. Nelson, S.E. Bullock, B.M (2004). Premature adolescent autonomy: Parent disengagement and deviant peer process in the amplification of problem behaviour. Journal of Adolescence, 27,515–530.
6. Dishion, T.J. Owen, L.D. (2002). A longitudinal analysis of friendships and substance use: Bidirectional influence from adolescence to adulthood. Developmental Psychology, 38,480–491.
7. Hussong, A.M., Hicks, R.E. (2003). Affect and Peer Context Interactively Impact Adolescent Substance Use. J Abnorm Child Psychol 31, 413–426. https://doi.org/10.1023/A:1023843618887
8. Bukowski, W. M., Hoza, B., & Boivin, M. (1994). Measuring friendship quality during pre-and early adolescence: The development and psychometric properties of the Friendship Qualities Scale. Journal of Social and Personal Relationships, 11(3), 471-484.

9. Brown, B. B., Clasen, D. R., & Eicher, S. A. (1986). Perceptions of peer pressure, peer conformity dispositions, and self-reported behavior among adolescents. Developmental Psychology, 22, 521-530.
10. K.C. J, P. G. US adolescents' friendship networks and health risk behaviors: a systematic review of studies using social network analysis and Add Health data. PeerJ. 2015;3:e1052. pmid:26157622
11. Burk WJ, van der Vorst H, Kerr M, Stattin H. Alcohol use and friendship dynamics: selection and socialization in early-, middle-, and late-adolescent peer networks. J Stud Alcohol Drugs. 2012;73(1):89–98. Epub 2011/12/14. pmid:22152666.
12. Urberg et al. (2007). Study on A two-stage model of peer influence in adolescent substance use: Individual and relationship-specific differences in susceptibility to influence. Addictive Behaviors. 28(7), 1243-56.
13. Poulin François, Thomas J. Dishion and Eric Haas (1999). The Peer Influence Paradox: Friendship Quality and Deviancy Training Within Male Adolescent Friendships. Invitational Issue: Peer Influences in Childhood and Adolescence, Merrill-Palmer Quarterly, 45(1), 42-61.
14. Arielle R. Deutsch, Pavel Chernyavskiy, Douglas Steinley, and Wendy S. Slutske (2015).Measuring Peer Socialization for Adolescent Substance Use: A Comparison of Perceived and Actual Friends' Substance Use Effects, Journal of Studies on Alcohol and Drugs, 76(2), 267-277.
15. Iina Savolainen, Markus Kaakinen, Anu Sirola, Atte Oksanen (2018). Addictive behaviors and psychological distress among adolescents and emerging adults: A mediating role of peer group identification. Addictive Behaviors Reports, 7, 75–81
16. Irene Tung, Amanda N. Noroña, Steve S. Lee. (2019) Childhood maltreatment affects adolescent sensitivity to parenting and close friendships in predicting growth in externalizing behavior. Development and Psychopathology 31(4), 1237-1253.