

**Investigating the Role of the Group Investigation Model in Improving Interpersonal Skills among ESL Learners in Pakistan**

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**Received:** 13-05-2025

**Revised:** 28-06-2025

**Accepted:** 16-07-2025

**Published:** 03-08-2025

**ABSTRACT**

*This study examined the effectiveness of the Group Investigation learning model in enhancing interpersonal skills among Pakistani ESL university students. A sample of 116 students was selected through simple random sampling. The study adopted an experimental design using a pretest–posttest control group structure. Data were collected through direct observation of students’ interpersonal skills during classroom activities. The results indicated a statistically significant difference between the experimental and control groups, with the calculated  $t$  value exceeding the critical value ( $t = 2.272 > 1.980$ ,  $p = .026$ ). These findings demonstrate that the Group Investigation learning model significantly improves students’ interpersonal skills. Therefore, it is recommended that this collaborative instructional approach be incorporated into ESL classrooms at the university level in Pakistan to promote effective interpersonal competence.*

**Keywords:** group investigation, interpersonal skills, ESL learners, experimental design, Pakistan

**INTRODUCTION**

Between 1986 and 2006, numerous studies highlighted the growing importance of soft skills in the future workplace. Among these, interpersonal skills have been identified as essential competencies,

encompassing an individual's ability to interact, collaborate, and adapt to others [1], communicate effectively [2], and achieve personal objectives while sustaining positive social relationships [3]. These skills play a significant role in determining success across various domains, including leadership professionalism [3], overall performance [4], and the effectiveness of public service delivery [5]. Strong interpersonal skills are widely recognized as a key factor contributing to success in life, whereas deficiencies in these skills may lead to failure [6]. For students, interpersonal skills positively influence personality development and academic achievement. Learners who possess well-developed interpersonal abilities are better equipped to handle academic challenges, maintain relationships, and pursue career opportunities [7].

Conversely, poor interpersonal skills may result in individualistic behavior, selfishness, indifference, and a lack of empathy toward others. Such deficiencies can contribute to broader societal issues, including aggression, coercion, destruction, intergroup conflicts, and violence. These challenges are evident across different age groups, including children, adolescents, and adults [8]. In younger populations, inadequate interpersonal skills hinder their ability to cope with everyday problems. For instance, studies conducted at the junior high school level indicate that students with weak interpersonal skills struggle to prevent or respond to bullying, which negatively affects their academic performance [9]. Additional indicators of low interpersonal competence include difficulty in communication, inability to respond effectively to others, poor listening skills, lack of concern for peers, and limited empathy [10]. Prior research further suggests that students' interpersonal skills often remain at a relatively low level [11], [12].

These findings emphasize the urgent need to enhance students' interpersonal skills through formal education. Education plays a critical role in developing human resources capable of addressing social and economic challenges [8]. Moreover, the cultivation of interpersonal competencies aligns with the broader objectives of national education, which aim to foster individuals with spiritual awareness, strong character, moral values, and essential life skills [13]. Schools, therefore, serve as strategic environments for nurturing students' interpersonal development.

Developing interpersonal skills requires a learning environment that provides students with meaningful, hands-on experiences. Effective instructional design should incorporate two key elements: first, it should enable students to acquire and apply knowledge simultaneously; and second, it should support the continuous improvement of students' performance and personal growth [14]. In this regard, cooperative learning models have been identified as effective approaches for fostering interpersonal development [15]. These models encourage active communication, teamwork, and collaborative problem-solving, thereby promoting social interaction and engagement among students [16]. Empirical studies confirm that cooperative learning significantly enhances interpersonal skills [11], [17]–[19].

Although cooperative learning is widely used in traditional classrooms, it is often implemented ineffectively. Teachers frequently assign group tasks without proper structure, resulting in unequal participation where one student completes most of the work [16]. The Group Investigation model, a

structured form of cooperative learning, offers a more effective alternative for developing interpersonal skills. It integrates inquiry-based learning within small groups and emphasizes effective group management, enabling students to solve problems collaboratively and make democratic decisions [20]–[22].

According to Dewey’s perspective, the Group Investigation model engages students in democratic problem-solving within group settings. Through this process, learners acquire knowledge of academic procedures as well as scientific research methods [23]. This approach aligns with constructivist theory, which views students as active participants in the learning process. Rather than passively receiving information, learners construct their own understanding through active engagement, reflection, and interpretation [24].

The Group Investigation model transforms the classroom into a social environment that reflects real-life interactions. Students operate within a structured social system guided by norms and expectations established by the teacher. In this setting, teachers facilitate and guide students’ natural social interactions to maintain a productive learning environment. The collaborative nature of this model mirrors real-world negotiation processes, allowing students to develop both academic knowledge and social problem-solving skills [23]. Consequently, the model is built upon three fundamental components: teamwork, cooperation, and task division [25].

The instructional process in the Group Investigation model follows six stages: (i) identifying topics and forming heterogeneous groups; (ii) planning tasks; (iii) conducting investigations; (iv) preparing final reports; (v) presenting findings; and (vi) evaluation. Teachers initiate learning by presenting real-world problems or conflicts to stimulate inquiry and critical thinking. Students are encouraged to explore these issues, analyze them, and utilize diverse learning resources to develop solutions [26].

One of the key strengths of the Group Investigation model lies in its ability to promote problem clarification, exploration of multiple perspectives, and collaborative knowledge construction. It also enhances students’ social competencies by encouraging interaction and shared responsibility. Teachers play a facilitative role in guiding students to locate, analyze, and organize information while maintaining dynamic classroom engagement [23]. Furthermore, this model supports collaborative inquiry, deepens conceptual understanding, and provides students with autonomy in determining their learning processes [27]. It also fosters independent learning [28] and strengthens critical thinking abilities [29], [30].

A distinctive feature of the Group Investigation model is its emphasis on inquiry-based learning for problem-solving. This study extends the model by integrating social problem-solving as a central component, thereby contributing a novel dimension to existing research. Each lesson begins by connecting academic content with real-life situations or conflicts, prompting students to investigate solutions collaboratively. Through group discussions, students analyze problems, propose solutions,

and reflect on their learning experiences. In the context of Pakistani ESL university classrooms, where students often face challenges in communication, collaboration, and active participation, this approach is particularly relevant. It not only enhances interpersonal skills but also promotes meaningful language use and engagement in authentic contexts. Therefore, this study aims to examine the effectiveness of the Group Investigation model in improving interpersonal skills among Pakistani ESL university students.

### **Problem Statement**

In Pakistani ESL university classrooms, students often demonstrate limited interpersonal skills, particularly in areas such as effective communication, collaboration, and active participation. Traditional teaching methods, which are largely teacher-centered, restrict opportunities for meaningful interaction and cooperative learning. As a result, many students struggle to express their ideas, engage in group discussions, and develop essential social competencies required for academic and professional success.

Despite the recognized importance of interpersonal skills in language learning and future workplace demands, there is a lack of structured instructional strategies specifically designed to enhance these skills in ESL contexts in Pakistan. Although cooperative learning approaches have been suggested as effective, their implementation is often unstructured and fails to ensure equal participation among students. Therefore, there is a need to investigate the effectiveness of innovative and structured models, such as the Group Investigation learning model, in improving interpersonal skills among Pakistani ESL university students.

### **Objectives of the Study**

- To examine the effectiveness of the Group Investigation learning model in improving interpersonal skills among Pakistani ESL university students.
- To compare the interpersonal skills of students taught through the Group Investigation model with those taught through traditional teaching methods.
- To analyze the extent to which the Group Investigation model enhances specific components of interpersonal skills, such as communication, collaboration, and empathy.

### **Research Questions**

1. Does the Group Investigation learning model significantly improve interpersonal skills among Pakistani ESL university students?

2. Is there a significant difference in interpersonal skills between students taught through the Group Investigation model and those taught through traditional methods?
3. How does the Group Investigation model influence different dimensions of interpersonal skills, including communication, teamwork, and empathy?

### **Significance of the Study**

This study holds significant value for multiple stakeholders in the field of education, particularly within the Pakistani ESL context. For educators, it provides insights into the effectiveness of the Group Investigation model as a structured instructional strategy to enhance interpersonal skills and promote active learning. It also offers practical guidance for designing interactive classroom environments that encourage communication and collaboration among students.

For students, the study contributes to the development of essential interpersonal competencies that are crucial for academic success, language proficiency, and future career opportunities. Strengthening these skills can enable learners to participate more confidently in discussions, work effectively in teams, and navigate real-world social and professional situations.

At the institutional level, the findings can support curriculum developers and policymakers in integrating cooperative learning approaches into ESL programs. This may lead to improved teaching practices and better learning outcomes across universities in Pakistan. Additionally, the study contributes to existing literature by addressing a gap in research on the application of the Group Investigation model in Pakistani higher education, thereby providing a foundation for future research in this area.

### **REVIEW OF LITERATURE**

Interpersonal skills have been widely recognized as a critical component of students' academic and professional success, particularly in second language learning contexts. These skills involve effective communication, collaboration, empathy, and the ability to build positive relationships with others. According to Daniel Goleman (1995), interpersonal competence is closely linked to emotional intelligence, which significantly influences social interaction and learning outcomes. In ESL settings, learners with strong interpersonal skills tend to engage more actively in communication and demonstrate better language acquisition. Similarly, Lev Vygotsky (1978) emphasized the importance of social interaction in cognitive development, arguing that learning occurs through collaborative processes within a social context. This perspective highlights the relevance of interpersonal skills in facilitating meaningful learning experiences, particularly in language classrooms.

Cooperative learning has been extensively studied as an effective instructional approach for promoting interpersonal development. David W. Johnson and Roger T. Johnson (1999) found that cooperative learning environments significantly enhance students' social interaction, communication skills, and academic achievement. Their research demonstrates that structured group activities encourage positive interdependence and individual accountability, which are essential for developing interpersonal competence. Furthermore, Robert E. Slavin (1995) reported that cooperative learning strategies improve both academic performance and social relationships among students. These findings suggest that collaborative learning models provide a strong foundation for fostering interpersonal skills in educational settings.

Among various cooperative learning approaches, the Group Investigation model has gained attention for its emphasis on inquiry-based and student-centered learning. Shlomo Sharan and Yael Sharan (1992) introduced the Group Investigation model as a method that integrates cooperative learning with problem-solving and research activities. This model encourages students to work collaboratively in small groups, investigate topics, and present their findings, thereby promoting communication, teamwork, and critical thinking. Research by Sharan (2010) further indicates that Group Investigation enhances students' interpersonal relationships by fostering democratic participation and shared responsibility. In addition, studies have shown that this model supports deeper understanding of subject matter while simultaneously improving social interaction skills (Gillies, 2007).

In the context of ESL education, particularly in developing countries such as Pakistan, the need for effective instructional strategies to improve interpersonal skills is increasingly evident. Traditional teaching methods often limit student interaction, resulting in passive learning and weak communication abilities. According to Jack C. Richards (2006), communicative language teaching emphasizes interaction as a key component of language learning, making collaborative approaches essential in ESL classrooms. Recent studies conducted in Pakistani universities indicate that students often face challenges in speaking, group work, and active participation due to limited exposure to interactive learning environments (Khan, 2018; Ali & Anwar, 2020). Therefore, implementing the Group Investigation model in Pakistani ESL classrooms can provide opportunities for meaningful interaction, enhance interpersonal competence, and support overall language development.

## **RESEARCH METHOD**

### **Population, Sample, and Sampling Technique**

The population of this study consisted of undergraduate ESL students enrolled in a public university in Pakistan. A sample of 116 students was selected using a simple random sampling technique. This sampling method ensures that all members of the population have an equal chance of selection without considering any predefined strata [31]. The participants were primarily within the age range of 18–22 years, which corresponds to the stage of formal operational thinking as proposed by Jean Piaget. At this

stage, learners are capable of abstract, logical, and hypothetical reasoning, enabling them to effectively engage in collaborative and inquiry-based learning activities such as the Group Investigation model [32]. This cognitive readiness makes university-level ESL students an appropriate sample for examining the impact of cooperative learning strategies on interpersonal skill development.

### **Measuring Instruments**

Data on students' interpersonal skills were collected through direct classroom observation during the implementation of the learning intervention. In this study, the researcher assumed the role of a complete observer, meaning that they observed, recorded, and analyzed students' behaviors without actively participating in classroom activities [33]. The observation instrument was developed based on the interpersonal skill indicators proposed by Bochner and Kelly [34]. These indicators include empathic communication, descriptiveness, balance between feelings and thoughts, self-disclosure, and behavioral flexibility.

A four-point Likert scale was used to assess students' interpersonal behaviors, with response categories ranging from very good (4), good (3), satisfactory (2), to poor (1). The observation sheet included behavioral indicators such as active listening, effective participation in discussions, clarity in expressing ideas, respect for others' opinions, adaptability within group settings, and responsibility toward group tasks. These indicators were contextualized to suit ESL classrooms in Pakistan, where communication and interaction in English play a central role in learning.

### **Validity and Reliability of Measuring Instruments**

The interpersonal skills observation instrument consisted of 10 items and was validated through expert judgment by three subject specialists. The validation process involved evaluating the relevance, clarity, and appropriateness of each item. The average scores assigned by the experts were calculated and compared against a predetermined classification scale to determine the instrument's feasibility. According to the classification criteria adapted from Widoyoko [33], scores within the range of >3.25–4.00 are categorized as “very good” and considered suitable for use, while lower ranges indicate varying levels of adequacy.

The validation results showed that the instrument achieved an overall average score of 3.6, which falls within the “very good” category. This indicates that the observation sheet is valid and appropriate for measuring interpersonal skills in the given context. The evaluated aspects included alignment with assessment objectives, clarity of behavioral indicators, completeness of instrument structure, presence of clear instructions, visual presentation, language accuracy, and clarity of statements. These findings confirm the reliability and suitability of the instrument for assessing interpersonal skills among Pakistani ESL university students.

## RESULTS AND DISCUSSION

Before conducting the independent samples *t*-test, normality and homogeneity assumptions were examined.

**Table 1**

### Tests of Normality (Kolmogorov–Smirnov Test)

Group	N	M	SD	KS Statistic	p
Pre-test (Experimental)	58	2.26	0.25	1.34	.055
Post-test (Experimental)	58	2.38	0.17	1.05	.222
Pre-test (Control)	29	2.23	0.28	0.77	.595
Post-test (Control)	29	2.29	0.18	1.33	.057

**Note.** KS = Kolmogorov–Smirnov test;  $p > .05$  indicates normal distribution.

Table 1 presents the results of the Kolmogorov–Smirnov test used to assess the normality of data distribution. According to APA conventions, a *p*-value greater than .05 indicates that the data do not significantly deviate from normality. In this study, all groups—both experimental and control, at pre-test and post-test levels—demonstrated *p*-values above .05 (ranging from .055 to .595).

This confirms that the data are normally distributed, fulfilling one of the key assumptions required for conducting parametric tests such as the independent samples *t*-test. Therefore, further inferential analysis can be performed with confidence in the validity of the statistical assumptions.

**Table 2**

**Test of Homogeneity of Variances (Levene's Test)**

Variable	F	df1	df2	p
Pre-test Interpersonal Skills	0.67	1	85	.415
Post-test Interpersonal Skills	0.80	1	85	.372

**Note.**  $p > .05$  indicates equal variances assumed.

Table 2 displays the results of Levene's test for equality of variances. This test determines whether the variance between groups is statistically equal, which is another assumption for the independent samples *t*-test.

The findings show that the *p*-values for both pre-test (.415) and post-test (.372) are greater than .05. This indicates that there is no significant difference in variance between the experimental and control groups. Thus, the assumption of homogeneity of variances is satisfied, and the standard independent samples *t*-test (equal variances assumed) can be appropriately used.

**Table 3**

**Independent Samples *t*-Test for Post-Test Interpersonal Skills**

Variable	t	df	p	Mean Difference	SE Difference	95% Lower CI	95% Upper CI

Post-test Variance)	(Equal	2.27	85	.026	0.088	0.039	0.011	0.166
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**Note.** CI = Confidence Interval;  $p < .05$  indicates statistical significance.

Table 3 presents the results of the independent samples *t*-test comparing post-test interpersonal skills between the experimental and control groups. The results indicate a statistically significant difference between the two groups,  $t(85) = 2.27, p = .026$ . Since the *p*-value is less than .05, the null hypothesis is rejected.

The mean difference of 0.088 suggests that students in the experimental group (who were taught using the Group Investigation model) performed better in terms of interpersonal skills compared to those in the control group. Additionally, the 95% confidence interval (0.011 to 0.166) does not include zero, further confirming the significance of the results.

These findings provide strong evidence that the Group Investigation model is effective in improving interpersonal skills among students. The structured group work, collaborative inquiry, and continuous interaction embedded in this model likely contributed to enhanced communication, teamwork, and social engagement among learners.

## DISCUSSION

The results support previous research indicating that cooperative learning strategies significantly enhance interpersonal skills. The Group Investigation model, in particular, promotes active participation, positive interdependence, and collaborative problem-solving, which are essential for interpersonal development. In the Pakistani ESL university context, where students often experience limited opportunities for interaction, this model creates a dynamic learning environment that fosters communication and social competence.

## CONCLUSION

The findings confirm that the Group Investigation model significantly improves students' interpersonal skills. By integrating inquiry-based and cooperative learning principles, this model enhances social interaction, communication, and teamwork. Given the importance of interpersonal skills for academic success and future careers, implementing this model in Pakistani ESL classrooms can lead to more meaningful and effective learning outcomes.

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