



THE ROLE OF LISTENING SKILLS IN SHAPING CLASSROOM ENGAGEMENT:

A Study of Grades 9–12 Students

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Abstract: Effective listening is a fundamental communication skill that supports academic comprehension, information processing, and meaningful participation in classroom learning. However, research examining the relationship between listening skills and classroom engagement among Indian secondary school students remains limited. This study aimed to assess listening skills and classroom engagement among students in Grades 9–12 and examine the relationship between these variables. A descriptive cross-sectional design was employed with 160 students recruited through convenience sampling from selected schools in Chennai, Tamil Nadu. Listening skills were measured using the HURIER Listening Profile, and classroom engagement was assessed using the Classroom Engagement Inventory. Data were analysed using descriptive statistics, independent samples t-tests, one-way ANOVA, and Pearson correlation in IBM SPSS Statistics Version 26. The findings indicated that most students demonstrated adequate listening skills across all HURIER dimensions, while classroom engagement was moderately high ($M = 72.94$, $SD = 7.46$). Significant gender differences were observed across all listening dimensions, with male students scoring higher than female students. Emotional engagement also differed significantly by gender. However, no significant correlations were found between listening skills and overall classroom engagement or its subscales ($p > .05$). These findings suggest that although students possess satisfactory listening competencies, listening skills alone may not predict classroom engagement. Other factors, including motivational, interpersonal, and instructional influences, may play a more substantial role in shaping student engagement.

Index Terms - listening skills, classroom engagement, secondary school students, HURIER model, student engagement, educational psychology, India

I. INTRODUCTION

Listening is a fundamental communication skill that plays a central role in students' academic learning. Students spend approximately 45–75% of their academic communication time engaged in listening activities [1,2]. Despite its importance, listening has received considerably less research attention than reading, writing, and speaking, particularly in secondary education where students are expected to comprehend increasingly complex classroom instruction.

Listening extends beyond the passive act of hearing and involves active cognitive processes such as attention, comprehension, interpretation, evaluation, memory, and response [3,4]. Brownell's [1] HURIER model conceptualizes listening as six interrelated dimensions: Hearing, Understanding, Remembering, Interpreting, Evaluating, and Responding. Effective listening facilitates knowledge acquisition, meaningful classroom interaction, and academic success [5,6].

Classroom engagement is another important determinant of educational success and is commonly defined as students' behavioral, emotional, and cognitive involvement in learning activities [7]. Higher levels of engagement have consistently been associated with improved academic achievement, persistence, and psychological well-being [8,9]. Given that effective listening enables students to attend to instruction,

process information, and participate in classroom interactions, it may contribute to greater classroom engagement.

Although both listening skills and classroom engagement have been widely studied, research examining their relationship remains limited. Evidence from the Indian secondary school context is particularly scarce, and little is known about how these constructs vary across demographic characteristics such as gender, grade, school type, and academic performance.

Therefore, the present study aimed to assess listening skills and classroom engagement among students in Grades 9–12, examine differences across selected sociodemographic variables, and determine the relationship between listening skills and classroom engagement.

II. METHODOLOGY

Study Design and Participants

A descriptive cross-sectional study was conducted among students in Grades 9–12 from selected schools in Chennai, Tamil Nadu, India. The study aimed to examine listening skills and classroom engagement and explore the relationship between these variables. A total of 160 students were recruited using convenience sampling. Students who were enrolled in Grades 9–12, provided written assent along with parental or guardian consent, and were willing to participate were included in the study. Students who were absent during data collection, submitted questionnaires with more than 10% missing responses, or reported sensory or cognitive impairments that could affect questionnaire completion were excluded. Socio-demographic information, including gender, grade, school, parents' education, birth order, family type, monthly household income, and mother tongue, was also collected.

Measures

Listening skills were assessed using the 36-item HURIER Listening Profile [1], which measures six dimensions of listening: Hearing, Understanding, Remembering, Interpreting, Evaluating, and Responding. Each item is rated on a five-point Likert scale ranging from 1 (Almost Never) to 5 (Almost Always), with higher scores indicating greater listening competency. Classroom engagement was assessed using the 24-item Classroom Engagement Inventory (CEI) [10], which measures behavioral, emotional, cognitive, and disengagement dimensions. Responses are recorded on a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). Negatively worded items (Items 11, 12, and 19–24) were reverse scored before calculating subscale and total scores, with higher scores indicating greater classroom engagement. Both instruments have demonstrated satisfactory reliability and validity in previous research.

Procedure and Ethical Considerations

Following permission from the participating schools, data were collected during regular school hours. The questionnaire package, comprising the HURIER Listening Profile, the Classroom Engagement Inventory, and a socio-demographic questionnaire, was administered in classroom settings. The researcher was present to provide clarification when required. Although the questionnaires were administered in English, explanations were provided in Tamil where necessary. The average completion time was approximately 35 minutes.

Ethical approval was obtained from the Institutional Ethics Committee of the authors' institution prior to data collection. Written parental or guardian consent and student assent were obtained before participation. Participation was voluntary, and students were informed of their right to withdraw at any time without penalty. All responses were collected anonymously and treated confidentially.

Statistical Analysis

Data were analyzed using IBM SPSS Statistics version 26.0. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were used to summarize participant characteristics and study variables. Independent-samples *t*-tests were conducted to compare listening skills and classroom engagement by gender, while one-way analysis of variance (ANOVA) was used to examine differences across socio-demographic variables. Pearson's product-moment correlation coefficient was computed to assess the relationship between listening skills and classroom engagement. Statistical significance was set at $p < .05$.

III. RESULTS

The following section presents the findings pertaining to the demographic characteristics of the sample, descriptive statistics for study variables, group comparisons, and correlation analyses. Table 1 presents the sociodemographic characteristics of the 160 participants. Grade 10 students formed the largest group (28.7%), followed by Grades 9 and 11 (26.3% each) and Grade 12 (18.8%). Male students slightly outnumbered females (54.4% vs. 45.6%). More than half attended Pon Vidyashram (51.2%), followed by JBAS Boys School (27.5%) and JBAS Girls School (21.3%). Most participants belonged to nuclear families (65.0%), with Tamil being the most commonly reported mother tongue (40.0%).

Table 1. Sociodemographic Characteristics of Participants (N = 160)

Variable	n	%
Grade		
9th grade	42	26.3
10th grade	46	28.7
11th grade	42	26.3
12th grade	30	18.8
Gender		
Male	87	54.4
Female	73	45.6
School		
JBAS Boys School	44	27.5
JBAS Girls School	34	21.3
Pon Vidyashram	82	51.2
Birth Order		
First born	65	40.6
Middle born	18	11.3
Last born	16	10.0
Single child	61	38.1
Family Type		
Nuclear	104	65.0
Joint	56	35.0
Monthly Household Income		
₹21,914 – ₹36,526	58	36.3
₹36,527 – ₹54,650	79	49.4
₹54,651 – ₹73,053	23	14.4
Mother Tongue		
Tamil	64	40.0
Hindi	44	27.5
Malayalam	52	32.5
Mother's Education		
Primary	56	35.0
Secondary	51	31.9
Higher Secondary	19	11.9
Undergraduate	18	11.3
Postgraduate	16	10.0
Mother's Occupation		
Agriculture Worker	45	28.1
Corporate/Private Sector	19	11.9

Variable	<i>n</i>	%
Govt./PSU Employee	11	6.9
Skilled Worker	46	28.7
Not Working	39	24.4
Father's Education		
Primary	49	30.6
Secondary	18	11.3
Higher Secondary	51	31.9
Undergraduate	31	19.4
Postgraduate	11	6.9

Table 2 presents the descriptive statistics for listening skills and classroom engagement. Among listening skill dimensions, interpreting yielded the highest mean score ($M = 19.96$, $SD = 2.68$), while understanding recorded the lowest ($M = 18.75$, $SD = 2.12$), reflecting generally high listening competence across the sample. Classroom engagement dimensions showed relatively comparable mean scores across all dimensions, with a mean total classroom engagement score of 72.94 ($SD = 7.46$), indicating a satisfactory level of overall engagement.

Table 2. Descriptive Statistics for Listening Skill Components and Classroom Engagement (N = 160)

Variable	<i>Min</i>	<i>Max</i>	<i>M</i>	<i>SD</i>
Listening Skill Components				
Hearing	12	24	19.52	2.50
Understanding	11	24	18.75	2.12
Remembering	12	23	19.76	2.78
Interpreting	12	24	19.96	2.68
Evaluating	12	25	19.11	2.12
Responding	11	23	19.81	2.78
Classroom Engagement Dimensions				
Behavioral Engagement	8	27	18.30	3.37
Emotional Engagement	10	28	18.18	3.52
Cognitive Engagement	9	29	18.31	3.51
Disengagement	10	26	18.16	3.33
Total Classroom Engagement	46	93	72.94	7.46

As shown in Table 3, significant gender differences were observed across all listening skill dimensions ($p < .001$ to $p = .036$), with male students consistently scoring higher than female students. For classroom engagement, a significant difference emerged only in emotional engagement ($t = 2.32$, $p = .022$), with male students reporting higher scores. No significant gender differences were found in total classroom engagement, suggesting that gender influences listening skills more strongly than engagement. Supplementary Table S1 presents differences across school types. Significant differences were found across all listening skill dimensions ($p < .001$), with JBAS Boys School students scoring higher in certain dimensions and Pon Vidyashram students excelling in others. For classroom engagement, only emotional engagement differed significantly across schools ($F = 3.16$, $p = .045$), with no significant differences observed in total classroom engagement, indicating that school environment influences listening skills more than classroom engagement.

Table 3. Gender Differences in Listening Skills and Classroom Engagement: Independent Samples t-Test (N = 160)

Variable	Male (n = 87)	Female (n = 73)	<i>t</i>	<i>p</i>
	M (SD)			
Listening Skill Components				
Hearing	20.44 (1.99)	18.42 (2.61)	5.40	< .001
Understanding	19.49 (1.71)	17.86 (2.23)	5.12	< .001
Remembering	20.29 (2.42)	19.12 (3.06)	2.63	.009
Interpreting	20.66 (2.16)	19.14 (2.99)	3.62	< .001
Evaluating	19.44 (1.75)	18.71 (2.45)	2.12	.036
Responding	21.05 (1.96)	18.34 (2.90)	6.78	< .001
Classroom Engagement Dimensions				
Behavioral	18.34 (3.13)	18.25 (3.67)	0.18	.855
Emotional	18.76 (3.73)	17.48 (3.15)	2.32	.022
Cognitive	18.06 (3.31)	18.62 (3.74)	1.00	.318
Disengagement	18.17 (3.12)	18.14 (3.58)	0.07	.947
Total Classroom Engagement	73.33 (7.02)	72.48 (7.98)	0.72	.473

As shown in Supplementary Table S2, mothers' educational level was significantly associated with students' listening skills across all dimensions ($p < .001$ to $p = .002$), with students whose mothers had primary education reporting comparatively higher scores. In contrast, no significant differences were found in any classroom engagement dimension ($p > .05$), suggesting that mothers' educational level influences listening competencies but not engagement behaviours. Supplementary Table S3 reveals that fathers' educational level was significantly associated with all listening skill dimensions ($p < .001$), with students whose fathers had primary education demonstrating higher scores across most dimensions. Similar to mothers' education, fathers' educational attainment showed no significant association with any classroom engagement dimension ($p > .05$).

As presented in Supplementary Table S4, significant differences in listening skills were found across birth order groups for all dimensions ($p < .001$ to $p = .006$), with single children consistently reporting the highest scores. No significant differences were observed in any classroom engagement dimension according to birth order, suggesting birth order is associated with listening skills but not with engagement. Supplementary Table S5 indicates that students from joint families reported significantly higher scores in certain listening skill dimensions compared to students from nuclear families. However, no significant differences were found in any classroom engagement dimension across family types, suggesting that family structure may selectively enhance listening competencies without influencing engagement levels.

Table 4 presents the correlations among listening skills and classroom engagement dimensions. Critically, none of the listening skill dimensions showed a significant correlation with any classroom engagement dimension, including total engagement ($p > .05$), indicating the absence of a direct relationship between listening skills and classroom engagement in the present sample. However, strong positive intercorrelations were observed among all listening skill dimensions ($r = .389$ to $r = .691$, $p < .01$), confirming listening as a multidimensional yet internally cohesive construct. Similarly, all engagement dimensions were significantly and positively correlated with total classroom engagement ($r = .457$ to $r = .608$, $p < .01$), supporting the internal consistency of the engagement construct.

Table 4. Pearson Correlation Matrix for Listening Skill Components and Classroom Engagement Dimensions (N = 160)

Variable	Hear ing	Understa nding	Rememb ering	Interpr eting	Evalua ting	Respon ding	Behavio ural	Emoti onal	Cogni tive	Disengage ment
Hearing	.504*	.606**	.546**	.474**	.691**	-.10	.14	-.09	.05	-.01
Understan ding	-	.477**	.450**	.389**	.620**	-.09	.05	-.02	.12	.02
Remembe ring	-	-	.585**	.463**	.582**	-.12	.06	.01	.11	.03
Interpretin g	-	-	-	.667**	.502**	-.06	.08	-.04	.08	.03
Evaluatin g	-	-	-	-	.572**	-.03	.05	-.04	-.08	-.04
Respondi ng	-	-	-	-	-	-.02	.15	-.03	.09	.09
Behaviora l	-	-	-	-	-	-	.02	.04	-.05	.46**
Emotional	-	-	-	-	-	-	-	.06	.23**	.61**
Cognitive	-	-	-	-	-	-	-	-	.06	.55**
Disengage ment	-	-	-	-	-	-	-	-	-	.56**

IV. DISCUSSION

The present study investigated listening skills and classroom engagement among high school students, examining the influence of sociodemographic variables including gender, school, parental education, birth order, and family type. The findings offer meaningful insights into the nature of listening competency and its relationship with classroom engagement. The majority of students demonstrated good-to-adequate listening competencies across all six dimensions of the HURIER model. More than half were classified as good listeners across hearing (55.6%), understanding (57.5%), remembering (63.1%), interpreting (63.7%), and responding (59.4%), with evaluating yielding the highest proportion of adequate ratings (55.0%). These results are consistent with Brownell's [11] description of the HURIER framework as comprising six interrelated and mutually reinforcing components, wherein proficiency in one dimension tends to co-occur with proficiency in others; a pattern confirmed by the strong intercorrelations observed in the present study ($r = .389$ to $.691$, $p < .01$). Consistent with this, Siti et al. [12] found satisfactory effectiveness across all six listening dimensions in primary school contexts, suggesting the model captures pedagogically relevant aspects of listening skill.

Regarding classroom engagement, the mean total score was 72.94 ($SD = 7.46$), with broadly comparable means across behavioral ($M = 18.30$), cognitive ($M = 18.31$), emotional ($M = 18.18$), and disengagement ($M = 18.16$) dimensions. This relative uniformity suggests participants maintained a generally consistent level of engagement across behavioral, affective, and cognitive modes; a finding aligned with Fredricks et al.'s [7] proposition that the three dimensions of engagement are interrelated constructs that tend to co-vary. The significant positive correlations between each engagement dimension and total classroom engagement further support the internal coherence of the construct.

Male students significantly outperformed female students across all six listening skill dimensions, with effect sizes ranging from small to large (Cohen's $d = 0.35$ to 1.10). This result is somewhat counterintuitive given the wider literature. Nguyen [13] noted that findings on gender differences in listening remain inconclusive, with males tending to attend more to factual content while females are more attuned to affective and relational information; a distinction with differential implications depending on how listening is operationalized. Since the present study employed the HURIER model, which assesses overt listening behaviors across multiple dimensions rather than comprehension of factual content alone, this may partially account for the observed male advantage. From a neurological standpoint, research has suggested that males and females may utilize different hemispheric processes in listening comprehension [13]. Additionally, Adeyemi and Ige [14] found that attitude toward listening significantly mediated listening outcomes among

secondary school students, and motivational and attitudinal differences between male and female students in Indian school contexts may further contribute to this pattern.

For classroom engagement, the only significant gender difference was in emotional engagement, with male students reporting higher scores ($M = 18.76$ vs. $M = 17.48$, $t = 2.32$, $p = .022$). No significant differences were found in behavioral, cognitive, or total classroom engagement. These results suggest gender exerts a more pronounced influence on listening competencies than on classroom engagement. The finding that emotional engagement was the sole engagement dimension showing gender differences resonates with broader literature indicating that affective responses to schooling may be more sensitive to gender-related socialization processes than behavioral or cognitive engagement [7].

Significant differences were found across all listening skill dimensions by school, with large effect sizes ($\eta^2 = .08$ to $.28$). These school-level differences are consistent with Chang and Read [15], as cited in Mahmoudi and Rezaei [16], who reported that students from academically rigorous environments demonstrate stronger listening comprehension. Vandergrift and Baker [17] similarly identified teaching practices, classroom noise levels, and instructional strategies as significant school-level correlates of listening skill development. Given that the three schools differ in demographic composition, including the gender-segregated nature of JBAS schools versus the co-educational Pon Vidyashram, differential exposure to listening-focused pedagogy may underlie the observed differences. As Paramole et al. [18] noted, the institutional context within which listening skills are practiced significantly shapes student-teacher interactions and, by extension, listening development.

Among engagement dimensions, a significant school-level difference was found only for emotional engagement ($F = 3.16$, $p = .045$, $\eta^2 = .04$). The absence of school-level differences in behavioral, cognitive, or total classroom engagement suggests that while school context shapes affective responses to learning, students' behavioral and cognitive classroom involvement remains relatively stable across schools; in line with Fredricks et al.'s [7] view that engagement is primarily driven by individual-level characteristics and proximal classroom processes.

Significant differences in all six listening skill dimensions were found according to both mothers' and fathers' educational levels. Notably, students whose parents had primary education reported comparatively higher listening scores than those from higher parental education backgrounds. This seemingly paradoxical pattern can be interpreted through the compensatory investment hypothesis: parents with lower formal education may place disproportionately high value on their children's oral communication and attentiveness, fostering listening habits through storytelling and close verbal guidance at home. In Indian joint and extended family contexts, more common among lower-SES households in the present sample, oral communication across generations remains an important mode of intergenerational knowledge transmission, potentially enriching children's exposure to diverse listening experiences [19]. Additionally, students from lower-SES families may face fewer digital distractions, preserving the attentional capacities that underpin listening competency. Research by Hoff [20] and Spencer et al. [21] has confirmed that parental education shapes the quality of home literacy environments and verbal parent-child interactions.

In contrast, no significant differences in any classroom engagement dimension were found based on either parent's educational level. This aligns with Mancini et al. [22], who found that while parental education predicted children's academic skills through cognitive stimulation pathways, its effect on school-based behavioral outcomes such as engagement was mediated through other variables, indicating that the direct association between parental education and classroom engagement may be attenuated once students enter the school context.

Birth order emerged as a significant predictor of listening skill performance across all six dimensions. Single-child participants consistently reported the highest scores, while last-born children reported the lowest. This is consistent with the resource dilution model [23], which posits that children who do not share parental resources with siblings accumulate greater intellectual and communicative stimulation through fuller exposure to adult-level conversation. Firstborn children also performed relatively well, consistent with extensive prior research showing that firstborns benefit from intensive early parenting that instills self-regulation and achievement motivation [24], qualities consonant with the attentional and metacognitive demands of skilled listening. Importantly, birth order showed no significant association with any classroom engagement dimension, suggesting it influences domain-specific communicative skill development rather than overall school motivation.

Students from joint families reported significantly higher scores in remembering, interpreting, and evaluating compared to those from nuclear families; the higher-order listening components within the HURIER framework requiring deeper cognitive processing and critical appraisal [11]. The joint family environment in the Indian context typically involves exposure to multiple adult speakers, intergenerational conversations, and diverse dialogues, cultivating more sophisticated listening habits. Research by Sharma and Chauhan, as cited in Sahu [25], found that joint families provide a broader social support network that positively affects children's communicative outcomes. No significant differences in classroom engagement were found by family type, echoing Singh and Rawat [26], who found that family structure affected adolescents' emotional security but not academic engagement outcomes.

Perhaps the most theoretically significant finding is the absence of any significant correlation between listening skill dimensions and classroom engagement dimensions (all $p > .05$). This result challenges the intuitive assumption that students who listen well are more engaged, or that engaged students listen more attentively. The present findings suggest these are empirically distinct constructs with divergent antecedents.

This non-significant relationship may be understood in terms of construct specificity. Classroom engagement, as conceptualized by Fredricks et al. [7], reflects behavioural, emotional, and cognitive investment within school; participation, interest, and strategic effort. Listening skill, as captured by the HURIER model, reflects acquired communicative competencies developed through cumulative socialization largely outside the immediate school context. While Newton [27] demonstrated that active listening by teachers promotes student engagement, the present findings indicate that student-level listening skill; as a relatively stable personal competency, does not directly translate into higher classroom engagement. A student may possess well-developed listening skills without converting them into motivated or affectively invested classroom behaviour.

An alternative interpretation involves mediating variables. The present study measured listening as a skills-based capacity and engagement as a motivational-behavioural orientation; the two constructs may be related through mediating factors such as academic self-efficacy, instructional quality, or teacher-student relationship quality [18] that were not assessed here.

The strong intercorrelations among listening components ($r = .389$ to $.691$) and among engagement dimensions ($r = .457$ to $.608$) affirm the internal validity of each construct. The absence of cross-construct correlations is therefore not an artifact of poor measurement but a substantive finding suggesting that listening skill and classroom engagement represent two independent developmental domains requiring different types of educational intervention.

V. IMPLICATIONS

The findings carry several practical implications for educators, counsellors, and school administrators in Indian secondary school contexts. First, the pervasive significance of sociodemographic variables particularly gender, school context, parental education, birth order, and family type in predicting listening skill performance underscores the need for differentiated instructional approaches that take students' home and family contexts into account. School counselors and teachers should be aware that students from lower parental education backgrounds may nonetheless demonstrate strong oral listening competencies, and that these strengths should be recognized and leveraged rather than overlooked due to assumptions based on SES.

Second, the finding that classroom engagement was broadly consistent across the sociodemographic variables examined suggests that engagement-building interventions can be applied universally within the student population without requiring intensive targeting based on family background. Teachers may focus on creating intrinsically motivating instructional environments responsive to behavioral, emotional, and cognitive dimensions of engagement as outlined by Fredricks et al. [7] with confidence that engagement is largely a malleable, school-driven construct.

Third, the absence of a relationship between listening skills and classroom engagement implies that listening skill training and engagement-enhancement strategies should be pursued as complementary but distinct educational priorities. Listening instruction based on the HURIER framework including explicit training in hearing, understanding, remembering, interpreting, evaluating, and responding should be integrated into the curriculum as a distinct communication skills program, rather than assuming that engagement alone will naturally develop listening competency or vice versa.

VI. LIMITATIONS AND FUTURE DIRECTIONS

Several limitations of the present study warrant acknowledgment. The sample was drawn from three schools in a single urban region of Tamil Nadu and therefore may not be representative of broader Indian adolescent populations. The cross-sectional design precludes causal inference; longitudinal studies examining the developmental trajectories of listening skills and engagement over time would provide greater insight into their interplay. The study relied on self-report measures, which may be subject to socially desirable responding, particularly for engagement items. Future research should incorporate observational measures of listening behaviour and classroom engagement, and should examine potential mediating mechanisms such as teacher quality, instructional practices, and academic motivation that may link these constructs more proximally. Expanding the sample to include rural populations and students from diverse linguistic backgrounds would also enhance generalizability.

VII. CONCLUSION

This study provides a systematic empirical examination of listening skills and classroom engagement among high school students and their sociodemographic correlates. The findings demonstrate that listening skills and classroom engagement are empirically distinguishable constructs, with listening competency being shaped by a broader set of family and demographic variables while classroom engagement remains more consistent and potentially more directly influenced by school-level processes. Gender, school environment, parental education, birth order, and family type all significantly differentiated listening skill performance, while classroom engagement dimensions were largely insensitive to these variables. These findings enrich the theoretical and empirical understanding of listening as a developmentally embedded and contextually situated skill and reinforce the importance of embedding explicit listening instruction within school curricula independent of broader engagement-enhancement efforts.

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Conflict of Interest

The authors declare that they have no competing interests or conflicts of interest related to this study.

Data Availability Statement

The datasets analysed during the current study are not publicly available due to participant confidentiality and privacy considerations but are available from the corresponding author upon reasonable request.

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