International Journal of Environmental Sciences
ISSN: 2229-7359
Vol. 11 No. 16s, 2025
https://www.theaspd.com/ijes.php

Parenting, Peer Pressure and Residential Context: A Socio-Environmental Study of Adolescent Tobacco Use in India

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Abstract
This study explores the influence of residential setting based on spatial context (urban, suburban, rural), reflecting environmental and socio-cultural variation on peer pressure, parenting dynamics, and adolescent smoking behavior in India. This study employed a cross-sectional and comparative design. Drawing on data from across rural, suburban, and urban regions, the study investigates how geographic and social contexts shape tobacco use patterns. A sample of 760 tobacco-using adolescents (rural = 426, suburban = 114, urban = 220) completed validated measures on parent-adolescent connectedness, hostility, and peer pressure. A chi-square test revealed a strong association between peer influence and smoking frequency, with daily smokers overwhelmingly reporting peer-driven initiation. One-way ANOVA (Welch's correction) indicated that urban adolescents reported higher parent-adolescent connectedness, while suburban adolescents showed greater hostility. Rural adolescents experienced significantly higher peer pressure, suggesting that both densely populated and tightly knit environments foster conformity-based behaviors. The findings emphasize the need for geographically tailored interventions that integrate behavioral, social, and environmental factors to reduce adolescent tobacco use. By incorporating constructs such as built environment and ecological setting, this study highlights how spatial context intersects with family and peer dynamics in shaping health-risk behaviors. These insights can inform school-based, family-centered, and community-level tobacco prevention strategies grounded in both psychological and environmental sciences.

Keywords: *Adolescent Smoking, Environmental Determinants, Peer Pressure, Residential Environment, Parenting.*

INTRODUCTION

Adolescence is a key transitional period involving major changes across physical, emotional, and social domains. The World Health Organization (WHO, 2022) defines adolescents as individuals aged 10 to 19 years. In India, adolescents constitute a significant portion of the population, with approximately 253 million individuals about 21% of the country's total population falling within this age group (UNICEF, 2021). Their importance to national development is immense, as they represent the future workforce, leaders, and innovators. Investing in adolescent health, education, and skills is crucial for achieving sustainable development goals. Empowering this demographic ensures a productive, progressive society, as adolescents are central to driving economic growth and social transformation (WHO, 2022).

Tobacco consumption among Indian adolescents remains a major public health issue. For instance, research in northeastern India indicates alarmingly high levels of both smoking and smokeless tobacco use among adolescents (Sinha et al., 2003). Smokeless tobacco use was highly prevalent among school adolescents and was significantly linked to exposure at home, school (including teacher use), public spaces, and media promotions (Sharma et al., 2021). However, traditional practices such as "chhutta" a coarse tobacco roll smoked with the lit end placed inside the mouth remain prevalent in coastal Andhra Pradesh, illustrating the impact of regional cultural norms on tobacco use (Chadda & Sengupta, 2002). Previous research has shown significant variations in tobacco use across urban, rural, and urban-slum populations in North India, highlighting the role of residential context in shaping tobacco-related behaviors (Gupta et al., 2010).

The Global Youth Tobacco Survey (GYTS-4), conducted in 2019 among students aged 13 to 15, reported an 8.5% prevalence of tobacco use, with boys (9.6%) showing higher rates than girls (7.4%) (MoHFW, 2019). In Andhra Pradesh, adolescent smoking prevalence is relatively low at 2.6%, ranking 33rd among 37 states and union territories (GYTS, 2019). Although adolescent tobacco use has declined by 42% over the past decade, secondhand smoke exposure remains high, with 29.5% of students reporting exposure in public places (MoHFW,

2019). In response, the Ministry of Health and Family Welfare (MoHFW) has implemented the National Tobacco Control Programme (NTCP), which emphasizes awareness campaigns, legal enforcement, and cessation support (MoHFW, 2021). Despite national efforts, regional disparities persist.

Parent Adolescent Relationship

The parent-adolescent relationship plays a crucial role in shaping emotional, social, and behavioral development. Positive parenting marked by warmth, support, and open communication promotes self-esteem, resilience, and independence, ultimately contributing to academic achievement and mental well-being (Steinberg, 2001). Conversely, hostile parenting, characterized by harsh discipline, lack of warmth, and poor communication, is linked to emotional distress, conflict, and behavioral issues such as substance abuse (Sharma & Srivastav, 2023). Research shows that in early adolescence, girls exhibit reduced parent–child communication, which improves during middle adolescence, whereas boys display declining disclosure with stable levels of secrecy and parental solicitation; overall, parental knowledge decreases with age, though it remains briefly stable for middle adolescent girls (Keijsers & Poulin, 2013).

Environmental stressors such as overcrowding, academic pressure, and socioeconomic disadvantage vary across residential settings, shaping parenting styles and limiting open communication (Cuellar et al., 2015). Educational level and income also influence dialogue quality, with higher socioeconomic status linked to more effective parent-adolescent communication. Urban adolescents often report more open communication, while rural adolescents experience greater conflict and reduced openness. Higher-income families tend to support better dialogue, whereas economically disadvantaged and rural families face structural barriers, limiting effective parent-adolescent communication (Singampalli et al., 2024a). Additionally, family history of smoking significantly increases the risk of adolescent tobacco use. Parental or household smoking normalizes the behavior, making early experimentation and long-term dependence more likely (Sharma et al., 2010). Adolescents from such families often view smoking as socially acceptable, increasing vulnerability to peer influence and environmental stressors. In Andhra Pradesh, adolescents from joint families and lower-income backgrounds with a history of tobacco use have shown higher levels of nicotine dependence, emphasizing the role of family structure and socioeconomic status in substance use behaviors (Singampalli et al., 2024b).

Peer Pressure

Peer pressure plays a critical role in adolescence as young individuals seek acceptance and belonging within their peer groups. It can stem from friends, school environments, and increasingly from social media, where adolescents often feel compelled to conform to group norms or engage in risky behaviors such as substance use. A meta-analysis by Liu et al. (2017) found that peer smoking significantly increases the likelihood of smoking through direct modeling and the internalization of perceived social norms. Peer influence is often moderated by the spatial and social environment. Similarly, Robalino and Macy (2018) and Rozi et al. (2016) found that adolescents with smoking peers are at a much higher risk of adopting the habit themselves. Leshargie et al. (2019) reported comparable results in Ethiopia, demonstrating the global relevance of peer dynamics in tobacco use. In rural settings, strong community ties may amplify conformity pressures, while urban anonymity can increase susceptibility to broader peer networks (Pruitt et al., 1991).

The need for social validation makes adolescents particularly vulnerable to peer influence, and this vulnerability is amplified by social media platforms like Instagram and TikTok, which promote idealized lifestyles and unrealistic standards through social comparison. Peer influence shapes not only behavior but also academic performance, social relationships, and engagement in both constructive and harmful activities. Adolescents' heightened need for social validation makes them particularly susceptible to peer influence, a vulnerability that is increasingly amplified by social media platforms such as Instagram and Facebook, which promote idealized lifestyles and unrealistic standards (Nesi & Prinstein, 2015). Peer dynamics significantly shape not only risky behaviors like substance use but also academic outcomes and interpersonal relationships, depending on the nature of peer interactions (Allen et al., 2012). Research further indicates that peer influence can drive both constructive and harmful behaviors, with adolescents' susceptibility varying by age and social environment (Steinberg & Monahan, 2007).

Peer pressure is one of the strongest drivers of adolescent tobacco use in India, where the desire for social acceptance often leads to experimentation with smoking. Singh and Chandel (2022) emphasize the importance

of understanding peer dynamics to inform effective interventions. In schools, smoking often symbolizes maturity or status, with initiation driven by peer modeling, easy tobacco access, poor supervision, and social stress (Kumar et al., 2021) found that peer pressure significantly influences substance use among school-going adolescents in Southern India, although strong parental support can help mitigate its negative effects.

Need for the Study

Although national-level progress has been made, patterns of adolescent tobacco use in India continue to differ significantly based on where adolescents live. Rural, suburban, and urban environments differ in supervision, peer norms, and access to tobacco, shaping risk differently. While urban youth benefit from awareness and connectedness, rural and suburban adolescents often face stronger peer pressure and limited alternatives. Few Indian studies have compared how these contexts influence peer-driven smoking. This study fills that gap, using a socio-environmental lens to examine how parenting and peer dynamics interact with spatial context, informing location-specific prevention strategies.

Objectives

1. To examine the association between peer influence and smoking frequency among adolescent tobacco users.
2. To examine differences in connectedness, hostility and peer pressure based on Residential setting.

Hypotheses

1. There is a significant association between peer influence and smoking frequency among adolescent tobacco users.
2. There are significant differences in connectedness and peer pressure based on Residential setting.

METHOD

Participants

This study examined the relationship between parental connectedness and hostility and peer pressure among tobacco-using adolescents. A purposive sampling method was used to collect data from 760 adolescents from Andhra Pradesh, India. Only those who reported smoking or using tobacco products were included, ensuring the sample's relevance to the research. Of the total participants, 56.1% (n = 426) resided in rural areas, 15.0% (n = 114) in suburban areas, and 28.9% (n = 220) in urban areas.

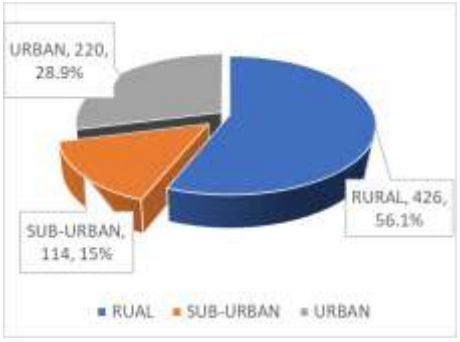

Figure 1Residential Setting

Measures

- **Demographic Information Sheet:** A demographic sheet was used to collect information on participants' Residential setting, Peer influence and Smoking Frequency. Residential setting (Urban, Suburban, Rural) served as a proxy for environmental context. Peer influence was measured (Yes/No), and smoking frequency was categorized as Rarely, Sometimes, Often, or Daily.
- **Parent-Adolescent Relationship Scale (PARS):** developed by Burke et al. (2021), is a 15-item, 6-point Likert-type self-report measure designed to assess the quality of the parent-adolescent relationship across three dimensions: Connectedness, Shared Activities, and Hostility. Suitable for adolescents aged 11–18 years and

emerging adolescents 19-25 years PARS is a reliable tool for evaluating parent-adolescent relationships in both research and clinical settings. Connectedness and Hostility subscales are takes for this study

- **Peer Pressure Scale (PPS):** developed by Sunil Saini and Sandeep Singh (2016), is a self-report, unidimensional measure designed to assess the extent of peer pressure in adolescents aged 16–19 years across both educated and uneducated strata. It is a 5-point Likert scale, with response options ranging from Strongly Disagree (5) to Strongly Agree (1), where higher scores indicate greater peer pressure. The scale consists of 25 items, with a score range of 25–125. Peer pressure, as measured by this scale, has been linked to behaviors such as smoking, drinking, gambling, violence, risky sexual activities, and gang involvement, making it a relevant tool for examining adolescent vulnerability to peer influence.

Data Analysis

The data were analyzed using IBM SPSS Statistics 27. Descriptive statistics, including means, standard deviations, and frequencies, were computed for key variables. Inferential analyses included chi-square tests to examine associations between categorical variables and a one-way ANOVA to analyze differences across living environments.

Procedure

This study followed a cross-sectional and comparative design, and data were collected through a pen-and-paper survey administered offline. Participants were first presented with a screening question to confirm their tobacco use status, ensuring that only adolescents who reported smoking or using tobacco products were included in the study. Necessary permissions were obtained from relevant authorities, and ethical guidelines were followed. Informed consent was obtained from all participants before data collection, ensuring their voluntary participation and confidentiality.

RESULTS

Table 1: Chi-Square Analysis of Smoking Frequency and Peer Influence

	Peer Influence		
Smoking Frequency	**No (n = 90)**	**Yes (n = 670)**	**Total (n = 760)**
Rarely	41 (60.3%)	27 (39.7%)	68 (8.9%)
Sometimes	14 (30.4%)	32 (69.6%)	46 (6.1%)
Often	8 (15.7%)	43 (84.3%)	51 (6.7%)
Daily	27 (4.5%)	568 (95.5%)	595 (78.3%)

Note. Percentages in parentheses indicate the proportion within each smoking frequency category.

A chi-square test of independence was conducted to examine the association between peer influence and smoking frequency among adolescents. The results revealed a statistically significant relationship, $\chi^2(3, N = 760) = 199.27$, $p < .001$. Cramér's $V = .512$, indicating a large effect size. Among rare smokers, the majority (60.3%) were not influenced by peers, but as smoking frequency increased, peer influence became more prominent. Notably, 95.5% of daily smokers reported being influenced by peers, highlighting the strong role of peer pressure in sustained tobacco use.

Table 2: One-Way ANOVA for Residential setting on Dependent Variables

DV	Residential setting	N	Mean	SD	F	p	η^2g
connectedness	rural	426	2.42	1.170	52.30***	<.001	0.1005
	sub-urban	114	2.60	.995			
	urban	220	**3.25**	.892			
hostility	rural	426	1.99	1.363	9.51***	<.001	0.0229
	sub-urban	114	**2.41**	1.051			
	urban	220	2.35	1.026			

peer pressure	rural	426	**103.26**	19.264	3.15*	.044	0.0086
	sub-urban	114	98.11	20.156			
	urban	220	103.16	20.221			

Significant value: ***p<0.001, **p<0.01, *p<0.05

A one-way Welch's ANOVA was conducted to examine the effect of residential setting (rural, suburban, urban) on connectedness, hostility and peer pressure, due to unequal group sizes and variances.
Results revealed a significant effect of living environment on connectedness, F(2, 310.13) = 52.30, p < .001, η^2g = 0.1005, indicating that 10.05% of the variance in connectedness is explained by living environment. The mean connectedness score was highest in urban adolescents (M = 3.25, SD = .892), followed by suburban (M = 2.60, SD = .995), and rural adolescents (M = 2.42, SD = 1.170).
For hostility, there was also a significant difference across living environments, F(2, 321.22) = 9.51, p < .001, η^2g = 0.0229, with 2.29% of the variance explained by the living environment. Adolescents from suburban areas reported the highest hostility scores (M = 2.41, SD = 1.051), followed by urban (M = 2.35, SD = 1.026) and rural adolescents (M = 1.99, SD = 1.363).
For peer pressure, a significant effect of living environment was observed, F(2, 286.08) = 3.15, p = .044, η^2g = 0.0086, though the effect size was small. The highest peer pressure scores were found in rural (M = 103.26, SD = 19.264) and urban adolescents (M = 103.16, SD = 20.221), while suburban adolescents reported the lowest levels (M = 98.11, SD = 20.156).

Table 3: Games-Howell Post-Hoc Test for Residential setting on Dependent Variables

Dependent Variable	(I) Residential setting	(J) Residential setting	Mean Difference (I-J)	Std. Error	Sig.
connectedness	rural	sub-urban	-.184	.109	.213
		urban	**-.829*****	.083	<.001
	sub-urban	rural	.184	.109	.213
		urban	**-.645*****	.111	<.001
	urban	rural	.829***	.083	<.001
		sub-urban	.645***	.111	<.001
hostility	rural	sub-urban	**-.416***	.119	.002
		urban	**-.359*****	.096	<.001
	sub-urban	rural	.416*	.119	.002
		urban	.057	.120	.883
	urban	rural	.359***	.096	<.001
		sub-urban	-.057	.120	.883
peer pressure	rural	sub-urban	**5.158***	2.106	.040
		urban	.099	1.652	.998
	sub-urban	rural	**-5.158***	2.106	.040
		urban	-5.058	2.329	.078
	urban	rural	-.099	1.652	.998
		sub-urban	5.058	2.329	.078

Significant value: ***p<0.001, **p<0.01, *p<0.05

Given the unequal sample sizes across the three area groups, the Games-Howell post-hoc test was conducted, as it does not assume equal variances. The results indicated significant differences in connectedness, hostility, and peer pressure across different areas of living environments.
For connectedness, urban adolescents reported significantly higher scores compared to both rural and suburban adolescents. Specifically, the mean difference between rural and urban adolescents was MD = -.829, SE = .083, p < .001, while the mean difference between suburban and urban adolescents was MD = -.645, SE = .111, p < .001. However, the difference between rural and suburban adolescents was not significant (MD = -.184, SE = .109, p = .213), suggesting that their levels of connectedness were relatively similar.

In terms of hostility, rural adolescents reported significantly lower hostility compared to both suburban and urban adolescents. The mean difference between rural and suburban adolescents was MD = -.416, SE = .119, p = .002, while the difference between rural and urban adolescents was MD = -.359, SE = .096, p = .001. However, no significant difference was found between suburban and urban adolescents (MD = .057, SE = .120, p = .883), indicating that their levels of hostility were comparable.

For peer pressure, a significant difference was observed between rural and suburban adolescents, where rural adolescents reported higher peer pressure (MD = 5.158, SE = 2.106, p = .040). However, the comparisons between rural and urban adolescents (MD = .099, SE = 1.652, p = .998) and suburban and urban adolescents (MD = -5.058, SE = 2.329, p = .078) were not statistically significant, suggesting that peer pressure levels were mostly similar among these groups.

Discussion

Table 1, chi-square test of independence confirmed a significant association between peer influence and smoking frequency among adolescents. While peer influence was minimal among occasional smokers, it became increasingly prominent with higher smoking frequency. Notably, nearly all daily smokers reported being influenced by peers, emphasizing the crucial role of peer pressure in sustaining tobacco use. These findings suggest a strong association between peer influence and smoking frequency, with adolescents influenced by their peers being significantly more likely to initiate and sustain smoking behavior. Mpousiou et al. (2018) found that peer influence is a key factor in both the onset and persistence of smoking among adolescents. A recent study conducted in Karnataka reported that adolescents with peers who used tobacco were significantly more likely to engage in tobacco use themselves, highlighting the strong influence of peer modeling on smoking initiation and continuation among Indian adolescents (Bhojani et al., 2011).

Table 2 and 3, The findings suggest that urban adolescents have the highest parent-adolescent connectedness, likely due to better access to educational and emotional resources. Suburban adolescents reported the highest hostility, possibly reflecting unique social pressures, while rural adolescents experienced the least hostility. Peer pressure varied slightly, with rural and urban adolescents experiencing higher levels than suburban adolescents. The Games-Howell post-hoc test confirmed significant differences in connectedness, hostility, and peer pressure. Urban adolescents had stronger connectedness than rural and suburban groups, while hostility was lowest in rural adolescents. Rural adolescents also reported significantly higher peer pressure than suburban adolescents, though urban-rural differences were minimal.

In India, urban adolescents tend to have stronger parent-adolescent bonds due to better education, open communication, and supportive parenting. Research by Akindele and Ayodeji (2021) supports this trend, showing higher social connectedness among Nigerian urban adolescents. In contrast, suburban environments, shaped by socioeconomic pressures and academic expectations, may lead to more controlling or harsh parenting, increasing hostility in parent-child relationships (Cuellar et al., 2015). Suburban hostility may reflect transitional stressors neither as resource-rich as urban areas nor as community-embedded as rural settings leading to parenting inconsistencies. Peer pressure is particularly influential in rural areas, where tight-knit communities and strong peer bonds amplify conformity pressures. This aligns with ecological theories of behavior, which emphasize that environmental affordances such as unsupervised spaces and proximity to tobacco vendors amplify peer influence in certain locales. Pruitt et al. (1991) found that peer influence significantly impacts adolescent substance use in rural settings, aligning with my findings that rural adolescents engaged in smoking or tobacco use experience greater peer pressure. Tobacco's easy availability in low-income rural and urban areas, along with public exposure, fosters an environment that normalizes adolescent smoking. Limited recreation and weak supervision further increase vulnerability to peer-driven behaviors, especially in rural settings where tight peer bonds intensify influence.

Conclusion

This study underscores the pivotal role of residential setting in shaping peer-influenced tobacco use among adolescents. Chi-square analysis confirmed that peer influence was significantly associated with smoking frequency, with daily smokers being the most affected. However, deeper insights emerged from contextual differences, urban adolescents reported stronger parent-child connectedness due to better support systems and suburban adolescents faced higher hostility, likely from academic stress and rural adolescents experienced the

highest peer pressure, driven by close-knit communities and limited supervision. These socio-spatial variations highlight how environmental contexts can amplify or buffer peer influence. The findings call for geographically tailored tobacco prevention strategies that move beyond individual-level interventions to address broader social and ecological conditions. Incorporating residential context into policy and educational efforts can enhance the effectiveness of public health responses to adolescent tobacco use.

Limitations and Scope for Further Study

This study's cross-sectional design limits the ability to draw causal inferences between residential setting, peer pressure, and adolescent smoking behavior. Additionally, reliance on self-reported data may introduce social desirability bias, particularly in reporting tobacco use or peer influence. The study also focused on a limited geographical region, which may affect the generalizability of findings to other cultural or socio-economic contexts in India. Future research could employ longitudinal designs to track behavioral changes over time and explore additional environmental variables such as access to tobacco outlets, community norms, and school-based interventions. Expanding the sample to include diverse regions and integrating qualitative methods may offer deeper insights into contextual and psychosocial determinants of adolescent smoking.

References

1. Akindele, A., Ayodeji (2021). Social connectedness and health risk behaviours among in-school adolescents in urban and rural areas of Oyo State, Nigeria. Journal of Preventive Medicine and Hygiene Vol. 62 No. 3 https://doi.org/10.15167/2421-4248/jpmh2021.62.3.2107
2. Allen, J. P., Chango, J., Szwedo, D., Schad, M., & Marston, E. (2012). "Predictors of susceptibility to peer influence regarding substance use in adolescence." Child Development, 83(1), 337–350. https://doi.org/10.1111/j.1467-8624.2011.01682.x
3. Bhojani, U.M., Elias, M.A. & N, D. Adolescents' perceptions about smokers in Karnataka, India. BMC Public Health 11, 563 (2011). https://doi.org/10.1186/1471-2458-11-563
4. Burke, K., Dittman, C. K., Haslam, D., Filus, A., & Ralph, A. (2020). Parent-Adolescent Relationship Scale. Parenting and Family Support Centre, The University of Queensland, Australia. https://pfsc.psychology.uq.edu.au/files/4724/PARS%20Adolescent%20and%20Emerging%20Adult%20Report%20%2815%20items%2C%20with%20scoring%29.docx
5. Chadda, R., Sengupta, S. (2002). Tobacco use by Indian adolescents. Tobacco Induced Diseases, 1(June), 111. https://doi.org/10.1186/1617-9625-1-2-111
6. Cuellar, J., Jones, D. J., & Sterrett, E. (2015). Examining Parenting in the Neighborhood Context: A Review. Journal of child and family studies, 24(1), 195–219. https://doi.org/10.1007/s10826-013-9826-y
7. Gupta, V., Yadav, K., & Anand, K. (2010). Patterns of tobacco use across rural, urban, and urban-slum populations in a North Indian community. Indian Journal of Community Medicine, 35(2), 245–251. https://doi.org/10.4103/0970-0218.66877
8. Keijsers, L., & Poulin, F. (2013). Developmental changes in parent–child communication throughout adolescence. Developmental Psychology, 49(12), 2301–2308. https://doi.org/10.1037/a0032217
9. Kumar, S. R. P., Chaudhary, D. G., Udayakumar, S., Sujatha, B., Sengodan, R., & Kumar, S. (2021). A cross-sectional study on peer pressure on adolescents of school-going age in Southern India. Journal of Pharmaceutical Research International, 33(56A), 259–265. https://doi.org/10.9734/jpri/2021/v33i56A33909
10. Leshargie, C. T., Alebel, A., Kibret, G. D., Birhanu, M. Y., Mulugeta, H., Malloy, P., et al. (2019). The impact of peer pressure on cigarette smoking among high school and university students in Ethiopia: A systematic review and meta-analysis. PLOS ONE, 14(10), e0222572. https://doi.org/10.1371/journal.pone.0222572
11. Liu, J., Zhao, S., Chen, X., Falk, E., & Albarracín, D. (2017). The influence of peer behavior as a function of social and cultural closeness: A meta-analysis of normative influence on adolescent smoking initiation and continuation. Psychological Bulletin, 143(10), 1082–1115. https://doi.org/10.1037/bul0000113
12. Ministry of Health and Family Welfare. (2019). Global Youth Tobacco Survey (GYTS-4), India, 2019: National fact sheet. National Tobacco Control Programme. https://ntcp.mohfw.gov.in/assets/document/National_Fact_Sheet_of_fourth_round_of_Global_Youth_Tobacco_Survey_GYTS-4.pdf
13. Ministry of Health and Family Welfare. (2021). National Tobacco Control Programme (NTCP) – Overview and initiatives. Press Information Bureau. https://pib.gov.in/PressReleasePage.aspx?PRID=1744555

14. Mpousiou, D., Lamprou, D., Toumpis, M., Andritsou, M., Karathanasi, A., Fouskakis, D., Katsaounou, T., Zervas, E., & Katsaounou, P. (2018). The influence of peer smoking in smoking behaviour of adolescents. European Respiratory Journal, 52(suppl 62). https://doi.org/10.1183/13993003.congress-2018.PA4568
15. Nesi, J., & Prinstein, M. J. (2015). "Using social media for social comparison and feedback-seeking: Gender and popularity moderate associations with depressive symptoms." Journal of Abnormal Child Psychology, 43(8), 1427–1438. https://doi.org/10.1007/s10802-015-0020-0
16. Pruitt, B. E., Kingery, P. M., Mirzaee, E., Heuberger, G., & Hurley, R. S. (1991). Peer influence and drug use among adolescents in rural areas. Journal of drug education, 21(1), 1–11. https://doi.org/10.2190/0LWT-23YL-TMP7-TC23
17. Robalino, J. D., & Macy, M. (2018). Peer effects on adolescent smoking: Are popular teens more influential? PLOS ONE, 13(7), e0189360. https://doi.org/10.1371/journal.pone.0189360
18. Rozi, S., Mahmud, S., Lancaster, G., & Zahid, N. (2016). Peer pressure and family smoking habits influence smoking uptake in teenage boys attending school: Multilevel modeling of survey data. Open Journal of Epidemiology, 6(3), 167–172. doi: 10.4236/ojepi.2016.63018
19. Saini, S., & Singh, S. (2016). Peer Pressure Questionnaire – Revised. Educational Research. https://doi.org/10.13140/RG.2.2.10861.79842
20. Sharma, A. D., Garg, S., Singh, M. M., Deshmukh, C. P., Sharma, P., & Borle, A. L. (2021). Prevalence and social contextual factors of smokeless tobacco use: Insights from schools of Delhi, India. Asian Pacific Journal of Cancer Prevention, 22(8), 2351–2355. https://doi.org/10.31557/APJCP.2021.22.8.2351
21. Sharma, R., Grover, V. L., & Chaturvedi, S. (2010). Tobacco use among adolescent students and the influence of role models. Indian Journal of Community Medicine, 35(2), 272–275. https://doi.org/10.4103/0970-0218.66891
22. Sharma, J. & Srivastav, A.S. (2023). Influence of Parent Child Relationship on an Individual's Personal Value and Social Maturity. International Journal of Indian Psychology, 11(3), 1786-1810. DIP:18.01.172.20231103, DOI:10.25215/1103.172 https://ijip.in/articles/influence-of-parent-child-relationship-on-an-individuals-personal-value-and-social-maturity/
23. Singampalli, H. S., Busi, A. B., & Raju, M. V. R. (2024a). Exploring the relationship between family communication and Internet gaming disorder among adolescents. INSPA Journal of Applied and School Psychology, November 2024, Vol. VI, Special Issue, 131-140 https://ijasp.in/2024/11/01/exploring-the-relationship-between-family-communication-and-internet-gaming-disorder-among-adolescents/
24. Singampalli, H. S., Busi, A. B., Putla, S., & Burada, D. S. K. (2024b). Unpacking nicotine dependency: The role of family and socioeconomic factors in youth addiction. International Journal of Creative Research Thoughts (IJCRT), 12(12), e571-e577. Retrieved from http://www.ijcrt.org/papers/IJCRT2412496.pdf
25. Singh, T.K. & Chandel, P. K. (2022). Peer Pressure and Peer Influence in Children and Adolescence. International Journal of Indian Psychology, 10(3),1791-1801. DIP:18.01.186.20221003, DOI:10.25215/1003.186 https://ijip.in/articles/peer-pressure-and-peer-influence-in-children-and-adolescence/
26. Sinha, D N; Gupta, P C; Pednekar, M S. Tobacco use among students in the eight North-eastern states of India. Indian Journal of Cancer 40(2):p 43-59, Apr–Jun 2003. https://journals.lww.com/indianjcancer/abstract/2003/40020/tobacco_use_among_students_in_the_eight.1.aspx
27. Steinberg, L. (2001), We Know Some Things: Parent–Adolescent Relationships in Retrospect and Prospect. Journal of Research on Adolescence, 11: 1-19. https://doi.org/10.1111/1532-7795.00001
28. Steinberg, L., & Monahan, K. C. (2007). "Age differences in resistance to peer influence." Developmental Psychology, 43(6), 1531–1543. https://doi.org/10.1037/0012-1649.43.6.1531
29. UNICEF. (2021). Adolescent development and participation in India. https://www.unicef.org/india/what-we-do/adolescent-development-participation
30. World Health Organization. (2022). Adolescent health and development in India. https://www.who.int/india/health-topics/adolescent-health-and-development