


## Validation of a Scale to Measure Parental Perception and Attitude towards Private Tuition

Suparna Baidya, P G Student, Department of Education, University of Kalyani, West Bengal, India

Suvendu Ray ([suvenduray1998@gmail.com](mailto:suvenduray1998@gmail.com)),  <https://orcid.org/0009-0001-5705-9105>

Research Scholar, Department of Education, University of Kalyani, West Bengal, India



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**Abstract:** *Private tuition has become increasingly prevalent worldwide, reflecting parental motivations to augment traditional education. This study aimed to validate a scale for measuring perception and attitude of parents towards private tuition. A comprehensive scale is developed by the study through rigorous psychometric validation, which include item analysis using t- test and Cronbach's alpha. The investigator deliberately selected fifty (50) parents from West Bengal for item analysis and one hundred seventy-six (176) parents for calculating Cronbach's alpha. Through item analysis, eleven items in the perception scale covered five dimensions, and fifteen items in the attitude scale covered six dimensions have been retained for the final scale. The highly significant Cronbach's alpha values on the attitude scale were 0.79 and the perception scale's Cronbach's alpha was 0.81. The findings of this study are expected to contribute significantly to our understanding of the motivations driving parental decisions regarding private tuition and their implications for educational equity and student outcomes.*

**Keywords:** Educational Policies, Parental Perception, Private Tuition, Teaching, Traditional Education

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### 1. Introduction

Private tuition has become a prevalent phenomenon in educational systems worldwide, providing additional support beyond regular school hours (Chingthem & Sharma, 2015). Private supplementary tutoring as “a kind of extra, fee-paying academic teaching or drilling for full time students studying in regular school instruction programs or syllabuses at all levels of education (Percy, 2004; Jha, 2003). This includes activities such as one-on-one tutoring, group classes, online courses, and specialized coaching in subjects like mathematics, languages, and sciences. In many settings, private supplementary tutoring is a shadowy phenomenon which is difficult to document (Stevenson & Baker, 1992; Bray, 1999; Bray & Kwok, 2003). The rise of private tuition can be attributed to factors such as perceived deficiencies in public education systems, competitive academic environments, aspirations for higher academic achievement, and concerns about future opportunities for children in an increasingly competitive global economy (Bray, 2009; Akiba, 2011). Parents often view private tuition as a means to supplement and enhance their children's learning, providing personalized attention and targeted support that may not be readily available in overcrowded classrooms or under-resourced schools (Chen & Stevenson, 1995; Micklewright & Muralidharan, 2013). Also, parents may want tutoring to remain confidential because school teachers could interpret the demand for supplementary tutoring as reflecting parents' lack of confidence in the schools (Bray & Kwok, 2003). Parents and teachers argue that private tuition enables learners to access additional attention, ensures improved learning styles, improved performance, personalized relationship, and involvement of parents as they keep track of the performance of their children (Makworo, 2012; Mwebi & Maithya, 2016).

However, private tuition raises critical questions regarding equity, access, and the broader implications for educational outcomes and social mobility. Access to high-quality private tuition may be limited by financial resources, geographic location, or cultural factors (Dang, et al., 2013; Buchmann & Dalton, 2002). Families who want their children to move successfully from high school to university and then to occupational career spend more time and money on the informal educational activities (Stevenson & Baker, 1992; Tansel & Bircan, 2006). The motivations driving parental decisions to invest in private tuition are multifaceted and influenced by socio-economic status, cultural norms, parental education levels, and perceptions of school quality (Morgan, 2009; Silova & Kazamias, 2008). In India, a 1997 survey of 7879 primary school pupils in Delhi found that 39.2% were receiving tutoring (Aggarwal, 1998; Bray & Kwok, 2003).

Understanding parental perceptions and attitudes towards private tuition is crucial for policymakers, educators, and researchers seeking to promote educational equity and improve educational practices. This study aimed to address this gap by developing and validating a scale designed to measure parental perception and attitude towards private tuition. By rigorously validating this scale, researchers seek to provide a robust framework for analyzing and interpreting parental attitudes towards private tuition across diverse socio-economic and cultural contexts.

## 2. Design and Sampling

In this study, the population consists of all school going students' parents of West Bengal. Random purposive sampling, a kind of non-probability or non-random sampling was used to gather data for this study's objectives (Teddlie et al., 2007). The investigator deliberately selected fifty (50) parents from West Bengal for item analysis and one hundred seventy-six (176) parents for calculating Cronbach's alpha.

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## 3. Development of Perception and Attitude Scale

**Item pool:** The questionnaire was developed after consultation with experts and reviewing relevant literature. The initial version of the perception scale used thirty statements as the main framework. After reviewing the language, appropriateness, intensity, clarity, and purposes, 15 statements covering various aspects of private tuition issues were prepared. The attitude scale used thirty statements, with 17 statements covering various aspects of private tuition issues. Seventeen statements were built on five dimensions: Perceived Necessity, Financial Concerns, Trust in the School System, Parental Involvement, Student Motivation, and Teaching and Education. The questionnaire's initial draft was revised based on the experts' recommendations, and adjustments were made to ensure clarity and appropriateness.

**Scoring Technique:** The perception scale on private tuition was initially developed with 15 statements with two possible responses, 'Yes' and 'No'. The positive statements received a score of 2, while the negative statements received a score of 1. The scale was time-limited and had a minimum score of 15 and a maximum score of 30. The scale was built on five dimensions: Perceived Necessity, Financial Concerns, Trust in the School System, Parental Involvement, and Student Motivation.

Researchers used self-report scales to measure attitudes, with a self-administered attitude scale consisting of 17 items on Likert's five-point scales (Strongly agree, Agree, Neutral, Disagree, and Strongly disagree). The scores for 'Strongly agree', 'Agree', 'Neutral', 'Disagree' and 'Strongly disagree' were '5', '4', '3', '2', and '1', respectively for favourable statements while for unfavourable statements, the scores were '1', '2', '3', '4', and '5'. The highest number for each item was '5', and the lowest number was '1'.

**Pre -Try-out:** A study involving twenty-five parents from a specific area completed a preliminary version of a perception and attitude scale towards private tuition. The aim was to understand participants' challenges in answering questions about their perception and attitude of the questionnaire's language. The information was then examined to refine and screen the statements. Based on the results of pre-try-out testing, the resource person reviewed and changed the items to clarify the language and improve its flow.

**Try-out:** Fifty parents from the study area were then given the private tuition perception and attitude scale. The questionnaire was given out, and careful marking was requested against each statement. The weighted responses to each individual item were added up to determine each respondent's score. The scores were processed for item analysis after the 50 respondents' scores were calculated.

**Statistical Technique Used:** The researcher used item analysis with the t-test to eliminate the poor items from the study. Next, the Cronbach's alpha was used to evaluate the test's reliability.

## 4. Result

**Item analysis:** The respondents with the highest and lowest test scores group, respectively, in the top and bottom 27% of the orderly ranked list are identified. The t-test is a trustworthy statistical method for assessing item discrimination by comparing the extreme group means. Not only does it indicate whether an item discriminates in this way, but it also indicates the statistical significance of any discrimination between high and low scorers. When used in conjunction with the Kelley method, this approach can greatly enhance and validate a scale (Kelley, 1939).

**Table 1: Item analysis for the Perception scale about Private Tuition**

Items		<i>t</i>	<i>p</i>	Items		<i>t</i>	<i>p</i>
Before	After			Before	After		
PTPT1	PTPT1	3.12	0.000**	PTPT9	PTPT9	2.28	0.012*
PTPT2	PTPT2	3.6	0.000**	PTPT10	PTPT10	3.12	0.000**
PTPT3	PTPT3	4.83	0.000**	PTPT11	PTPT11	5.7	0.000**
PTPT4	PTPT4	3.12	0.002**	PTPT12	PTPT12	2.69	0.010**
PTPT5	PTPT5	2.68	0.013*	PTPT13	PTPT13	1.88	0.035*
PTPT6	PTPT6	2.68	0.014*	PTPT14	PTPT14	4.16	0.000**
PTPT7	PTPT7	3.78	0.000**	PTPT15	PTPT15	5.7	0.000**
PTPT8	PTPT7	2.74	0.010**				

\*Significance in 0.05 level \*\*significance of 0.01 level

Note: PTPT: Perception towards private tuition

Table 1 reveals that 11 items (PTPT1, PTPT2, PTPT3, PTPT4, PTPT7, PTPT8, PTPT10, PTPT11, PTPT12, PTPT14, and PTPT15) having *t* values of 3.12, 3.6, 4.83, 3.12, 3.78, 2.74, 3.12, 5.7, 2.69, 4.16, and 5.7, respectively, are significant at the 0.01 level, and 4 items (PTPT5, PTPT6, PTPT9, and PTPT13) having *t* values of 2.68, 2.68, 2.28, and 1.88, respectively, are significant at the 0.05 level. Therefore, no item could be rejected. All items (15) with a good discrimination value have been retained and covered five dimensions of the final perception scale about private tuition.

**Table 2: Item analysis of Attitude Scale**

Items		<i>t</i>	<i>p</i>	Items		<i>t</i>	<i>p</i>
Before	After			Before	After		
ATPT1	ATPT1	2.877	0.008**	ATPT10	ATPT8	3.57	0.000**
ATPT2	ATPT2	4.16	0.000**	ATPT11	ATPT9	5.97	0.000**
ATPT3	ATPT3	3.78	0.000**	ATPT12	ATPT10	4.13	0.000**
ATPT4	ATPT4	5.17	0.000**	ATPT13	-	1.56	0.06
ATPT5	ATPT5	4.65	0.000**	ATPT14	-	1.26	0.11
ATPT6	ATPT6	1.92	0.03*	ATPT15	ATPT11	6.22	0.000**
ATPT7	-	0.25	0.4	ATPT16	-	0.7	0.244
ATPT8	ATPT7	2.46	0.01*	ATPT17	-	0.58	0.28
ATPT9	-	1.47	0.08				

\* Significant in 0.05 level \*\*significant in 0.01 level

Note: ATPT- Attitude towards Private Tuition

Table 2 reveals that six items (ATPT7, ATPT9, ATPT13, ATPT14, ATPT16, and ATPT17) with *t* values of 0.25, 1.47, 1.56, 1.26, 0.7, and 0.58, respectively, are insignificant at both the 0.05 and 0.01 levels of significance. So, these items are eliminated from the final draft of the attitude scale towards private tuition. One item (ATPT6) having *t* values of 1.92 is significant at the 0.05 level. The remaining ten items (ATPT1, ATPT2, ATPT3, ATPT4, ATPT5, ATPT8, ATPT10, ATPT11, ATPT12, and ATPT15) having *t* values of 2.87, 4.16, 3.78, 5.17, 4.65, 1.92, 2.46, 3.57, 5.97, 4.13, and 6.22, respectively, are significant at the 0.01 level. Finally, eleven items have been retained and covered six dimensions of the final attitude scale towards private tuition.

**Validity:** The degree to which a measurement instrument truly measures what it is intended to measure is a common definition of validity (Kimberlin, et. al., 2008). In order to guarantee the face validity and content validity, expert validation was assumed at the initial stage (Cicchetti, et. al.,1981). Face validity and content validity have been evaluated using this scale.

**Reliability:** A measure of the correlation between two random samples of items selected from a universe of items similar to those in the test, alpha ( $\alpha$ ) is considered a suitable equivalency index, with the exception of brief tests of the test's first factor concentration (Cronbach et al., 1951).

**Table 3: Reliability of perception and attitude Scale towards Private tuition**

Scale	Cronbach's alpha
Perception	0.81
Attitude	0.79

Table 3 indicated that perception scale had 0.81Cronbach's alpha value and the attitude scale had 0.79 Cronbach's alpha value, as indicated highly significant. To ensure internal consistency and reliability, the analysis's Cronbach Alpha coefficient should be at least 0.60 and its correlation coefficient should be between 0.20-0.90 (Duzgan & Kirkic, 2023; Hinkin, 1995; Ray & Sikdar, 2023).

**Final Scale:** The final scale of perception had eleven items covered five dimensions and the attitude had fifteen items covered six dimensions. The Items distribution has been presented in below table 4 and 5.

**Table 4: Final Draft of perception Scale towards Private tuition**

Sl. No.	DIMENSION	Items		Total Items
		Favorable	Unfavorable	
1	Perceived Necessity	2	1, 3	3
2	Financial Concerns	4, 5, 6, 8	7	5
3	Trust in School System	9, 10	11	3
4	Parental Involvement	12, 13, 14	-	3
5	Student Motivation	-	15	1
	<b>Total</b>	<b>10</b>	<b>5</b>	<b>15</b>

**Table 5: Final Draft of Attitude Scale towards Private tuition**

Sl. No.	DIMENSION	Items		Total Items
		Favorable	Unfavorable	
1	Perceived Necessity	1, 3	2	3
2	Financial Concerns	4	5	2
3	Trust in School System	-	6	1
4	Parental Involvement	7	-	1
5	Student Motivation	9, 10	8	3
6	Teaching and Education	-	11	1
	<b>Total</b>	<b>6</b>	<b>5</b>	<b>11</b>

## 5. Discussion

Table 1 indicates that four items (PTPT5, PTPT6, PTPT9, and PTPT13) are significant at the 0.05 level and eleven items are significant at the 0.01 level. Six items (ATPT7, ATPT9, ATPT13, ATPT14, ATPT16, and ATPT17) are not significant at either the 0.05 or 0.01 level of significance, according to table 2. Therefore, these items are removed from the attitude scale regarding private tuition final draft. The remaining items, which covered the six dimensions of the attitude scale, have been kept. Finally, eleven items on the final perception scale covered five dimensions, and fifteen items on the attitude scale covered six dimensions. The highly significant values on the attitude scale were 0.79 and the perception scale's Cronbach's alpha was 0.81.

## 6. Implication

A validated scale can provide a structured assessment of parental views and attitudes towards private tuition, providing insights into their expectations and concerns. This information can inform educational policies and interventions to address the prevalence of private tuition. Understanding parental attitudes can help guide educators in developing strategies to support students receiving private tuition. The study could also uncover cultural and socioeconomic factors influencing parental decisions, guiding equitable education policies. Future research could explore longitudinal effects and correlations between parental attitudes and student outcomes.

## 7. Conclusion

The study has validated a scale to measure parental perceptions and attitudes towards private tuition. The scale demonstrates robust psychometric properties and reveals that parents' decisions are influenced by factors such as perceived educational quality, concerns about their children's academic performance, and socio-economic considerations. Recognizing the diversity in parental motivations and concerns about private tuition is crucial for educators, policymakers, and stakeholders to develop more informed strategies. Future research could explore longitudinal impacts of private tuition on student outcomes, conduct comparative studies across different socio-economic groups or cultural contexts, and investigate how parental attitudes

evolve over time. The validated scale serves as a valuable tool for researchers and practitioners to explore and address the complexities surrounding private tuition in contemporary educational settings. By refining our understanding of parental attitudes, we can strive towards more equitable and effective educational policies and practices.

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**APPENDIX**

**PERCEPTION AND ATTITUDE SCALE TOWARDS PRIVATE TUITION (For Parents)**  
INSTRUCTIONS TO BE FOLLOWED

Dear Respondents,

You have given total 26 statements related to your perception and attitude towards private tuition and you have to tick (✓) on any one option among the given options for each item which describes your present state of mind. You are instructed to read each statement carefully before answering it. There is no boundness in time but it can be expected from you that your answers will be given within 20 minutes. Please feel free to ask if you have any query. We assure you that your statements never be disclosed to anybody hence always be kept confidential for the research purpose. Sincerely, Researchers, Department of Education, University of Kalyani,

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Fill up the following Informations:				
Respondent's Name	:			
Residential Address	:			
Gender	:	Male ( )	Female ( )	
Location	:	Rural ( )	Urban ( )	
Educational Qualification	:	Secondary ( )	Higher Secondary ( )	Graduate ( )
Types of Family	:	Joint/Atomic ( )	Nuclear ( )	

**PERCEPTION SCALE ABOUT PRIVATE TUITION**

Sl. No.	STATEMENTS	Yes	No
1	Private tuition does not provide additional educational support.	( )	( )
2	Private tuition enhances the overall knowledge of their children.	( )	( )
3	Private tuition has negatively affected my child's academic performance.	( )	( )
4	Dissatisfaction with the school system has led to parents turning to private tuition.	( )	( )
5	Lack of confidence in the school's teaching methods influences the decision to private tuition.	( )	( )
6	Perceived shortcomings of the school curriculum led to reliance on private tuition.	( )	( )
7	Private tuition does not provide additional support beyond what is provided in regular schools.	( )	( )
8	Private tuition is more effective than regular school education.	( )	( )
9	Parents choose private tuition because of the influence of other parents in their social circle.	( )	( )
10	Private tuition decisions are influenced by the success stories of peers' children.	( )	( )
11	Pressure from friends and neighbors cannot influence the choice of enrolling in private tuition.	( )	( )
12	I am actively involved in monitoring and supporting my child's private tuition.	( )	( )
13	I communicate regularly with my child's private tutor about their progress.	( )	( )
14	I plan to continue private tuition for my child in future.	( )	( )
15	My child's confidence has deteriorated due to private tuition.	( )	( )

**ATTITUDE SCALE TOWARDS PRIVATE TUITION**

Sl. No.	STATEMENTS	Strongly Agree	Partially Agree	Neutral	Partially Disagree	Strongly Disagree
1	Private tuition should complement classroom education.	( )	( )	( )	( )	( )
2	Private tuition should not be taken to improve academic performance.	( )	( )	( )	( )	( )
3	Private tuition should be taken for better results.	( )	( )	( )	( )	( )
4	Private tuition should be given to children despite financial difficulties.	( )	( )	( )	( )	( )
5	Access to private tuition should not require financial sacrifice.	( )	( )	( )	( )	( )
6	School education should be ignored in favor of private tuition.	( )	( )	( )	( )	( )
7	A private tutor should be hired to look after the child's education for busy parents.	( )	( )	( )	( )	( )
8	Private tuition should not be chosen to encourage students to be academically motivated.	( )	( )	( )	( )	( )
9	Students should take private tuition to boost their confidence.	( )	( )	( )	( )	( )
10	Students should take private tuition to develop their potential talent.	( )	( )	( )	( )	( )
11	Private tuition should not be taken for proper progress in studies.	( )	( )	( )	( )	( )