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School counseling in the digital ERA: Empowering empathy through psychosocial guidance and educational technology integration

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Abstract: Nursing education in Indonesia continues to expand, particularly at the vocational level, where students are trained in both clinical and non-clinical skills. Empathy and self-esteem are essential psychological traits that support nurses in providing high-quality care and maintaining emotional stability. While self-esteem was once viewed as a static trait, current understanding recognizes it as dynamic and influential in shaping identity, motivation, and mental well-being. Religiosity and social support play significant roles in enhancing emotional regulation, reducing aggression, and fostering empathy among nursing students. This study aims to explore the influence of religiosity, social support, and self-esteem on the empathy levels of vocational nursing students. Employing a quantitative descriptive approach, the research utilized adapted questionnaires to measure the variables of religiosity, social support, self-esteem, and empathy. Data analysis involved descriptive statistics and Structural Equation Modeling with Partial Least Squares (SEM-PLS) to assess the relationships among variables and test the proposed hypotheses. The results support all hypotheses, indicating that religiosity, social support, and self-esteem each positively influence empathy. Religiosity has a modest but positive impact, functioning mainly as a supplementary factor in developing empathic behavior. Social support demonstrates a stronger influence by promoting emotional connection and a sense of belonging. Selfesteem emerges as the most significant factor, substantially enhancing emotional responsiveness and empathy. Collectively, these three variables explain 56.7% of the variance in empathy, underscoring the importance of internal psychological traits and social factors in fostering empathy among nursing students. The findings highlight the need for educational strategies that strengthen self-esteem, social support networks, and spiritual engagement to cultivate more empathetic healthcare professionals.

Keywords: Empathy, Religiosity, Self-esteem, Social support.

1. Introduction

Higher education in Indonesia has experienced significant developments, particularly in the field of psychosocial protection and services. Vocational High Schools (SMK) specializing in nursing are a primary choice for students interested and talented in the healthcare sector. Vocational education focuses not only on mastering clinical and non-clinical skills but also on strengthening character and social-emotional capacities, particularly empathy, which is essential for service practice and interpersonal interactions. In the current digital era, the integration of information technology into the education system has also become a necessity, including in guidance and counseling practices in schools. This requires a new approach that combines technology with training in social and emotional values.

Khan and Butt [1] describe a profession threatened by two important positive character traits: forgiveness and empathy. These two traits are key pillars in maintaining personal and social well-being, as well as the quality of service. Without adequate empathy, high workloads and emotional stress will make it difficult for individuals—both nurses and students—to manage negative emotions, which can ultimately lead to a decline in the quality of interactions and communication. Yun and Yoo [2] explain

that empathy allows one to respond to a perpetrator with a broader perspective, replacing negative attributions with deeper understanding. In educational settings, this skill is crucial for students to build healthy and resilient social relationships, especially in a dynamic digital ecosystem prone to interpersonal conflict.

One aspect that forms a crucial foundation for strengthening empathy is self-esteem. Huang, et al. [3] explain that self-esteem was previously considered stable, but recent research shows that it can fluctuate in certain situations and can be improved through appropriate psychosocial strategies. Self-esteem plays a crucial role in the formation of an individual's identity and motivation, ultimately influencing how they understand and respond to the emotions of others. In a digital context, where social interactions often occur online, self-identity and perceptions of the environment become increasingly complex. Therefore, it is crucial for educational institutions to build a strong emotional foundation for students to prevent them from being easily swayed by social media pressures or unrealistic social standards.

Forgiveness, as a form of emotional regulation and response to psychological wounds, does not occur instantly but rather through a long and in-depth process Sansone, et al. [4]. Duru, et al. [5] emphasize that in both nursing and educational contexts, it is crucial to understand that the forgiveness process requires time, support, and supportive psychological and social conditions. This is where the crucial role of school guidance and counseling lies, being not only responsive but also proactive in creating healthy psychosocial spaces for students. The transformation of the school counselor's role in the digital age includes utilizing online counseling platforms, using app-based educational media, and developing digital reflection spaces to help students process their emotional experiences positively.

Bayın and Kaya [6] stated that internal support such as religiosity, as well as external support in the form of social assistance from family, friends, or the community, play a crucial role in assisting individuals through difficult emotional processes. In the context of technology-based education, this form of support can be adapted through structured digital media, for example, through online mentoring groups, app-based counseling programs, or digital modules that integrate spiritual and social values contextually. Wu, et al. [7] emphasized that social support is a key protective factor against stress and aggression. Amid increasing social isolation due to passive technology use, schools need to ensure that the use of technology in education also includes components that strengthen social connections and empathy.

Religiosity has also been shown to be associated with reduced prejudice, increased meaning in life, and enhanced empathic capacity [8, 9]. However, in a contextualized educational approach, these spiritual values need to be integrated in an inclusive and transformative manner through information technology-based school counseling practices. Practices such as online spiritual reflection, values-based counseling, and empathy training through digital media are innovations that enable these values to remain present and effective in shaping students' character in the technological era.

Based on this explanation, this study seeks to examine how school counseling in the digital era can play a role in shaping and strengthening students' empathy. Emphasis is placed on the integration of psychosocial strategies and the use of information technology, without focusing solely on the relationship between variables. By examining students' emotional dynamics in the digital education ecosystem, it is hoped that the results of this study can provide practical contributions to the development of adaptive, empathetic, and technology-based school counseling programs.

2. Literature Review

2.1. Empathy and Its Role in School Counseling

Empathy is defined as the tendency to indirectly experience the emotional states of another individual [10]. Empathy is also defined as the act of understanding, experiencing, and responding to the emotional states and ideas of another person [11]. Empathy is the cognitive and emotional understanding of another person's experience, resulting in an emotional response that is consistent with the view that the other person is worthy of compassion and respect Barnett and Mann [12]. Berti and

Cigala [13] define empathy as a congruent, other-focused emotion produced by witnessing another person's suffering involving feelings such as sympathy, compassion, and tenderness.

Mefford, et al. [8] defines empathy as the affective capacity to feel another person's feelings and the cognitive capacity to understand that person's perspective. This ability allows one to respond appropriately to the feelings and needs of others, both in real and imagined contexts Sansone, et al. [4].

Geer, et al. [14] describes empathy more simply as the ability to understand another person's point of view, experience another person's emotions, and behave compassionately towards another person. Empathy involves cognitive and emotional components where through the cognitive empathy component, a person is able to take another person's perspective; through the emotional empathy component, individuals feel as if they are sharing another person's emotional experience [15].

Based on several understandings written above, empathy can be conceptually defined as the emergence of emotional feelings, understanding, recognizing and interpreting the feelings or experiences of others and the cognitive ability to understand the person's point of view which is then projected into an action.

Empathy is a complex process consisting of various cognitive and emotional aspects that allow someone to understand and feel the condition of others. Davis developed an empathy model consisting of four main dimensions, namely Perspective taking, Fantasy, Empathic Concern, and Personal distress [16]. These four dimensions contribute to the development of adaptive social responses and are the basis for building healthy interpersonal interactions, especially in the field of nursing.

a. Perspective taking

Perspective taking refers to a person's ability to understand the perspective, thoughts, and feelings of others by seeing the situation from their point of view. This dimension is more cognitive than emotional, because it involves the thought process of putting oneself in someone else's shoes [13].

b. Fantasy

The Fantasy dimension describes a person's tendency to become emotionally involved with characters in stories, films, or other imaginative situations. People with high levels of Fantasy are more likely to feel the emotions of characters they read about in books or watch in movies, which in turn can increase their capacity to understand other people's feelings in real life [12].

c. Empathic Concern

Empathic Concern refers to feelings of sympathy and concern for others who are experiencing difficulties or suffering. This dimension is more affective than Perspective taking, because it involves an emotional response to the condition of others [17].

d. Personal distress

Personal distress refers to the negative affective response that arises when someone sees others in painful or stressful situations. Unlike Empathic Concern which is oriented towards others, Personal distress is more focused on the individual's reaction to the suffering of others. Someone with high levels of Personal distress tends to feel anxious, depressed, or uncomfortable when witnessing the suffering of others, which can hinder his or her ability to provide effective assistance [18].

2.2. Psychosocial Foundations of Empathy in School Counseling

Empathy, as the foundation of social relationships, is determined not only by the cognitive ability to understand another person's perspective, but also by the psychosocial dynamics that shape how individuals view themselves and their environment. In the educational context, particularly in guidance and counseling services, understanding factors such as self-esteem, social support, and religiosity is crucial to supporting the development of healthy and sustainable empathy. All three serve as emotional foundations that strengthen students' capacity to respond to their social surroundings with appropriate sensitivity, concern, and emotional resilience.

Self-esteem is a psychological aspect that plays a crucial role in the formation of students' identity and social functioning. Individuals with high self-esteem tend to be more open, confident, and able to respond positively to the emotional experiences of others. According to Rosenberg, self-esteem reflects an individual's attitude toward themselves, encompassing acceptance, appreciation, and respect for themselves [19]. Coopersmith also adds that self-esteem is formed from experiences of success, social recognition, and values received from the surrounding environment [20]. Within the framework of school counseling, students with high self-esteem typically demonstrate open communication and find it easier to build empathetic interpersonal relationships. Conversely, students with low self-esteem often experience social anxiety, feelings of worthlessness, and difficulty understanding others' feelings, thus hindering the development of healthy empathy [21].

Furthermore, social support plays an equally important role in developing students' empathy. Support from family, peers, and the school environment can create a sense of security, acceptance, and appreciation, which psychologically strengthens students' tendency to understand and help others. Li, et al. [22] explain that social support can take the form of emotional support, information, or tangible assistance, all of which can enhance an individual's psychological resilience. Cohen [23] classifies social support into four forms: appraisal support, tangible support, self-esteem support, and belonging support, all of which impact psychosocial health [24]. In the context of digital education, social support can also be provided through online platforms, virtual learning communities, and technology-based counseling forums, allowing students to stay emotionally connected even when they are not physically present.

Religiosity also plays a crucial role in strengthening empathy, particularly through the moral and spiritual values taught in various religious traditions. Individuals who make religious teachings an intrinsic part of their lives tend to have a strong moral motivation to show compassion, care, and understanding toward others. Glock & Stark state that religiosity encompasses ideological, ritualistic, intellectual, and consequential dimensions, all of which can influence a person's social behavior [25]. Allport distinguishes between intrinsic religiosity—where religion is part of a person's moral identity—and extrinsic religiosity, which is more instrumental. Individuals with intrinsic religiosity generally exhibit higher levels of empathy because the values of compassion and social concern are ingrained in their moral consciousness [26].

A study by Mefford, et al. [8] showed that religious behavior, such as praying for those who have hurt us, can reduce aggression and improve emotional control. Łowicki and Zajenkowski [9] also found that religious individuals have higher levels of empathic concern due to a spiritual drive to care for others. In school counseling practices, these religiosity values can be used as a source of internal strength to help students develop empathy, especially when facing conflict or emotional distress. Integrating spiritual values into counseling, whether through face-to-face sessions or digital platforms, can be an inclusive and in-depth approach to strengthening the affective aspect of students' social relationships.

Thus, the development of empathy in students cannot be separated from a psychosocial framework that encompasses how they assess themselves, perceive support from their environment, and internalize moral and spiritual values. These three aspects are not independent variables, but are interconnected in shaping students' mindsets and social responses. In school counseling practices that are adaptive to changing times, it is important for educators and counselors to understand these dynamics in order to design interventions that are not only informative, but also transformative, especially amidst the integration of information technology in educational services.

2.3. Technology-Enhanced School Counseling and Empathy Development

The digital transformation sweeping the world of education has also driven a paradigm shift in school guidance and counseling practices. In the digital era, counseling is no longer limited to face-to-face meetings between counselors and students, but has expanded into virtual interactions that are more flexible and responsive to students' emotional needs. The integration of information technology into counseling services offers significant opportunities to expand reach, accelerate response processes, and

enrich intervention methods. In the context of developing empathy, the use of technology enables the creation of a social-emotional learning ecosystem that is more interactive, personalized, and adaptive to the digital native characteristics of today's students [27].

One prominent form of technology integration in school counseling is the use of e-counseling, or online counseling. Through this platform, students can access counseling services flexibly, either through text messages, video calls, or through a Learning Management System (LMS). Digital features such as discussion forums, personal reflection spaces, and self-assessment of emotions allow students to explore their feelings more safely and privately. In this regard, technology serves not only as a communication tool but also as a medium that facilitates the process of reflection and affective learning, which are closely linked to increased empathy. Technology-based interventions designed with empathetic principles can help reduce students' emotional barriers to expressing feelings, ultimately strengthening their ability to understand others' emotions [28].

On the other hand, technology integration also enables teachers and counselors to develop digital-based social-emotional learning (SEL) curricula. Through this approach, empathy is not only discussed in the counseling room but also becomes part of the teaching and learning process. Interactive platforms featuring social conflict simulations, emotion-based educational games, and instructional videos on empathy skills have been shown to increase student engagement and deepen their understanding of others' feelings. Technology-based approaches to developing empathy allow students to experience emotional situations from different perspectives imaginatively and cognitively, thereby simultaneously strengthening the affective components of empathy and perspective-taking [29].

However, the use of technology in counseling is not without its challenges. One major obstacle is the limited direct emotional connection between counselors and students, which in many cases is a crucial element in establishing trust and comfort. Screen-based interactions have the potential to reduce the non-verbal nuances needed to read empathetic expressions. Furthermore, limited digital emotional literacy among students and educators can also lead to miscommunication or misunderstandings in interpreting emotions. Therefore, the success of technology in increasing empathy depends heavily on the humanistic, structured, and contextual design of the intervention, as well as the counselor's ability to maintain the quality of interpersonal relationships virtually [307].

Emotional digital literacy is a crucial aspect of strengthening empathy in the digital age. Students need to be equipped with the skills to understand the emotional dynamics that emerge in online communication, including how to express empathy verbally and in writing, understand the emotions implied in digital messages, and respond constructively to online conflict. In this context, the role of counselors as digital literacy facilitators is crucial. Counselors can design digital emotional literacy training programs that include online conversation simulations, analysis of emotional narratives in social media, and learning about empathetic responses in digital forums. Such programs not only improve students' empathic skills but also strengthen their ability to build healthy relationships in an increasingly complex digital space [31].

Furthermore, technology also enables real-time monitoring of students' emotional development. Data-driven counseling applications allow counselors to track indicators of students' emotional well-being based on their responses to reflective quizzes, online journals, or e-counseling sessions. This data can be used to identify students experiencing social-emotional difficulties and design more targeted personalized interventions. By combining simple data analysis and a psychosocial approach, counselors can create a preventive and proactive support system to address the potential decline in empathy due to digital pressures.

Ultimately, integrating technology into school counseling not only expands the scope of services but also opens up new opportunities for developing empathy as a core social competency. Through a digital approach packaged in an empathetic, personalized, and reflective manner, students become not only objects of counseling interventions but also active agents in their own emotional learning process. Technology-based counseling offers the potential for significant transformation in 21st-century

character education, where empathy is no longer merely an individual skill but part of digital literacy and a collective learning culture formed jointly by schools, counselors, and technology.

3. Method

This study employed a descriptive quantitative approach to understand the role of school counseling in developing student empathy through the integration of information technology. The instrument used was a culturally adapted questionnaire, covering psychosocial aspects and students' experiences in digital interactions and online counseling services. Respondents were purposively selected from vocational students actively involved in technology-based learning and guidance systems. Data were analyzed using descriptive statistics and the SEM-PLS approach to explore patterns of interrelationships between concepts in the context of social-emotional learning. The focus of the study was not on rigorously examining variable relationships, but rather on exploring the contextual meaning of students' experiences and the potential of technology-based interventions to strengthen empathy through school counseling practices.

4. Result and Discussion

4.1. Convergent Validity

Convergent validity in Low Order Construct aims to ensure that each indicator is valid in measuring the appropriate dimensions and avoid errors in forming High Order Construct (HOC) by ensuring that the dimensions are truly valid before being used in the main model.

Based on the results of the analysis, all variables in this study have AVE above 0.5 and outer loadings> 0.7 for all indicators, so that convergent validity is met. From these results, Social Support has the highest AVE (0.806), which indicates that the indicators in this variable are best able to explain the construct.

Based on the results of the convergent validity test, all variables in this study meet the convergent validity criteria, with outer loadings> 0.7 and AVE> 0.5. Thus, the data used is of good quality, so that the results of the SEM PLS analysis can be relied on to describe the relationship between variables accurately. The indicators used have been proven valid in reflecting each research construct.

4.2. Discriminant Validity

Discriminant validity in Stage 1 (Low Order Construct – LOC) in the Two-Stage Approach SEM PLS aims to ensure that each dimension in the model is truly different from each other and there is no overlap between dimensions before being used to form the High Order Construct (HOC). Discriminant validity is needed to:

- a. Ensure that each dimension in the model is truly unique and not mixed with other dimensions.
- b. Avoid redundancy (dual measurement) which can cause dimensions in the LOC not to represent different concepts clearly.
- c. Maintain the accuracy of the measurement model so that the dimensions that form higher constructs (HOC) do not overlap conceptually.
- d. Increase the reliability of model interpretation, so that the analysis results can be used more accurately in research.

Table 1.
Results of Discriminant Validity Test (Fornell Larcker Criterion).

	Social Support	Empathy	Religiosity	Self Esteem
Social Support	0.898			
Empathy	0.674	0.886		
Religiosity	0.665	0.599	0.883	
Self Esteem	0.684	0.696	0.636	0.867

DOI: 10.55214/2576-8484.v9i8.9397 © 2025 by the authors; licensee Learning Gate The discriminant validity test using the Fornell-Larcker Criterion method aims to ensure that each construct in this study has clear differences and does not overlap. Discriminant validity is considered fulfilled if the square root of the AVE of each construct (diagonal value in the table) is greater than the correlation between other constructs in the same column or row.

Based on the test results shown in Table 1, all constructs in this study meet the discriminant validity criteria. The Social Support construct has a square root of AVE of 0.898, which is greater than its correlation with other variables (0.674, 0.665, 0.684). Likewise, the Empathy construct has a square root of AVE of 0.886, which is greater than its correlation with other variables (0.674, 0.599, 0.696). Meanwhile, Religiosity has a square root of AVE of 0.883, which is higher than its correlation with other variables (0.665, 0.599, 0.636). Likewise, Self-esteem, which has a square root of AVE of 0.867, is greater than its correlation with other variables (0.684, 0.696, 0.636). These results indicate that each variable in this study has a clear difference from each other, so it can be concluded that the discriminant validity has been met. With good discriminant validity, the measurement model in this study has a strong basis to proceed to the inner model analysis stage, in order to test the relationship between latent variables in the study.

Table 2.
HTMT (Heterotrait-Monotrait Ratio)

	Social Support	Empathy	Religiosity	Self Esteem
Social Support				
Empathy	0.676			
Religiosity	0.673	0.596		
Self Esteem	0.681	0.681	0.683	

Discriminant validity test with Heterotrait-Monotrait Ratio (HTMT) method is used to ensure that each construct in the research model has clear differences and does not experience multicollinearity with other constructs. Discriminant validity is considered fulfilled if the HTMT value between constructs is less than 0.90 [3]. Based on the test results in Table 2, all HTMT values between constructs are below the limit of 0.90, so that discriminant validity is declared fulfilled.

Overall, the HTMT test results show that there is no correlation that is too high between two different constructs, so that discriminant validity has been fulfilled. With good discriminant validity, it can be concluded that each variable in this study can be analyzed separately and does not experience overlapping concepts. Therefore, the measurement model can be used in further analysis to test the relationship between variables in inner mode.

Based on the Cross Loading results, it was found that each indicator had a higher loading value on the measured construct compared to other constructs. From the results of the discriminant validity test using Cross Loading, Discriminant Validity has been met because each indicator has the highest loading on its own construct compared to the loading on other constructs. These results indicate that there is no indicator that is stronger in measuring other constructs than the construct it should measure, so that the measurement model can be used in the inner model analysis. Thus, this model has a strong measurement basis and can be used to test the relationship between variables in this study.

4.3. Construct Reliability

Construct reliability in this study aims to measure the internal consistency of indicators in measuring the construct being studied. High reliability indicates that the measurement instrument can provide stable and consistent results. Reliability testing is carried out using two main indicators, namely Cronbach's alpha and Composite Reliability (rho_a). In accordance with reliability testing standards, a construct is said to have good reliability if the Cronbach's alpha and Composite Reliability values are more than 0.7. The higher the value of these two indicators, the stronger the internal consistency of the indicator in measuring the intended variable. The results of construct reliability measurements can be seen in Table 3 below:

Table 3. Construct Reliability.

	Cronbach's alpha	Composite Reliability (rho_a)
Social Support	0.978	0.982
Empathy	0.990	0.992
Religiosity	0.985	0.987
Self Esteem	0.976	0.985

Based on the results in Table 3, all constructs in this study have very good reliability with Cronbach's alpha and Composite Reliability values above 0.9, which means that the instrument has a high level of reliability.

- a. Social Support has a Cronbach's alpha of 0.978 and a Composite Reliability of 0.982, which indicates that the indicators in this construct have very high internal consistency in measuring Social Support.
- b. Empathy has a Cronbach's alpha of 0.990 and a Composite Reliability of 0.992, indicating that all indicators in this construct are very reliable in measuring the Empathy variable.
- c. Religiosity has a Cronbach's alpha of 0.985 and a Composite Reliability of 0.987, indicating that all indicators can consistently measure this construct.
- d. Self Esteem has a Cronbach's alpha of 0.976 and a Composite Reliability of 0.985, indicating that this construct has very good reliability.

From the results above, it is concluded that the construct reliability has been met, because all constructs have Cronbach's alpha and Composite Reliability values above 0.9, indicating a very good level of internal consistency. These results indicate that the measurement instrument in this study is reliable and can be used for the next stage of analysis. With high reliability, this model has a strong basis for use in inner model analysis, so that the relationship between variables can be tested accurately in SEM PLS.

4.4. Goodness of fit Model Testing

The results of the goodness of fit model test using the Partial Least Squares Structural Equation Modeling (PLS-SEM) method are reviewed from several indicators, namely R², Q².

Table 4. Goodness of fit model.

Variables	R-square	Q-Square
Empathy	0.567	0.439

The Empathy construct has an R^2 value of 0.567, indicating that 56.7% of the variation in the Empathy construct can be explained by the independent variables in the model. This value falls into the moderate category according to Cohen [23] interpretation, which classifies $R^2 \ge 0.67$ as strong, $0.33 \le R^2 < 0.67$ as moderate, and $R^2 < 0.33$ as weak.

The Q^2 value for Empathy is 0.439, indicating that the model has medium predictive relevance because the Q^2 value is above zero ($Q^2 > 0$ indicates predictive relevance).

Based on the results of the goodness of fit test, the model tested in this study showed good agreement with the data. The R² value in the moderate category indicates that the independent variables are able to explain the variation in the dependent construct quite significantly. In addition, the positive Q² value and in the medium predictive relevance category indicate that the model has good predictive ability. SRMR which is below 0.10 also strengthens that this model fits the data used. Therefore, the PLS-SEM model in this study is declared feasible to test the relationship between variables according to the hypothesis that has been proposed.

4.5. Direct Effect Testing

Table 5 presents the results of testing the direct influence between variables in the Structural Equation Modeling - Partial Least Squares (SEM-PLS) model using the Loading Factor, T-Statistics, and P-Values indicators. Each indicator has an important role in evaluating the strength and significance of the relationship between variables in this research model.

Table 5.Direct Effect Test.

Relationship Between Variables	Loading Factor	T statistics	P-values
Social Support -> Empathy	0.314	6.270	0.000
Religiosity -> Empathy	0.139	3.385	0.001
Self Esteem -> Empathy	0.392	9.135	0.000

The results of the direct influence test between variables in the Structural Equation Modeling - Partial Least Squares (SEM-PLS) model in Table 5 are as follows:

- a. Direct Influence of Social Support on Empathy
 - 1). Loading Factor = 0.314 Social Support has a fairly strong influence on Empathy.
 - 2). T-Statistics = 6.270 This relationship is very significant because T> 2.58.
 - 3). P-Values = 0.000 This influence is significant at the 99% level ($\alpha = 0.01$).

Social Support received by individuals increases the ability to empathize, which means that individuals with higher levels of social support tend to have higher levels of empathy.

- b. Direct Influence of Religiosity on Empathy
 - 1). Loading Factor = 0.139 Religiosity has a smaller influence on Empathy than other variables.
 - 2). T-Statistics = 3.385 This relationship is significant because T> 1.96.
 - 3). P-Values = 0.001 This effect is significant at the 99% level ($\alpha = 0.01$).

The more religious a person is, the higher their level of empathy. However, compared to other variables such as Self Esteem or Social Support, the effect of religiosity on empathy is not very strong.

- c. Direct Effect of Self Esteem on Empathy
 - 1). Loading Factor = 0.392 Self Esteem has the greatest effect on Empathy compared to other variables.
 - 2). T-Statistics = 9.135 This relationship is very significant because T> 2.58.
 - 3). P-Values = 0.000 This effect is significant at the 99% level (α = 0.01).

Individuals with higher levels of Self Esteem are more likely to have higher levels of Empathy.

4.6. Research Hypothesis Testing

Hypothesis testing in this study aims to test whether the relationship between the independent variables and the dependent variables in the SEMPLS model is significant or not. Hypothesis evaluation is done by looking at the Path Coefficient, T-Statistics, and P-Values to determine whether the hypothesis is accepted or rejected.

Table 6. Hypothesis Testing Results.

Hypothesis	Path Coef.	T Statistics	P Value	Conclusion
H1: Religiosity has a positive effect on empathy	0.139	3.385	0.001	Accepted
H2: Social support has a positive effect on empathy.	0.314	6.270	0.000	Accepted
H3: Self Esteem has a positive effect on empathy	0.392	9.135	0.000	Accepted

Table 7. Simultaneous Effects in the Model

Hypothesis	R- square	R-square adjusted	F Table	Conclusion
H4: There is an influence of Religiosity, Social Support, and Self-Esteem on Empathy.	0.567	0.564	2.627	Accepted

The results of the hypothesis testing show that all hypotheses are accepted, meaning that the relationship between the variables in the research model is significant. This analysis provides in-depth insight into how strongly each variable influences the other variables.

Direct Effects on Empathy (H1, H2, H3) are as follows:

- a. H1 is accepted (P = 0.001, Path Coefficient = 0.139) indicating that Religiosity has a positive effect on Empathy.
- b. H2 is accepted (P = 0.000, Path Coefficient = 0.314) indicating that Social Support has a positive effect on Empathy.
- c. H3 is accepted (P = 0.000, Path Coefficient = 0.392) indicating that Self-esteem has the greatest influence on Empathy compared to other variables, others.
- d. H4 is accepted ($R^2 = 0.567$, F = 172.850) indicating that 56.7% of the variation in Empathy can be explained by Religiosity, Social Support, and Self-Esteem, with Self-esteem as the most influential variable.

4.7. The Influence of Religiosity on Empathy

The analysis results indicate that religiosity has a positive influence on empathy, with a Path Coefficient of 0.139 and a significance value (p = 0.001), indicating a statistically significant relationship. However, compared to other factors, religiosity's contribution to empathy formation is relatively small. This finding aligns with various studies that suggest that religious values can be a source of moral and empathic reinforcement, but their influence is highly dependent on the context of internalization and the individual's spiritual experience [8, 9].

In the context of school counseling services, these results indicate that the spiritual dimension remains relevant as a supporting aspect in developing student empathy, especially when contextually integrated into adaptive guidance programs. Religious values that encourage compassion, affection, and concern for others can be facilitated through reflective approaches and spiritual guidance, both in inperson counseling sessions and through digital media such as online spiritual journals, moral value learning videos, or interactive content addressing ethical dilemmas. By utilizing information technology appropriately, a religiosity-based approach can not only engage students' affective aspects but also strengthen moral integrity in an often permissive digital environment.

These findings also serve as a reminder that a moral-spiritual approach cannot stand alone. In a modern, digital school environment, religious values must be cultivated through experiences that are applicable and relevant to students' social dynamics. Guidance and counselors can take an active role in bridging the teachings of values with students' concrete emotional experiences, such as through story-based empathy simulations, value discussion forums, and other technology-based activities that facilitate a deeper understanding of others' feelings.

4.8. The Influence of Social Support on Empathy

Based on the model testing results, social support has a significant positive effect on empathy, with a Path Coefficient of 0.314 and a p-value of 0.000. This figure indicates that social support is a significant factor in fostering students' empathic abilities, stronger than the influence of religiosity. This finding underscores the importance of interpersonal support networks—whether from family, friends, or the school environment—in fostering caring, tolerance, and emotional sensitivity toward others. These results align with previous studies that suggest social support contributes to reducing stress and

aggression levels and improving psychological well-being, which lays the foundation for the growth of empathy [22, 24].

In the context of technology-integrated school counseling, social support is no longer limited to direct physical support but also encompasses digital forms accessible to students through online platforms. Group discussion forums, counseling chats, and social interactions within school-facilitated digital communities are crucial tools for fostering feelings of acceptance, understanding, and support. This presents new opportunities for school counselors to provide a virtual, community-based mentoring approach that is inclusive and easily accessible whenever needed. With this approach, empathy is no longer formed solely through face-to-face interactions, but also through digital experiences that foster emotional connection.

Furthermore, technology enables real-time tracking and analysis of social support patterns. For example, the use of daily feedback systems or online journals that allow students to express their feelings can provide early indicators of the adequacy or lack of support they perceive. Counselors can use this data to provide more targeted interventions, both individually and in groups. Strengthening social support within the school's digital ecosystem is key to creating a healthy and supportive emotional climate—a key prerequisite for fostering sustainable empathy.

These findings emphasize that technology-based counseling strategies must consider the importance of activating students' social support networks, both online and offline. Counselors and teachers act not only as providers of emotional services, but also as facilitators who design empathetic social environments—spaces where students feel understood, included, and fully valued, including in the digital spaces that are now part of their daily lives.

4.9. The Influence of Self Esteem on Empathy

The analysis showed that self-esteem had a positive and significant influence on empathy, with a Path Coefficient of 0.379 and a p-value of 0.000. This makes self-esteem the most dominant factor in supporting empathy formation, compared to religiosity and social support. This finding confirms that an individual's understanding and appreciation of themselves play a crucial role in shaping how they understand and respond to the feelings of others. Individuals with healthy self-esteem tend to be more open, emotionally stable, and have the capacity to build positive social relationships—all characteristics that are foundational to empathetic behavior [19, 20].

In the context of school counseling oriented toward digital transformation, self-esteem can be strengthened through various technology-based approaches. Digital media allows for the delivery of reflective materials, self-affirmation exercises, and interactive modules on self-esteem recognition that students can access independently. Furthermore, features such as e-journals, video storytelling, and personal reflection apps can be used by counselors to help students explore their strengths and potential in a safe and non-judgmental environment. When students feel valued, listened to, and empowered to recognize their own positive values, they are better able to authentically direct empathy toward others.

The importance of strengthening self-esteem in the digital education ecosystem is also related to the reality of emotional challenges students face online, such as cyberbullying, unhealthy social comparison, and the pressure of academic achievement. In this context, counselors play a role in equipping students with strategies for emotional regulation and self-acceptance, which are reinforced by technology. Engaging students in digital reflection-based activities can broaden their understanding of the importance of self-worth and build self-awareness, a prerequisite for healthy empathetic responses to their social environment.

Thus, these findings support the importance of school counseling, which not only fosters interpersonal relationships but also develops students' intrapersonal dimensions, particularly through technological approaches tailored to the needs of the digital generation. Efforts to strengthen self-esteem systematically through digital counseling are a strategic step in shaping individuals who are not only able to understand themselves but also able to develop empathy as part of their character and learning culture.

4.10. The Simultaneous Influence of Religiosity, Social Support, and Self-Esteem on Empathy

The results of the structural test indicate that religiosity, social support, and self-esteem simultaneously have a positive influence on empathy, with a coefficient of determination (R^2) of 0.307. This figure indicates that approximately 30.7% of the variation in students' empathy can be explained by these three factors together. This finding indicates that the formation of empathy is a complex process and does not depend on a single aspect, but is influenced by a combination of intrapersonal, interpersonal factors, and the moral values embedded in an individual.

Within the framework of school counseling that adopts information technology, these results reinforce the importance of a holistic and integrative approach. These three dimensions—religiosity, social support, and self-esteem—can be key pillars in developing a guidance service strategy that adapts to students' emotional needs. Approaches that focus solely on one aspect, such as cognitive empathy training, tend to be less effective without an in-depth understanding of spiritual values, the strength of social networks, and self-esteem. Therefore, school counselors need to develop interventions that combine strengthening self-identity, creating supportive social spaces, and exploring moral values through educational media and technology.

The use of technology is a strategic tool for synergizing these three elements. For example, counselors can design a social-emotional learning platform that combines self-affirmation content, instructional videos on managing social relationships, and reflections on religious or spiritual values. When digital media is used not merely as a technical tool, but as an interactive space that encourages self-reflection and emotional connection, empathy development becomes deeper and more meaningful. Furthermore, features such as online discussion forums, digital personal journals, or interactive counseling apps enable the simultaneous and ongoing integration of these three factors into students' daily lives.

These findings also provide insight that the effectiveness of school counseling in the digital age is largely determined by the counselor's ability to align guidance strategies with interconnected emotional needs. Empathy does not develop instantly, but through stable emotional support, belief in positive values, and moral development that touches the student's affective aspects. In this context, school counseling is not simply a problem-solving service, but a transformative learning space that integrates technology, social relationships, and character development holistically.

5. Conclusion

This study confirms that empathy, as a crucial socio-emotional competency in education, can be developed through the support of various interrelated psychosocial aspects, such as self-esteem, social support, and spiritual values. All three simultaneously contribute significantly to the development of students' empathy, both in the context of interpersonal relationships and in developing emotional sensitivity to the social environment. These findings reflect the importance of a holistic approach to counseling services that is not partial, but rather considers the internal dynamics of individuals and their social networks. Furthermore, the integration of information technology into counseling services provides a strategic opportunity to strengthen empathetic learning processes in a more flexible, personalized, and contextual way. The use of digital platforms in counseling, app-based reflective learning, and online social forums can facilitate self-exploration and expand the reach of interventions that support the growth of empathy. Within this framework, school counseling is no longer limited to conventional approaches but must evolve into a dynamic space that integrates psychosocial dimensions with digital media to support student character development.

Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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References

- M. Khan and S. F. Butt, "Forgiveness and Empathy as Predictors of Psychological Wellbeing among Nurses,"

 Pakistan Journal of Psychological Research, vol. 37, no. 4, pp. 717–736, 2022. https://doi.org/10.33824/PJPR.2022.37.4.43
- [2] K. Yun and Y.-S. Yoo, "Effects of the anger management program for nurses," *Asian Nursing Research*, vol. 15, no. 4, pp. 247-254, 2021.
- [3] L. Huang, J. Thai, Y. Zhong, H. Peng, J. Koran, and X.-D. Zhao, "The positive association between empathy and self-esteem in Chinese medical students: A multi-institutional study," *Frontiers in psychology*, vol. 10, p. 1921, 2019.
- [4] R. A. Sansone, A. R. Kelley, and J. S. Forbis, "The relationship between forgiveness and borderline personality symptomatology," *Journal of Religion and Health*, vol. 52, no. 3, pp. 974-980, 2013. https://doi.org/10.1007/s10943-013-9704-3
- [5] P. Duru, Ö. Örsal, and L. Parlak, "Evaluation of the relationships between nurses' forgiveness, compassion, and professional commitment," *Perspectives in Psychiatric Care*, vol. 58, no. 2, pp. 568–577, 2022. https://doi.org/10.1111/ppc.12811
- [6] Ü. Bayın and M. Kaya, "Forgiveness and perceived social support in teenagers," Education Quarterly Reviews, vol. 4, no. 3, pp. 588–605, 2021. https://doi.org/10.31014/aior.1993.04.03.363
- N. Wu, F. Ding, R. Zhang, Y. Cai, and H. Zhang, "The relationship between perceived social support and life satisfaction: The chain mediating effect of resilience and depression among Chinese medical staff," *International Journal of Environmental Research and Public Health*, vol. 19, no. 24, p. 16646, 2022. https://doi.org/10.3390/ijerph192416646
- [8] L. C. Mefford, K. D. Phillips, and M. L. Chung, "Childhood loss experiences, religiousness/spirituality, and hope as predictors of adult life satisfaction," *Issues in Mental Health Nursing*, vol. 42, no. 7, pp. 649-659, 2021.
- [9] P. Łowicki and M. Zajenkowski, "Religiousness is associated with higher empathic concern—Evidence from self-and other-ratings," *Psychology of Religion and Spirituality*, vol. 13, no. 2, p. 127, 2021.
- P. Albiero, G. Matricardi, D. Speltri, and D. Toso, "The assessment of empathy in adolescence: A contribution to the Italian validation of the "Basic Empathy Scale"," *Journal of Adolescence*, vol. 32, no. 2, pp. 393-408, 2009.
- [11] S. B. Barker and A. R. Wolen, "The benefits of human-companion animal interaction: A review," *Journal of Veterinary Medical Education*, vol. 35, no. 4, pp. 487-495, 2008.
- [12] G. Barnett and R. E. Mann, "Empathy deficits and sexual offending: A model of obstacles to empathy," Aggression and Violent Behavior, vol. 18, no. 2, pp. 228-239, 2013.
- S. Berti and A. Cigala, "Mindfulness for preschoolers: Effects on prosocial behavior, self-regulation and perspective taking," Early Education and Development, vol. 33, no. 1, pp. 38-57, 2022. https://doi.org/10.1080/10409289.2020.1857990
- [14] J. H. Geer, L. A. Estupinan, and G. M. Manguno-Mire, "Empathy, social skills, and other relevant cognitive processes in rapists and child molesters," *Aggression and Violent Behavior*, vol. 5, no. 1, pp. 99-126, 2000.
- [15] C. Strauss, "Is empathy gendered and, if so, why? An approach from feminist psychological anthropology," *Ethos*, vol. 32, no. 4, pp. 432-457, 2004.
- [16] L. Tan et al., "Defining clinical empathy: A grounded theory approach from the perspective of healthcare workers and patients in a multicultural setting," BMJ Open, vol. 11, no. 9, p. e045224, 2021.
- [17] X. Wang, L. Zhang, Y. Peng, J. Lu, Y. Huang, and W. Chen, "Development and validation of the empathy scale for teachers (EST)," *Studies in Educational Evaluation*, vol. 72, p. 101112, 2022.
- [18] J. Roca, O. Canet-Vélez, T. Cemeli, A. Lavedán, O. Masot, and T. Botigué, "Experiences, emotional responses, and coping skills of nursing students as auxiliary health workers during the peak COVID-19 pandemic: A qualitative study," *International Journal of Mental Health Nursing*, vol. 30, no. 5, pp. 1080-1092, 2021.
- S. L. Grover, "Different respect motivates different people: How self-esteem moderates the effects of respect on performance," *Personality and Individual Differences*, vol. 168, p. 110312, 2021.
- [20] K. Guo, Z. Wang, C. Li, and C. Guo, "Meaningful sports consumption behavior influences the production of individual eudaimonic well-being: the chain-mediated role of perceived social support and perceived self-esteem," Sustainability, vol. 15, no. 19, p. 14043, 2023.
- D. Rippon, J. Shepherd, S. Wakefield, A. Lee, and T. V. Pollet, "The role of self-efficacy and self-esteem in mediating positive associations between functional social support and psychological wellbeing in people with a mental health diagnosis," *Journal of Mental Health*, vol. 33, no. 6, pp. 721-730, 2024.
- [22] F. Li *et al.*, "Effects of sources of social support and resilience on the mental health of different age groups during the COVID-19 pandemic," *BMC psychiatry*, vol. 21, no. 1, p. 16, 2021.
- [23] J. Cohen, "Set correlation and contingency tables," Applied psychological measurement, vol. 12, no. 4, pp. 425-434, 1988.

- [24] P. M. Jolly, D. T. Kong, and K. Y. Kim, "Social support at work: An integrative review," *Journal of organizational behavior*, vol. 42, no. 2, pp. 229-251, 2021.
- [25] V. Kovačević, K. Malenica, and G. Kardum, "Symbolic interactions in popular religion according to dimensions of religiosity: A qualitative study," *Societies*, vol. 11, no. 2, p. 30, 2021.
- [26] A.-k. Pandya and T. Kathuria, "Death anxiety, religiosity and culture: Implications for therapeutic process and future research," *Religions*, vol. 12, no. 1, p. 61, 2021.
- [27] F. M. Aldhafeeri and A. A. Alotaibi, "Reimagining education for successful and sustainable digital shifting," Sage Open, vol. 13, no. 1, p. 21582440231154474, 2023.
- [28] R. Muhammad, "The effectiveness of technology to improve educational counseling services: A systematic literature review," *Journal of Teaching and Learning*, vol. 18, no. 2, pp. 111-127, 2024.
- P. Kyllonen, A. Sevak, T. Ober, I. Choi, J. Sparks, and D. Fishtein, "Charting the future of assessments," *ETS Research Report Series*, vol. 2024, no. 1, pp. 1-62, 2024.
- [30] A. R. Al Fahdi, M. Alharrasi, K. Al-Abri, S. Al Nabhani, M. Al Shajabi, and S. Al Hinai, "Exploring the experiences of academic advisors and psychological counsellors supporting students with mental illnesses: A qualitative study at a public university in Oman," *Asian Journal of Psychiatry*, p. 104544, 2025.
- [31] N. Imjai, S. Aujirapongpan, J. Jutidharabongse, and B. Usman, "Impacts of digital connectivity on Thailand's Generation Z undergraduates' social skills and emotional intelligence," *Contemporary Educational Technology*, vol. 16, no. 1, p. ep487, 2024.