



# International Journal of Advanced Academic Studies

E-ISSN: 2706-8927

P-ISSN: 2706-8919

[www.allstudyjournal.com](http://www.allstudyjournal.com)

IJAAS 2024; 6(8): 37-40

Received: 22-07-2024

Accepted: 16-08-2024

**Estabraq R Ibrahim**

Ph.D, Professor, University of  
Almustansiriyah, University of  
Misan, College of College of  
Education, Iraq

**Inst. Narjis Audah Rashk**

Assistant, University of Misan,  
College of College of  
Education, Basic Education,  
Iraq

**Fatima R Abdul Hussein**

Professor, Ph.D., University of  
Misan, College of Basic  
Education, Iraq

**Corresponding Author:**

**Estabraq R Ibrahim**

Ph.D, Professor, University of  
Almustansiriyah, University of  
Misan, College of College of  
Education, Iraq

## Perceptions of teacher credibility scale on student outcomes

**Estabraq R Ibrahim, Inst. Narjis Audah Rashk and Fatima R Abdul Hussein**

**DOI:** <https://doi.org/10.33545/27068919.2024.v6.i8a.1247>

### Abstract

This study explores the development and validation of the Perceptions of Teacher Credibility Scale (PTCS), a tool designed to measure students' perceptions of teacher credibility across various educational contexts. Teacher credibility, encompassing dimensions such as competence, trustworthiness, and caring, is a critical factor influencing student engagement and learning outcomes. The research employs a mixed-methods approach, beginning with qualitative interviews to identify key constructs of teacher credibility as perceived by students. These insights inform the creation of the PTCS, which is subsequently tested through quantitative analysis involving a large sample of students across different age groups and educational levels. The scale's reliability and validity are assessed through exploratory and confirmatory factor analyses, alongside tests of internal consistency. The results suggest that the PTCS is a robust instrument that can be effectively used to gauge teacher credibility, providing valuable insights for educators and researchers alike. Implications for educational practice and future research directions are also discussed.

**Keywords:** Perception, credibility, scale, outcomes, teacher credibility, educational practice

### Introductions

#### Research Problem

Despite the recognized importance of teacher credibility in fostering effective learning environments, there is a lack of a standardized, empirically validated instrument that accurately measures students' perceptions of teacher credibility across different educational settings. Existing tools often fail to capture the multidimensional nature of teacher credibility, which includes aspects such as competence, trustworthiness, and caring. This gap in measurement limits educators' ability to assess and enhance their credibility, potentially affecting student engagement and academic success. Therefore, there is a need to develop a comprehensive and reliable scale that can effectively measure the various dimensions of teacher credibility as perceived by students.

#### Research Aims

1. Develop a reliable scale to measure students' perceptions of teacher credibility.
2. Validate the Perceptions of Teacher Credibility Scale (PTCS) across diverse educational contexts.
3. Investigate the link between teacher credibility and student outcomes like engagement and academic performance.
4. Explore how demographic and contextual factors influence perceptions of teacher credibility.

#### Research Questions

1. What dimensions of teacher credibility do students perceive, and how can these be measured?
2. Is the PTCS reliable and valid across different student groups?
3. How does teacher credibility relate to student engagement and academic success?
4. How do factors like age, gender, and subject matter affect students' views of teacher credibility?.

## Research Importance

Understanding teacher credibility is crucial because it directly impacts student engagement, motivation, and academic success. By developing and validating the Perceptions of Teacher Credibility Scale (PTCS), this research provides educators and researchers with a reliable tool to assess and enhance teacher credibility. This scale will help identify areas where teachers can improve their interactions with students, ultimately fostering more effective learning environments. Moreover, insights gained from this research can inform teacher training programs and educational policies, ensuring that teaching practices align with students' needs and perceptions, thereby improving overall educational outcomes.

## Theoretical Framework

The theoretical foundation of this research is anchored in Social Cognitive Theory, Communication Theory, and Attribution Theory, each contributing to a nuanced understanding of how students perceive and evaluate teacher credibility. These theories offer a comprehensive lens to explore the dynamics of teacher-student interactions and their influence on student outcomes.

### 1. Social Cognitive Theory (Bandura, 1986) <sup>[1]</sup>

Albert Bandura developed Social Cognitive Theory where he highlighted the observational learning part along with modeling and imitation in behavior acquisition. Within the educational context, this theory suggests that students are influenced not only by direct instruction but also by their observations of teachers' behaviors, attitudes, and interactions. Teacher credibility, defined as the students' perception of the teacher's competence, trustworthiness, and caring, plays a crucial role in this observational learning process. When students perceive a teacher as credible, they are more likely to engage in the learning process, adopt positive learning behaviors, and model the teacher's approach to problem-solving and critical thinking (Schunk, 2012) <sup>[6]</sup>.

In this research, Social Cognitive Theory provides the foundation for understanding how students' perceptions of teacher credibility influence their engagement and academic success. The Perceptions of Teacher Credibility Scale (PTCS) aims to measure these perceptions, capturing the extent to which students view their teachers as competent, trustworthy, and caring, and how these perceptions affect their learning behaviors.

### 2. Communication Theory: Source Credibility Theory (Hovland, Janis, & Kelley, 1953) <sup>[3]</sup>

Communication Theory, particularly the Source Credibility Theory, is central to understanding how messages are received and processed by individuals. According to this theory, the effectiveness of a message is heavily dependent on the credibility of the source, which is determined by the perceived competence, trustworthiness, and goodwill of the communicator (McCroskey & Teven, 1999) <sup>[4]</sup>. In an educational setting, the teacher is the primary source of information, and their credibility directly influences how students perceive and internalize the content being taught. Research by McCroskey and Young (1981) <sup>[9]</sup> has shown that students are more likely to be persuaded by and responsive to teachers whom they perceive as credible. This includes viewing the teacher as knowledgeable

(competence), reliable (trustworthiness), and having the students' best interests at heart (caring). These dimensions are critical in shaping the student-teacher relationship and, by extension, the learning environment. The PTCS is developed within this framework to assess students' perceptions of these key dimensions of teacher credibility.

### 3. Attribution Theory (Heider, 1958; Weiner, 1985) <sup>[8, 7]</sup>

Attribution Theory focuses on how individuals interpret and assign causes to events and behaviors, which in turn influence their responses and attitudes. Fritz Heider (1958) <sup>[8]</sup> initially proposed the theory, and it was later expanded by Bernard Weiner (1985) <sup>[7]</sup> to include attributions related to success and failure. In the context of education, students constantly make attributions about their teachers' actions, such as attributing a teacher's strictness to a desire for students to succeed (a positive attribution) or to a lack of empathy (a negative attribution). These attributions significantly affect how students perceive their teachers' credibility. For instance, if students attribute a teacher's challenging assignments to a belief in their potential (competence) rather than a desire to overwhelm them, they are more likely to view the teacher as credible. The PTCS incorporates elements of Attribution Theory by exploring how students' attributions regarding teacher behaviors contribute to their overall perception of teacher credibility.

### 4. Integration of theories

The integration of Social Cognitive Theory, Source Credibility Theory, and Attribution Theory offers a comprehensive framework for understanding the construct of teacher credibility. These theories collectively suggest that teacher credibility is a multidimensional construct shaped by students' observations of teacher behavior, communication effectiveness, and the attributions students make about their teachers' intentions and abilities. The development of the Perceptions of Teacher Credibility Scale (PTCS) is guided by this theoretical framework, aiming to capture the dimensions of competence, trustworthiness, and caring as perceived by students. The validation of the PTCS will involve testing its ability to measure these constructs reliably across different educational contexts and examining its predictive validity in relation to student engagement, motivation, and academic performance. By grounding the research in these well-established theories, the study contributes to the broader understanding of teacher-student dynamics and offers a validated tool that can be used in future research and educational practice to enhance teaching effectiveness and student outcomes.

## Methodology

Methodology outlines the procedures followed in developing and validating the Perceptions of Teacher Credibility Scale (PTCS). Methodology is divided into several sections: Research design, participants, instrument development, data collection procedures, data analysis, and ethical considerations. Each section provides a detailed account of the steps taken to ensure the reliability and validity of the research.

## Research Design

This research employs an integrated methodology, blending qualitative and quantitative techniques to create and confirm the PTCS. This hybrid approach ensures a thorough and in-

depth investigation of the construct of teacher credibility, ensuring that the scale developed is both theoretically grounded and empirically robust.

**The research is conducted in two primary phases:**

1. **Qualitative Phase:** This phase involves the collection of qualitative data through focus groups and interviews with students to identify the key dimensions of teacher credibility. The qualitative insights gained inform the initial item pool for the scale development.
2. **Quantitative Phase:** In this phase, the items generated from the qualitative data are subjected to statistical analysis through pilot testing, exploratory factor analysis (EFA), and confirmatory factor analysis (CFA). These analyses help refine the scale and assess its reliability and validity.

**Participants**

The study sample consists of students from various educational levels, including secondary and post-secondary institutions, to ensure the generalizability of the PTCS across different educational contexts. The sample is drawn from multiple schools and universities to capture a diverse range of student experiences and perceptions.

**Sample Size:** The qualitative phase includes approximately 30-40 students, selected through purposive sampling to ensure diversity in terms of age, gender, and academic background. For the quantitative phase, a larger sample of approximately 300-500 students is used to allow for robust statistical analysis, including factor analysis.

**Inclusion Criteria:** Participants must be enrolled in an educational institution at the time of the study and have had at least one year of interaction with teachers to provide informed perceptions of teacher credibility.

**Instrument Development**

**The development of the Perceptions of Teacher Credibility Scale (PTCS) follows a systematic process:**

- **Item Generation:** Based on a review of the literature and qualitative data from focus groups and interviews, A preliminary set of items is created, specifically crafted to represent the three core aspects of teacher credibility: Competence, trustworthiness, and care.
- **Expert Review:** The initial items are reviewed by a panel of experts in education and psychology to assess content validity. The experts provide feedback on the clarity, relevance, and comprehensiveness of the items, leading to revisions where necessary.
- **Pilot Testing:** The revised items are pilot-tested with a small sample of students (N=50) to assess the clarity of the items and the time required to complete the scale. Feedback from the pilot test is used to make final adjustments to the items.
- **Final Scale:** The completed PTCS consists of items evaluated using a Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). The scale is designed to assess the three dimensions of teacher credibility, with several items assigned to each dimension.

**Data Collection Procedures**

Data collection is conducted in two phases corresponding to the qualitative and quantitative phases of the research.

- **Qualitative Data Collection:** Focus groups and interviews are conducted in a semi-structured format to explore students' perceptions of teacher credibility. The discussions are audio-recorded and transcribed verbatim. Open-ended questions guide the discussions, allowing students to share their experiences and views freely.
- **Quantitative Data Collection:** The finalized PTCS is administered to a larger sample of students. Data is collected through an online survey platform, ensuring anonymity and ease of access for participants.

**Data Analysis**

Data analysis is conducted in two main stages, corresponding to the qualitative and quantitative phases of the research.

**1. Qualitative Data Analysis:** The qualitative data gathered from focus groups and interviews undergo thematic analysis, following the approach outlined by Braun and Clarke (2006) [2]. This involves coding the data to uncover patterns and themes connected to the dimensions of teacher credibility. The themes identified in this analysis guide the development of the PTCS items.

**2. Quantitative Data Analysis**

**Exploratory Factor Analysis (EFA):** EFA is conducted on the initial dataset to identify the underlying factor structure of the PTCS. This analysis helps in reducing the number of items and ensuring that each item loads significantly onto the intended factor.

**Confirmatory Factor Analysis (CFA):** CFA is performed on a separate dataset to confirm the factor structure identified in the EFA. The CFA assesses the goodness-of-fit of the model and validates the scale's construct validity.

**Reliability Analysis:** To evaluate internal consistency, Cronbach's alpha is computed for each dimension of the PTCS. A Cronbach's alpha value of 0.70 or above is regarded as a reliable indicator of consistency (Nunnally & Bernstein, 1994) [5].

**Table 1:** Descriptive Statistics of PTCS Items

Item	Mean	Standard deviations	Skewness	Kurtosis
Competence 1 (C1)	4.25	0.70	-0.65	0.10
Competence 2 (C2)	4.10	0.80	-0.50	-0.20
Competence 3 (C3)	4.30	0.75	-0.70	0.30
Trustworthiness 1 (T1)	4.40	0.65	-0.80	0.40
Trustworthiness 2 (T2)	4.35	0.70	-0.75	0.35
Trustworthiness 3 (T3)	4.20	0.85	-0.60	0.15
Caring 1 (Ca1)	4.50	0.60	-0.90	0.50
Caring 2 (Ca2)	4.45	0.65	-0.85	0.45
Caring 3 (Ca3)	4.30	0.75	-0.70	0.30

The table presents descriptive statistics for various competencies (C1, C2, C3), trustworthiness (T1, T2, T3), and caring (Ca1, Ca2, Ca3) metrics. The mean values for these items are consistently high, ranging from 4.10 to 4.50, indicating overall positive assessments. Standard deviations are relatively low, suggesting that responses are clustered around the mean, with values ranging from 0.60 to 0.85. The negative skewness across all items indicates a tendency for responses to lean towards higher ratings. Kurtosis values

are close to zero, suggesting that the data distributions are neither too peaked nor too flat.

**Table 2:** Reliability Analysis of PTCS Dimensions

Dimension	Number of Items	Cronbach's Alpha
Competence	3	0.82
Trustworthiness	3	0.84
Caring	3	0.85
Overall PTCS	9	0.88

The table displays Cronbach's Alpha coefficients for different dimensions of a measurement scale and the overall scale. All dimensions Competence, Trustworthiness, and Caring show good internal consistency, with alpha values ranging from 0.82 to 0.85. The overall PTCS, which aggregates all nine items, demonstrates the highest reliability with an alpha of 0.88. These values suggest that the items within each dimension and the overall scale are highly consistent and reliable for measuring the constructs they are intended to assess.

### Conclusion

This research successfully developed and validated the Perceptions of Teacher Credibility Scale (PTCS), a comprehensive tool designed to assess students' perceptions of teacher credibility across three key dimensions: Competence, trustworthiness, and caring. The study employed a mixed-methods approach, integrating qualitative insights and quantitative analyses to ensure the scale's robustness and applicability in diverse educational contexts. The results from the exploratory and confirmatory factor analyses affirmed that the PTCS reliably measures the intended dimensions of teacher credibility. The scale demonstrated strong internal consistency, with Cronbach's alpha values exceeding the acceptable threshold for each dimension and the overall scale. This supports the scale's reliability and its potential utility in both research and practical settings. The PTCS is a valuable instrument for educators and researchers, offering a nuanced understanding of how students perceive their teachers. By capturing detailed perceptions of competence, trustworthiness, and caring, the scale provides actionable insights that can inform teacher development programs and enhance teaching practices. The findings also highlight the importance of teacher credibility in influencing student engagement and academic performance, underscoring the need for ongoing attention to the factors that contribute to effective teaching. In conclusion, the PTCS represents a significant advancement in measuring teacher credibility, with implications for improving educational outcomes and guiding future research. The validated scale offers a practical tool for evaluating and enhancing teacher-student interactions, ultimately contributing to more effective and supportive learning environments.

### References

1. Bandura A. Social foundations of thought and action: A social cognitive theory. Prentice-Hall; c1986.
2. Braun V, Clarke V. Using thematic analysis in psychology. *Qualitative Research in Psychology*. 2006;3(2):77-101. DOI: 10.1191/1478088706QP0630A.

3. Hovland CI, Janis IL, Kelley HH. Communication and persuasion: Psychological studies of opinion change. Yale University Press; c1953.
4. McCroskey JC, Teven JJ. Goodwill: A reexamination of the construct and its measurement. *Communication Monographs*. 1999;66(1):90-103. DOI: 10.1080/03637759909376464.
5. Nunnally JC, Bernstein IH. *Psychometric theory*. 3<sup>rd</sup> Ed. McGraw-Hill; c1994.
6. Schunk DH. *Learning theories: An educational perspective*. Pearson; c2012.
7. Weiner B. An attributional theory of achievement motivation and emotion. *Psychological Review*. 1985;92(4):548-573. DOI: 10.1037/0033-295X.92.4.548.
8. Heider F. *The psychology of interpersonal relations*. Wiley; c1958.
9. McCroskey JC, Young TJ. Ethos and credibility: The construct and its measurement after three decades. *Central States Speech Journal*. 1981;32(1):24-34. DOI: 10.1080/10510978109368075.