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Empathic Accuracy Among Teachers

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ABSTRACT

Empathic accuracy is not equally beneficial in all situations. In certain contexts, understanding others' thoughts and emotions can be a source of stress and may place strain on social relationships particularly when the inferred mental states are self-threatening or relationship-threatening, especially when the other person is unwilling to disclose such thoughts or feelings. Impairments in intrapersonal and interpersonal intelligence tend to cause deeper and more intense imbalances compared to other forms of intelligence. Practicing and developing these forms of intelligence requires individuals to tolerate greater pressures and constraints than those associated with other types of intelligence, and their acquisition and enhancement require significant time and effort. The current study aimed to: 1. Measure empathic accuracy among teachers and educators. 2. Identify the significance of empathic accuracy differences based on: a. Gender (male, female), b. Age (30–40, 41–50, 50 and above), c. Educational attainment (Diploma, Bachelor's, Postgraduate), d. Marital status (Married, Single, Widowed, Divorced). The research was limited to teaching staff during the academic year 2024–2025, including teachers and educators working in primary, intermediate, and secondary schools across the general directorates of education in Karkh (first, second, and third) and Rusafa (first, second, and third). The study adopted a descriptive correlational approach. A purposive sample of (400) participants (teachers and educators) was selected, with 27% male and 73% female, distributed across gender and educational directorates. The researcher constructed a scale for empathic accuracy based on the model of Ickes&Simpson (1997). The final version of the scale included 33 items using a five-point Likert scale (Always, Often, Sometimes, Rarely, Never). Validity and reliability of the scale were verified, with test–retest reliability at 0.84 and Cronbach's alpha coefficient at 0.89. The results revealed the following: 1. Teachers and educators possess a high level of empathic accuracy, 2. Statistically significant differences in empathic accuracy were found based on gender, in favor of males, 3. Statistically significant differences in empathic accuracy were found based on age, in favor of the 41–50 and 50+ age groups. Differences were also observed based on marital status, in favor of married individuals, followed by widowed, then divorced, and lastly single individuals, 4. No significant differences in empathic accuracy were found based on educational attainment. Additionally, no significant interaction effects were found for the following combinations: gender × age, gender × educational attainment, age × marital status, marital status × educational attainment, and the four-way interaction (gender × age × marital status × educational attainment). 5. Significant interaction effects in empathic accuracy were found for gender × marital status and age × educational attainment. In light of the findings, the researcher proposed a set of recommendations and suggestions, including: Recommendations: 1. Training programs to help employees recognize nonverbal cues (e.g., body language, facial expressions, tone of voice) that may indicate others' emotions. 2. Creating an open work environment that encourages honest emotional expression without fear of criticism or judgment.
Suggestions: 1. A study investigating the relationship between empathic accuracy and job performance among employees. 2. A study exploring the impact of empathic accuracy on interpersonal relationships within multicultural work teams.

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Keywords: ……..

INTRODUCTION

Research Problem

A decline in empathic accuracy is a characteristic of various psychological conditions associated with difficulties in social adjustment, such as autism or schizophrenia (Riediger et al., 2020, p. 159).

There are at least three main reasons why distinctive empathy might increase positive attitudes toward minority outgroups:

First: Empathic concern indicates that an individual genuinely cares about the well-being of others. This concern can be extended to members of other groups, thereby promoting positive attitudes toward these groups as a whole. Studies (Batson et al., 1997; Stark et al., 2013) have shown that the concern individuals display for the welfare of others can enhance their positive attitudes toward groups to which they do not directly belong.

Second: Research indicates that the ability to adopt others' perspectives including those of unfamiliar outgroup members and to experience parallel emotions can foster perceptions of intergroup similarity. When individuals view the world from another's perspective and feel what they feel, they can infer that "these people are just like us," facilitating the development of more positive attitudes toward outgroups. This was confirmed by Stephan and Finlay (1999) in their study on the effects of perspective-taking in promoting intergroup positivity.

Third: Many minority groups suffer from discrimination and social stigma. When members of majority groups show empathy toward individuals who face such discrimination, they become more aware of the injustices others experience. This increased awareness may lead to positive attitude changes toward outgroups. Studies by Finlay and Stephan (2000) and Nesdale et al. (2005) confirmed that empathy can improve attitudes toward discriminated groups.

Based on these three reasons, empathic accuracy can enhance positive attitudes toward minority outgroups, as demonstrated by Van Bommel et al. (2020, p. 342).

Certain conditions, however, can affect empathic accuracy. For example, **alexithymia** the inability to identify and describe one's own emotions is associated with decreased empathic accuracy. Considering the importance of the *mirror system* in empathic accuracy, this deficit is logical: individuals who struggle to recognize their own emotions are likely to show reduced brain activity in areas involved in interpreting emotions and understanding others' affective states areas also engaged when recognizing others' feelings. In fact, individuals with alexithymia show reduced mirror system activity when viewing others' facial expressions (Moriguchi et al., 2009, p. 2064).

However, empathic accuracy is not equally beneficial in all contexts. In some situations, understanding others' thoughts and feelings can be stressful and strain social relationships for example, when inferred mental states threaten the self or the relationship (Elfenbein & Ambady, 2002; Simpson et al., 1995), particularly when the other person does not wish to disclose those thoughts or emotions (Elfenbein & Ambady, 2002; Puccinelli & Tickle-Degnen, 2004; Ickes & Hodges, 2013). Similarly, individuals with borderline personality disorder a condition characterized by unstable, conflict-laden relationships display heightened empathic accuracy for thoughts and feelings that threaten relationships with their partners, compared to healthy controls (Riediger&Blanke, 2020, p. 160).

Accordingly, this study seeks to address the following research questions:

1. Are state employees, including male and female teachers, aware of empathic accuracy, and do they apply it in their interpersonal relationships?

Significance of the Study

Individuals with higher empathic accuracy are better able to predict the type of support their partners need and to provide it effectively (Verhofstadt et al., 2008, p. 785).

Social psychology research has focused on the role of empathic accuracy in shaping interpersonal relationships and on individual differences in this ability. Findings indicate that emotional or social closeness enhances the ability to accurately perceive others' emotions. People are more capable of "reading emotional states" that is, identifying and understanding others' emotions through their expressions, tone of voice, and nonverbal behavior when they share a close relationship with them. For instance, one study found that men were more accurate in understanding their friends' emotions than those of strangers (Stinson&Ickes, 1992, p. 788). In romantic relationships, empathic accuracy is higher among couples who feel stable in their relationships; conversely, people tend to misinterpret their partners' emotions when feeling threatened, such as when assessing whether their partner is physically attracted to someone else (Simpson&Blackstone, 1995, p. 629).

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In healthy relationships, empathic accuracy is associated with better social support partners who are more accurate in inferring each other's emotional states are also better at providing tangible assistance, such as material goods or financial help (Verhofstadt et al., 2008, p. 792).

A comprehensive review of adult studies found significant gender differences in empathic accuracy in only three out of ten studies (Graham&Ickes, 1997), with women outperforming men in all three. The level of empathic accuracy is related to how individuals feel about their emotional relationships. However, findings on the role of empathic accuracy in adult relationships have been mixed. Some studies have highlighted the benefits of accurate perceptions (Swann, De La Ronde,&Hixon, 1994) and realistic expectations (McNulty&Karney, 2004), while others emphasized the benefits of positively biased perceptions (Murray, Holmes,&Griffin, 1996) and optimistic expectations (McNulty&Karney, 2002).

Neff and Karney (2005) offered evidence to reconcile these apparent contradictions, showing that most close partners display positively biased perceptions of each other (e.g., viewing the partner as warm), yet the happiest couples tend to have more accurate perceptions of their partners' traits (e.g., recognizing that the partner may engage in conflict).

Research on couples sharing similar emotional orientations found that men who exhibited violent behavior toward their partners performed poorly in identifying their partners' emotional states (Clements, 2007, p. 369).

Two studies by Klein and Hodges (2001) on university students examined conditions under which women outperform men in empathic accuracy tasks (inferring a target's thoughts and feelings). The first study showed that women's advantage appeared only when they were asked to rate their empathic feelings toward the target before performing the accuracy task. The second study found that monetary incentives for accuracy improved performance for both genders and eliminated gender differences altogether. The combined results suggest that gender differences in empathic accuracy stem from motivational differences rather than from inherent ability disparities (Klein&Hodges, 2001, p. 720).

Ickes (1997) noted that subtle differences in empathic inference processes may lead women to display greater empathic accuracy because they are aware that they are being evaluated on their ability to show empathy. Similarly, Eisenberg and Lennon (1983) found that women's perceptions of their emotional abilities may motivate them to demonstrate higher empathy levels a conclusion supported by Klein and Hodges' (2001, p. 720) review.

Eisenberg and Lennon (1983) also found that women react more empathetically than men across various situations, suggesting that women view empathic skills as more integral to their self-concept. If a woman perceives an empathy-related task as an evaluation of her emotional competence, she is more likely to be motivated to perform well, thus achieving higher accuracy than a man completing the same task (Klein&Hodges, 2001, p. 721).

Empathic individuals also tend to be more willing to help others than less empathic individuals, as empathy is positively correlated with helping behavior. This finding was supported by Wilson and Norman (1994, p. 425). Empathy that leads to helping behavior stems from *self–other merging*, where the individual helps another to alleviate personal distress and simultaneously experience happiness (Cialdini et al., 1987, p. 137).

Goleman argues that teachers with high empathy are more likable, socially skilled, and genuinely invested in teaching situations. Conversely, teachers with low empathy tend to be harsh and indifferent to others' needs. Mercer (2005) similarly noted that empathetic teachers can understand others' emotions, act responsibly, and that empathic concern (such as compassion toward people with problems) is a fundamental construct that reduces verbal and physical aggression (Mahmoud, 2022, p. 185).

Al-Obaidi's (2011) findings showed that females were more empathetic than males, with a correlational relationship between empathy and aggressive behavior among participants each variable influencing the other. Batanova and Loukas (2014) found that family and school environments play a crucial protective role against aggressive behavior and that low empathy among females was not associated with aggression (Mahmoud, 2022, p. 185).

In light of the foregoing, the importance of the current study can be summarized as follows:

1. This research focuses on an important segment teachers and educators who play a vital and decisive role in the life of societies and nations.
2. The study provides a modern tool for measuring empathic accuracy, available for use by other researchers interested in examining this construct in relation to different variables.
3. Measuring empathic accuracy among adolescents is crucial, as it can serve as a strong predictor of their performance, given the significant influence this variable has on human behavior and activity in general, and on the study sample in particular.

Research Objectives

The present study aims to:

- Measure the level of *empathic accuracy* among teachers and instructors.

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- Identify statistically significant differences in empathic accuracy according to the following variables: Gender: (male – female).
- Age: (30–40 years), (41–50 years), and (above 50 years).
- Educational qualification: (secondary, bachelor's, postgraduate, other).
- Marital status: (married, single, widowed, divorced).

Research Limits

The current study is limited to male and female teachers and instructors during the academic year 2024–2025, working in primary, intermediate, and secondary schools, distributed across the Al-Karkh Education Directorates (First, Second, and Third) and the Al-Rusafa Education Directorates (First, Second, and Third) in Baghdad.

Definition of Terms

First: Empathic Accuracy

1. **Ickes and Tooke (1988):**
   Defined empathic accuracy as "a measure of the extent to which one person can accurately infer the thoughts and feelings of another person." (W. Ickes&Tooke, 1988, p. 83).
2. **Bentley, Charles George (2010):**
   Defined it as "the individual's ability to infer the thoughts and feelings of another person, facilitated through skills such as observation, cognitive processes, and emotional competence."(Bentley, 2010, p. 30).
3. **Riediger and Blanke (2020):**
   Defined empathic accuracy as "the degree to which an individual understands another person's thoughts and feelings; it is a hallmark of social competence." (Riediger&Blanke, 2020, p. 158).

Theoretical Definition:

The researcher adopted the definition of *Ickes and Tooke (1988)*, which describes empathic accuracy as "a measure of the extent to which one person can accurately infer the thoughts and feelings of another person."

Operational Definition:

The total score obtained by the respondent on the *Empathic Accuracy Scale* developed for the purposes of this study.

Chapter Two

Empathic Accuracy

The term *empathic accuracy* was first introduced in **1988** alongside the concept of *empathic inference* by psychologists **William Ickes** and **William Tooke** (Ickes & Tooke, 1988). Generally, those with high empathic accuracy are regarded as skilled "mind readers." Individuals who possess this ability such as negotiators, lawyers, and police officers tend to perceive subtle cues that others overlook and can sense what is on the minds of those they interact with (Ickes&Tooke, 1988, p. 81).

Since then, research on empathic accuracy has explored its relationship to concepts such as *affect sharing* and *imagination*. To accurately infer another person's psychological state, one must be able both to share that state (affective sharing) and to cognitively label or conceptualize it (imagination). Neuroscientific research has shown that brain activation associated with empathic accuracy overlaps with regions involved in both affect sharing and imagination (Zaki et al., 2009, p. 106).

Empathic accuracy represents one aspect of what **William Ickes** termed **"daily mind reading."** Understanding others' internal states is essential for successful social interaction, while failure in this skill can lead to costly social impairments, as seen in individuals with autism spectrum disorders (Roeyers & Buysse, 2001, p. 271).

Theoretical Models Explaining Empathic Accuracy

1. Ickes and Simpson Model (1997)

Ickes and Simpson (1997) were the first to present a model of empathic accuracy, later revised in 2001 to include more complex predictions concerning the relationship between accuracy, satisfaction, and relational outcomes. They proposed that in most relationship contexts, empathic accuracy predicts greater satisfaction. However, in some cases especially those involving relational threats empathic accuracy might be less beneficial or even harmful (Simpson et al., 2003).

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Ickes and Hodges (2013) further noted that accurate perceptions can benefit both partners by helping them align and coordinate their mutual goals. Interestingly, despite strong theoretical support for the general benefit of accuracy in relationships, the empirical evidence remains surprisingly mixed.

In later studies, couples were instructed to focus their conversations on specific topics such as solving joint problems or providing support to a partner facing a personal issue. Importantly, participants were explicitly directed to make a conscious effort to be as "accurate" as possible in understanding their partners, creating what researchers termed a **"motivated accuracy condition."** This artificially induced focus on accuracy, coupled with the opportunity to review and reflect on recorded conversations, directed individuals' attention more intentionally toward exploring their partners' mental states.

Findings revealed that such directed focus enhanced empathic understanding compared to spontaneous daily interactions, where mutual mental awareness is typically lower (Rafael et al., 2017, p. 355).

Ickes and Simpson (1997) proposed a theoretical model describing the relationship between empathic accuracy and relationship quality. According to the model, the *nature of the topics discussed* whether threatening or non-threatening acts as a mediating variable determining the effect of empathic accuracy on relationship evaluation. Specifically, empathic accuracy correlates positively with relationship quality when neutral or non-threatening topics are discussed (e.g., routine daily matters). Conversely, in discussions involving conflict or relationship threats, empathic accuracy may correlate negatively with satisfaction, as understanding negative emotions or hidden intentions can provoke tension or disappointment.

Thus, the effect of empathic accuracy is **context-dependent**, influenced by the type of interaction and topic being discussed. Because heightened empathic accuracy may reveal unpleasant truths or conflicts that threaten stability, it can sometimes generate emotional distress or relational instability particularly when such topics cannot be avoided or ignored. Consequently, empathic accuracy can sometimes *help* and at other times *harm* close relationships. Experienced partners must therefore learn to **"manage" empathic accuracy** effectively in their daily lives.

The **Ickes and Simpson (1997, 2001)** model was developed to understand and predict when such management occurs and what outcomes it produces. These outcomes include the perceiver's level of empathic accuracy and perceptions of closeness or distance toward their partner (Simpson & Orina, 2003, p. 881).

The model assumes that a perceiver's ability to read the correct cues displayed by the partner and the partner's ability to send such cues sets the upper and lower limits of empathic accuracy during a given interaction. Within these limits, empathic accuracy is influenced by three factors:

(a) whether the situation involves thoughts or feelings of the partner that may cause distress to the perceiver,

(b) the clarity or ambiguity of the cues signaling the partner's mental state, and

(c) the degree to which the perceiver feels threatened by the possible consequences of accurately inferring those thoughts or feelings.

Beyond predicting empathic accuracy, the model also identifies conditions under which empathic accuracy will be positively or negatively associated with feelings of closeness to one's partner (Simpson&Orina, 2003, p. 881).

Simpson et al. (1995) tested the model's predictions by treating empathic accuracy as the dependent variable and later examined how current feelings of closeness function as the outcome variable.

This focus on **perceived closeness** has two major implications:

1. It highlights the connection between empathic accuracy and feelings of intimacy.
2. It recognizes that short-term fluctuations in perceived closeness serve as a real-time indicator ("online measure") of emotional connection within relationships at a specific point in time.

Partners who rarely experience major decreases in closeness during relationship-threatening interactions are likely to enjoy more stable and satisfying relationships. In contrast, those who frequently experience such declines may face short- and long-term relational difficulties (Simpson&Orina, 2003, p. 881).

According to the model, relationship partners should attempt to accurately infer each other's thoughts and feelings during most **routine, non-threatening situations** (e.g., everyday interactions with minimal relational risk). In these benign contexts, empathic accuracy provides constructive insight into the partner and the issues discussed, clarifies potential misunderstandings, prevents future conflict, and facilitates relationship satisfaction and closeness (Ickes & Simpson, 1997, p. 218).

The researcher adopted the **Ickes (2001)** model as the theoretical framework for the present study because it offers a clear conceptualization of the empathic accuracy variable and reflects the most recent developments in the field.

RESEARCH METHODOLOGY

First: Research Methodology

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The researcher adopted the **descriptive–correlational method** in the present study, as this approach is considered one of the most suitable methods in psychology. Through it, relationships between facts related to the studied phenomenon can be identified in order to achieve a deeper understanding of the phenomenon, rather than merely describing it or evaluating it according to certain values and standards (Al-Kilani&Al-Sharifi, 2007, p. 28).

Second: Research Population

The population of the current research consists of **teachers and instructors** in primary, intermediate, preparatory, and secondary schools distributed across the six education directorates of **Al-Karkh (First, Second, and Third)** and **Al-Rusafa (First, Second, and Third)**.

The total number of teachers and instructors in these directorates is **(116,600)**. Table (2) illustrates this distribution.

Table (2) Research Population by Gender and Directorate

%	Total	Gender	Educational Directorates (by Geographical Location)
Females	%	Males	
13,525	5%	5,295	Al-Karkh First
19,679	6%	6,961	Al-Karkh Second
10,258	4%	4,875	Al-Karkh Third
15,098	4%	4,443	Al-Rusafa First
16,792	5%	6,125	Al-Rusafa Second
9,620	3%	3,929	Al-Rusafa Third
84,972	**27%**	**31,628**	**Total**

Third: Research Sample

The researcher used a **purposive sampling method**, which is considered one of the most representative techniques of the original population. The total population was divided into several categories according to specific criteria (gender and directorate). Then, a number of schools were purposefully selected, while others were excluded permanently.

The researcher selected a sample consisting of **(400)** teachers and instructors distributed according to gender and directorate, as shown in Table (3).

Table (3) Research Sample by Gender and Directorate

%	Total	Gender	Educational Directorates (by Geographical Location)
Females	%	Males	
48	5%	20	Al-Karkh First
68	6%	24	Al-Karkh Second
36	4%	16	Al-Karkh Third
52	4%	16	Al-Rusafa First
56	5%	20	Al-Rusafa Second
32	3%	12	Al-Rusafa Third
292	**27%**	**108**	**Total**

Fourth: Research Tool

Empathic Accuracy Scale

After reviewing previous studies and literature related to the topic, such as those of **Ickes (1993); Wieck&Kunzmann (2015); Riediger&Blanke (2020);** and **Richter et al. (2011)** and after corresponding with several Arab and international research centers the researcher did not find an instrument suitable for the current study's population. Therefore, she decided to construct a new scale based on the **model of Ickes&Simpson (1997)**.

The researcher also reviewed relevant theoretical frameworks and online resources to ensure a comprehensive understanding of the construct. The scale of **Empathic Accuracy**, as defined by **Ickes&Tooke (1988)**, is:

"A measure of the extent to which a person can accurately infer the thoughts and feelings of another person." (Ickes&Tooke, 1988, p. 83)

The scale consists of **38 items**, each rated on a **four-point Likert scale** with the following response options: (Strongly Agree, Agree Slightly, Disagree Slightly, Strongly Disagree).

Items are scored **(4, 3, 2, 1)** respectively.

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Table (4) Samples Used in the Preparation of Research Instruments

Application Authority	Purpose	No. of Participants	Sample Type	No.
Ministry of Education (School Administrations in the Education Directorates)	To ensure clarity of the items and instructions, and to determine the time required for respondents to complete the Empathic Accuracy and Personal Intelligence Scales.	50	Pilot Random Sample	1
Ministry of Education (School Administrations in the Education Directorates)	1. To obtain research results. 2. To conduct item analysis for each scale and compute Cronbach's Alpha coefficients for Empathic Accuracy and Personal Intelligence.	400	Main Application Sample	2
Ministry of Education (School Administrations in the Education Directorates)	To compute reliability using the test–retest method.	40	Reliability Sample	3
		490		**Total**

Validity of the Empathic Accuracy Scale Items

To verify the extent to which the items accurately measure the intended construct and their suitability for the Iraqi environment, the researcher presented the preliminary version of the Empathic Accuracy Scale (Appendix 2) to a panel of **11 experts** specialized in psychology (Appendix 1). After analyzing their feedback regarding the validity of the items, **five items were rejected**, while some others were modified according to the experts' recommendations. Items that achieved an **agreement rate of 80% or higher** were considered valid, as this percentage represents the acceptance criterion. Consequently, all items were accepted except for five items (12, 13, 14, 17, and 18). Modifications to certain items are summarized in **Table (6)**, while **Tables (5) and (6)** illustrate these details.

Table (5) Item Numbers and Percentages of Experts' Agreement on the Empathic Accuracy Scale

Item Validity	Approval Percentage	Rejected	Approved	Number of Items	Items	Variable
Valid	100%	0	11	20	1, 2, 3, 4, 5, 7, 8, 9, 10, 13, 14, 17, 18, 19, 20, 25, 26, 32, 37, 38	Empathic Accuracy
Valid	91%	1	10	13	11, 12, 15, 16, 21, 22, 23, 24, 27, 31, 33, 34, 36	
Invalid	75%	3	9	5	6, 28, 29, 30, 35	

Table (6) Modifications to Some Items of the Empathic Accuracy Scale Suggested by the Experts

After Modification	Before Modification	No.
I can recognize others' emotions when I listen to their tone of voice.	I can recognize others' emotions and feelings just by listening to their tone of voice.	1
I interpret others' emotions by observing their behaviors.	I interpret others' emotions through their behaviors.	2
Body language reveals how others feel.	Body language tells me how others feel.	3
I interpret facial expressions accurately.	I interpret facial expressions correctly.	4
I feel sorrow when others talk about their problems.	I feel sad when others talk about their problems.	5
When someone talks about their feelings, I can easily understand them.	When someone talks about feeling depressed, I can usually understand how they feel.	6
I can predict others' emotions.	I have the ability to predict others' emotions.	7
I focus on the speaker's thoughts to understand what they are thinking.	I tend to focus on the speaker's thoughts.	8
I understand others' emotional needs.	I understand my colleagues' emotional needs.	9
I can manage my empathic relationships with others.	I am good at managing my empathic relationships with others.	10
Other people tell me that I understand what they feel.	Other people tell me that I understand what they feel and think.	11
When my friend is upset, I try to find out the reason for his annoyance.	If my friend is upset, I try to find out the reason for his annoyance.	12
I find myself in harmony with others' emotions.	I find myself in harmony with others' feelings.	13
I have the ability to detect my friends' emotions.	I have the ability to detect my friends' feelings.	14
I can tell what others feel just by looking at them.	I know others' emotions before they express them.	15
I can easily distinguish genuine emotions.	I can easily distinguish between genuine and insincere emotions.	16
I know how my friends feel.	I want to know how my friends feel.	17

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All experts suggested modifying the response alternatives from a **four-point** to a **five-point Likert scale**, assigned weights of **(5, 4, 3, 2, 1)** corresponding to the options *(Always, Often, Sometimes, Rarely, Never)*. Accordingly, the researcher reformulated some items linguistically as recommended by the experts, and the final response format was changed to a five-point scale.

Pilot Study: Clarity of Instructions and Items

To assess the clarity of the instructions, items, and response options of the Empathic Accuracy Scale and to identify any difficulties that respondents might encounter, as well as to estimate the time needed to complete the scale the researcher administered it to a **pilot sample of 50 teachers (males and females)**. The results showed that the instructions and items were clear, and the average completion time ranged between **16–20 minutes**.

Statistical Analysis

Psychometric Properties of the Items

The researcher computed the psychometric properties of the scale's items as follows:

A. Discrimination Power of the Items (Extremes Group Method)

To determine the discriminative power of each item statistically, aiming to retain the most discriminating items, the scale was administered to a **statistical analysis sample of 400 teachers**. The **extreme groups method** was used, as follows:

The total scores for all participants were arranged in descending order. The top **27%** of the scores (108 participants) represented the **upper group**, and the bottom **27%** (108 participants) represented the **lower group**, totaling **216 respondents**. This method was used to maximize the possible variance between groups (Anastasi, 1976, p.208).

To find the discrimination power of each item, an **independent samples t-test** was applied to compare the upper and lower groups' means for each item. A computed *t*-value greater than the tabulated *t*-value of **1.96** (at the 0.05 significance level and 214 degrees of freedom) indicated that the item was discriminative. The results revealed that all items of the scale were statistically significant, as shown in **Table (7)**.

(**Table 7:** Discrimination Power of Empathic Accuracy Scale Items – omitted here for brevity but can be included upon request.)

B. Internal Consistency

To calculate the internal consistency of the scale's items, **Pearson's correlation coefficient** was computed between each item and the total score using responses from the same statistical analysis sample (N = 400). The analysis was conducted via the **SPSS** software package.

All computed correlation coefficients were statistically significant, exceeding the tabulated value of **0.098** at the **0.01 significance level** with **398 degrees of freedom**, indicating that all items were internally consistent. **Table (8)** illustrates these results.

(**Table 8:** Correlation Coefficients Between Each Item and the Total Score – omitted here for brevity but can be added if required.)

Psychometric Properties of the Empathic Accuracy Scale

To ensure the adequacy of the Empathic Accuracy Scale for use in the present study, two fundamental psychometric properties were examined: **validity** and **reliability**. These are essential for confirming that the scale accurately measures the construct for which it was designed.

Validity

Validity is one of the most crucial concepts in psychometric testing. It refers to the extent to which a test measures what it purports to measure. The validity of the current scale was verified through several methods, as explained in the following sections.

(a) Face Validity

This type of validity for the **Empathic Accuracy Scale** was established, as shown in Table (5), through its presentation to a panel of experts who evaluated the appropriateness of the scale items and the clarity of its instructions (Appendix 1). Based on their opinions, the scale and its instructions were approved, with some modifications made to certain items and the exclusion of a few others.

(b) Construct Validity

The researcher verified the **construct validity** of the Empathic Accuracy Scale by calculating the correlation between each item and the total score of the scale, and by distinguishing the items, as shown in Tables (7) and (8).

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Scale Reliability

To determine the **reliability** of the Empathic Accuracy Scale, the researcher employed two methods:

First: Test-Retest Method

To calculate reliability using this method, the scale was administered to a **reliability sample** of (50) male and female teachers who were selected randomly. After a two-week interval from the first administration, the scale was reapplied to the same group. Their responses were then scored, and the **Pearson correlation coefficient** between the two sets of scores was computed. The reliability coefficient was found to be **(0.84)**, which is considered good according to the criterion of shared variance (Lindquist, 1988, p. 57).

Second: Cronbach's Alpha Coefficient for Internal Consistency

To extract reliability using this method, **Cronbach's Alpha formula** was applied to the responses of the statistical analysis sample, which consisted of (400) participants. The reliability coefficient obtained was **(0.87)**, which is an acceptable and high value, indicating that the scale demonstrates strong internal consistency (Cronbach, 1970, p. 63).

Statistical Indicators of the Empathic Accuracy Scale

The researcher calculated the statistical indicators such as **means**, **standard deviations**, **variance**, **skewness**, and **kurtosis** for the teachers' scores on the Empathic Accuracy Scale. Table (9) presents these results.

Table (9) *Statistical Indicators for the Empathic Accuracy Scale (Statistical Analysis Sample)*

Value	Statistical Indicators
121.9925	Arithmetic Mean
124.000	Median
123.00	Mode
17.07708	Standard Deviation
291.627	Variance
-0.688	Skewness
1.079	Kurtosis
36.00	Minimum Score
160.00	Maximum Score
124.00	Range

Upon examining the values of the above statistical indicators for the Empathic Accuracy Scale, it is evident that these indicators are consistent with those typically found in scientifically valid scales.

FIRST: PRESENTATION OF RESULTS

The results can be presented as follows:

1. First Objective: Measuring Empathic Accuracy Among Teachers

To achieve this objective, the researcher administered the Empathic Accuracy Scale, consisting of (33) items, to the research sample of (400) employees. The results indicated that the mean score for this sample was 121.9925 with a standard deviation of 17.077.

A **one-sample t-test** was conducted to compare the sample mean with the hypothesized mean of the scale. The results showed a **calculated t-value of 26.9279** with **399 degrees of freedom** at the significance level of **0.05**, while the hypothesized mean was (99). This indicates that the empathic accuracy among teachers is **high**, as shown in Table (10) and Figure (2).

Table (10) *One-Sample t-Test for the Empathic Accuracy Scale (Research Sample)*

Significance	df	t-table	t-calculated	Hypothesized Mean	Std. Deviation	Mean	N
Significant	399	1.96	26.9279	99	17.077	121.9925	400

Figure (2) Comparison of Sample Mean and Hypothesized Mean for the Empathic Accuracy Scale

Table (10) and Figure (2) indicate that employees scored **higher than the hypothesized mean** on the Empathic Accuracy Scale. This result aligns with **Ickes (2003)**, who stated that when individuals attempt to infer others' thoughts and feelings, empathic accuracy reflects the success of everyday mind-reading attempts (Ickes, 1997, 2003).

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These findings also correspond with **Rafaeli et al. (2017)**, which highlighted accuracy levels based on daily life measures rather than laboratory results, emphasizing the importance of daily empathic accuracy.

However, the results differ from **Simpson et al. (1993)**, who found that empathic accuracy was particularly low among couples perceiving their empathy as insecure or threatened, which may lead individuals to be less accurate in recognizing their partners' attraction toward potential alternative partners.

2. Second Objective: Examining Differences in Empathic Accuracy According to

a. **Gender** (Male, Female)
b. **Age** (30–40 years, 41–50 years, 50 years and above)
c. **Educational Attainment** (Diploma, Bachelor's, Graduate Studies)
d. **Marital Status** (Married, Single, Widowed, Divorced)

The researcher computed the **mean scores of empathic accuracy** for the research sample (400 teachers). After statistical analysis using **Four-Way ANOVA**, differences in empathic accuracy based on gender were observed, as shown in Table (11).

Table (11) *Means and Standard Deviations of Empathic Accuracy by Demographic Variables*

Std. Deviation	Mean	N	Category	Variable
15.5342	133.3982	113	Male	Gender
15.5149	117.5017	287	Female	
16.10635	106.1467	150	30–40	Age
7.61920	122.1840	163	41–50	
6.0970	138.6781	87	50+	
11.40369	125.2310	329	Married	Marital Status
14.94497	126.2647	34	Widowed	
8.87796	111.7273	11	Divorced	
23.63270	79.7692	26	Single	
9.29272	135.0376	133	Diploma	Education
7.50388	122.3184	179	Bachelor's	
20.26799	101.6136	88	Graduate	

Table (11) shows noticeable variation in means and standard deviations of empathic accuracy across demographic variables. To determine **statistical significance**, **Four-Way ANOVA** was used, as shown in Table (12).

Table (12) *Four-Way ANOVA for Empathic Accuracy According to Gender, Age, Marital Status, and Education*

F-table (0.05)	F-calculated	Mean Square	df	Sum of Squares	Source of Variance
3.867	19.153	861.647	1	861.647	Gender
3.020	44.999	2024.428	2	4048.857	Age
2.629	73.875	3323.522	3	9970.567	Marital Status
3.020	1.023	46.045	2	92.089	Education
3.020	3.042	136.872	2	273.745	Gender * Age
3.020	16.663	749.640	2	1499.279	Gender * Marital Status
3.020	1.659	74.640	2	149.279	Gender * Education
2.629	0.606	27.270	3	81.811	Age * Marital Status
2.629	3.041	136.800	3	410.399	Age * Education
2.396	1.389	62.485	4	249.940	Marital Status * Education
2.629	1.103	49.620	3	148.860	Gender * Age * Marital Status * Education
		44.988	372	16735.602	Error
			399	116358.977	Total

It is evident from Table (12) that statistically significant differences exist in empathic accuracy scores based on gender, with the F-calculated = 19.153 exceeding the F-table value (3.867). The difference favored males, whose mean score (133.3982) was higher than females (117.5017).

This result aligns with Stinson&Ickes (1992), where men were better at reading friends' emotional states than strangers, but differs from Klein&Hodges (2001) and Ickes, Gesn,&Graham (2000), which found either women performed better or no gender difference existed, influenced by social norms and motivational factors.

Age Differences: The F-calculated = 44.999 exceeded the F-table value (3.020), indicating significant differences by age. Post-hoc Scheffé tests (Table 13) showed differences favoring older age groups.

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Table (13) *Scheffé Post-Hoc Comparisons for Age*

Significance	Critical Value	Scheffé	Mean	N	Category	Comparison
Significant, favoring 41–50	2.461	-16.0370	106.1467 / 122.1840	150/163	30–40 vs 41–50	1
Significant, favoring 50+	2.467	-32.5314	106.1467 / 138.6781	150/87	30–40 vs 50+	2
Significant, favoring 50+	2.467	-16.4941	122.1840 / 138.6781	163/87	41–50 vs 50+	3

These findings align with **Riediger & Rauers (2014)**, who reported older adults experience more positive and less negative emotions in daily life compared to younger adults.

Marital Status Differences: **F-calculated = 73.875** > F-table (2.629), with post-hoc Scheffé tests (Table 14) showing scores highest among **married**, followed by **widowed**, **divorced**, and **single** individuals. The researcher interprets this as married individuals having greater emotional stability, widowed individuals gaining empathic clarity from life experience, divorced individuals affected by psychological stress, and singles potentially facing challenges in emotional expression.

Education Differences: No significant differences were observed (**F-calculated = 1.023<F-table 3.020**), suggesting that empathic accuracy is **not necessarily related to educational attainment**, but rather to life experiences and social interactions.

Interaction Effects:

- No significant differences for Gender * Age, Gender * Education, Age * Marital Status, Marital Status * Education, or Gender * Age * Marital Status * Education.
- Significant differences were found for Gender * Marital Status (F = 16.663>3.020) and Age * Education (F = 3.041>2.629).

These findings are consistent with previous research emphasizing **motivational and contextual factors** in empathic accuracy (Eisenberg & Lennon, 1983; Klein & Hodges, 2001).

RECOMMENDATIONS

1. Provide training to help employees recognize **nonverbal cues** (e.g., body language, facial expressions, tone of voice) that indicate others' emotions.
2. Create an **open work environment** encouraging employees to express their emotions honestly without fear of judgment.

SUGGESTIONS FOR FUTURE RESEARCH

1. Investigate the relationship between empathic accuracy and work performance.
2. Conduct a study on how empathic accuracy affects interpersonal relationships among employees in multicultural teams.

REFERENCES

Al-Abidi, Afraa Ibrahim. 2011. "The Correlational Nature of the Relationship Between Empathy and Aggressive Behavior: A Field Study Among Middle School Students in Baghdad." *Damascus University Journal* 27 (4): 131–164.

Al-Kilani, Abdullah, and Nidal Kamal Al-Sharifi. 2007. *Introduction to Research in Educational and Social Sciences.* Amman, Jordan: Dar Al-Masra.

Mahmoud, Hala Shaaban. 2022. "Psychometric Properties of the Empathy Scale as Perceived by Primary School Students." *Educational and Social Studies Journal*, 28 (3), January 2022.

Batanova, M., and A. Loukas. 2014. "Unique and Interactive Effects of Empathy, Family, and School Factors on Early Adolescents' Aggression." *Journal of Youth and Adolescence* 43 (11): 1890–1902.

Batson, C. D., B. D. Duncan, P. Ackerman, T. Buckley, and K. Birch. 1981. "Is Empathic Emotion a Source of Altruistic Motivation?" *Journal of Personality and Social Psychology* 40: 290–302. https://doi.org/10.1037//0022-3514.40.2.290.

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Batson, C. D., B. D. Duncan, P. Ackerman, T. Buckley, and K. Birch. 1989. "Is Empathy-Induced Helping Due to Selfless Concern or Egoism?" *Journal of Personality and Social Psychology* 55 (1): 19–27.

Batson, C. D., M. P. Polycarpou, E. Harmon-Jones, H. J. Imhoff, E. C. Mitchener, L. L. Bednar, T. R. Klein, and L. Highberger. 1997. "Empathy and Attitudes: Can Feeling for a Member of a Stigmatized Group Improve Feelings Toward the Group?" *Journal of Personality and Social Psychology* 72 (1): 105–118.

Bentley, Charles George. 2010. *Does Empathic Accuracy Mediate the Relationships Between Individual Psychological Characteristics and Adolescent Romantic Relationship Functioning?* All Graduate Theses and Dissertations, 542. https://digitalcommons.usu.edu/etd/542.

Cialdini, R. B., et al. 1987. "Empathy-Based Helping: Is It Selflessly or Selfishly Motivated?" *Journal of Personality and Social Psychology*: 749–758.

Clements, K., A. Holtzworth-Munroe, W. Schweinle, and W. Ickes. 2007. "Empathic Accuracy of Intimate Partners in Violent Versus Nonviolent Relationships." *Personal Relationships* 14 (3): 369–388. https://doi.org/10.1111/j.1475-6811.2007.00161.x.

Cronbach, L. J. 1970. *Essentials of Psychological Testing*. New York: Harper & Brothers.

Eisenberg, N., and R. Lennon. 1983. "Sex Differences in Empathy and Related Capacities." *Psychological Bulletin* 94: 100–131.

Ickes, W. 1997. *Empathic Accuracy*. New York: Guilford Press.

Ickes, W. 2001. "Measuring Empathic Accuracy." In J. A. Hall and F. J. Bernieri (Eds.), *Interpersonal Sensitivity: Theory and Measurement* (pp. 219–241). Mahwah, NJ: Erlbaum.

Ickes, W. 2003. *Everyday Mind Reading: Understanding What Other People Think and Feel.* Amherst, NY: Prometheus Books. ISBN 9781591021193.

Ickes, W., and J. A. Simpson. 1997. "Managing Empathic Accuracy in Close Relationships." In W. J. Ickes (Ed.), *Empathic Accuracy* (pp. 218–250). New York: Guilford Press.

Ickes, W., and S. D. Hodges. 2013. "Empathic Accuracy in Close Relationships." In A. Simpson and L. Campbell (Eds.), *The Oxford Handbook of Close Relationships* (pp. 348–373). London: Oxford University Press.

Ickes, W., A. Buysse, H. Pham, K. Rivers, J. R. Erickson, et al. 2000. "On the Difficulty of Distinguishing 'Good' and 'Poor' Perceivers: A Social Relations Analysis of Empathic Accuracy Data." *Personal Relationships* 7: 219–234. https://doi.org/10.1111/j.1475-6811.2000.tb00013.x.

Ickes, W., and W. Tooke. 1988. "The Observational Method: Studying the Interactions of Minds and Bodies." In S. Duck et al. (Eds.), *Handbook of Personal Relationships: Theory, Research, and Interventions* (pp. 79–97). Chichester: Wiley.

Ickes, W. 1993. "Empathic Accuracy." *Journal of Personality* 61 (4). Duke University Press.

Klein, K. J., and S. D. Hodges. 2001. "Gender Differences, Motivation, and Empathic Accuracy: When It Pays to Understand." *Personality and Social Psychology Bulletin* 27 (6): 720–730. https://doi.org/10.1177/0146167201276007.

Lindquist, E. F. 1988. *Educational Measurement*. Washington, DC: American Association.

McNulty, J. K., and B. R. Karney. 2002. "Expectancy Confirmation in Appraisals of Marital Interactions." *Personality and Social Psychology Bulletin* 28: 764–775.

Mercer, A. 2005. "The Relationship Between Empathic Concern and Perspective Taking to Physical Verbal Aggression." Western Washington University. http://myweb.students.www.edu.mercer.empathy.paper2.ht.

Moriguchi, Y., T. Ohnishi, J. Decety, M. Hirakata, M. Maeda, H. Matsuda, and G. Komaki. 2009. "The Human Mirror Neuron System in a Population With Deficient Self-Awareness: An fMRI Study in Alexithymia." *Human Brain Mapping* 30 (7): 2063–2076. https://doi.org/10.1002/hbm.20653.

Murray, S. L., J. G. Holmes, and D. W. Griffin. 1996. "The Benefits of Positive Illusions: Idealization and the Construction of Satisfaction in Close Relationships." *Journal of Personality and Social Psychology* 70: 79–98.

Neff, L. A., and B. R. Karney. 2005. "To Know You Is to Love You: The Implications of Global Adoration and Specific Accuracy for Marital Relationships." *Journal of Personality and Social Psychology* 88 (3): 480–497. https://doi.org/10.1037/0022-3514.88.3.480.

Puccinelli, N. M., and L. Tickle-Degnen. 2004. "Knowing Too Much About Others: Moderators of the Relationship Between Eavesdropping and Rapport in Social Interaction." *Journal of Nonverbal Behavior* 28: 423–443. https://doi.org/10.1007/s10919-004-4157-8.

Rafaeli, E., Reuma Gadassi, Maryhope Howland, and Ayelet Boussi. 2017. "Seeing Bad Does Good: Relational Benefits of Accuracy Regarding Partners' Negative Moods." *Motivation and Emotion* 41: 353–369. https://doi.org/10.1007/s11031-017-9614-x.

Riediger, M., and A. Rauers. 2014. "Do Everyday Affective Experiences Differ Throughout Adulthood? A Review of Ambulatory-Assessment Evidence." In *The Oxford Handbook of Emotion, Social Cognition, and Everyday Problem Solving During Adulthood*, 61–82. London: Oxford University Press.

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Riediger, M., F. Schmiedek, G. Wagner, and U. Lindenberger. 2009. "Seeking Pleasure and Seeking Pain: Differences in Pro- and Contra-Hedonic Motivation from Adolescence to Old Age." *Psychological Science* 20: 1215–1223. https://doi.org/10.1111/j.1467-9280.2009.02473.x.

Riediger, M., M. Studtmann, A. Westphal, A. Rauers, and H. Weber. 2014a. "No Smile Like Another: Adult Age Differences in Identifying Emotions That Accompany Smiles." *Frontiers in Psychology* 5: 480. https://doi.org/10.3389/fpsyg.2014.00480.

Riediger, M., M. Voelkle, N. C. Ebner, and U. Lindenberger. 2011. "Beyond 'Happy, Angry, or Sad?': Age-of-Poser and Age-of-Rater Effects on Multi-Dimensional Emotion Perception." *Cognition and Emotion* 25: 696–682. https://doi.org/10.1080/02699931.2010.540812.

Riediger, M., C. Wrzus, G. G. Wagner. 2014b. "Happiness Is Pleasant, or Is It? Implicit Representations of Affect Valence Are Associated With Contra-Hedonic Motivation and Mixed Affect in Daily Life." *Emotion* 14: 595–611. https://doi.org/10.1037/a0037711.

Simpson, J., M. Oriña, and W. Ickes. 2003. "When Accuracy Hurts, and When It Helps: A Test of the Empathic Accuracy Model in Marital Interactions." *Journal of Personality and Social Psychology* 85: 881–893. https://doi.org/10.1037/0022-3514.85.5.881.

Simpson, J. A., W. Ickes, and T. Blackstone. 1995. "When the Head Protects the Heart: Empathic Accuracy in Dating Relationships." *Journal of Personality and Social Psychology* 69 (4): 629–641. https://doi.org/10.1037/0022-3514.69.4.629.

Simpson, J. A., G. J. O. Fletcher, and L. Campbell. 2001. "The Structure and Function of Ideal Standards in Close Relationships." In *Blackwell Handbook of Social Psychology: Interpersonal Processes*, eds. G. J. O. Fletcher and M. S. Clark, 86–106. Oxford, UK: Blackwell Publishers.

Van Bommel, Ghislaine, Jochem Thijs, and Marta Miklikowska. 2020. "Parallel Empathy and Group Attitudes in Late Childhood: The Role of Perceived Peer Group Attitudes." *Motivation and Emotion*, 44: 337–350.

Verhofstadt, L. L., A. Buysse, W. Ickes, M. Davis, and I. Devoldre. 2008. "Support Provision in Marriage: The Role of Emotional Similarity and Empathic Accuracy." *Emotion* 8: 792–802. https://doi.org/10.1037/a0013976.

Wilson, N., and G. Norman. 1994. "Effects of Perceived Attractiveness and Feminist Orientation on Helping Behavior." *The Journal of Social Psychology* 125 (4): 415–420.

Zaki, J., N. Weber, K. Bolger, and K. Ochsner. 2009. "The Neural Bases of Empathic Accuracy." *Proceedings of the National Academy of Sciences USA* 106: 11382–11387.

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