

## **SOCIAL WELLBEING AND DIGITAL EMPATHY AMONG PRE-SERVICE TEACHERS IN KOZHIKODE DISTRICT**

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### **Abstract**

This study looks into the social well-being and digital empathy of pre-service teachers in Kozhikode district, examining variances based on gender and location and the relationship between these concepts. The study used a stratified random sample of 300 pre-service teachers and validated questionnaires to measure social wellbeing and digital empathy, with data analyzed using SPSS v.27. The findings show that female pre-service teachers have much greater levels of social well-being and digital empathy than males. Also, rural pre-service teachers scored higher on social well-being, although urban peers demonstrated stronger digital empathy. A high positive association ( $r = 0.61$ ) was found between social well-being and digital empathy. These findings show that digital empathy is critical for promoting social well-being in digitally mediated educational environments. The study emphasizes the importance of integrating digital empathy training into teacher education programs alongside social skills development in order to prepare instructors for effective interpersonal involvement in both physical and virtual classrooms. Limitations include a regional sample focus, which suggests additional research in varied contexts. This study contributes to our understanding of the intersection of social and digital competences, which is critical for contemporary teacher development.

### **1. INTRODUCTION**

Technology has made huge inroads in almost every aspect of life today, and education is no exception. When we look at what change technology has created in education; we will just notice that a small change has occurred, and that too in so many years. But if look closely, there are larger changes as in

- Expansion of access
- Opportunities for communication and collaboration
- Change of the role of teachers

As access to education expanded, the opportunities for communication also became more profound. This in a way impacted on the role of teachers. With the future being more inclined towards technology, the process of teaching-learning is being redesigned with many institutions already making feasible changes and there are more to follow.

Teacher education refers to a programme, policy and procedures to prospective teachers with required skills, knowledge to undertake teaching related activities in their respective educational institutions. The revolution of technology has changed the entire process of education. The major dilemma is on the usage of online tools and the identity of an individual in the cyberspace environment. If a person does not have the basic knowledge of using the digital space, he/she will

not be able to communicate with anyone in the institution or in the society. Here an individual's worth is measured online and the portfolio should show the digital identity.

As the process of teacher education is more inclined towards the process of effective socialization of an individual, the online methods are riskier than traditional ones. The possibility of undesired influences in a person's educational process will create problems in daily life and also the society. The digital space is one that cannot be controlled easily. The prime example being the cybercrimes shooting up. Thus, it will be more concerning for teachers.

When we look at a scenario where the highly qualified teachers are working for small amounts of salaries; there comes the importance of wellbeing of these individuals. It is possible that they can succumb to pressures from outside and inside. That is a fact now. A person being molded into a teacher is much more complex than one could imagine. The main quality to enhance in a prospective teacher is adaptability. Well, in the earlier years, the teacher education resembled more of a training which was based on face - to- face interactions only. But as of now it is mainly on online and recorded interactions. How an individual cope with these is of a different structure. If these goes unrealized, they are sure cause altercations.

Experience in similar situations were of great importance in the case of earlier teacher education programmes. But currently the prospective teachers are needed to have their own cyberspace environment. In this space, they have to create classes, record live lessons, and take assessments. If the teacher has less knowledge on how to use the digital space effectively, then the pressure they are going to encounter is so huge. They will be standing in a different path towards the future. The main culprit in this case is social media. The healthy use of social media is likely to make an individual look forward more fruitfully, but the opposite of this will be much worse. So, the need to have a well-balanced identity in the cyberspace is a must for prospective teachers.

### **Digital Empathy**

Digital empathy refers to the ability to understand, acknowledge, and respond compassionately to the feelings and experiences of others in digitally mediated settings. It brings traditional empathy into online communication by merging cognitive and emotional sensitivity through digital platforms including social media, messaging applications, video calls, and forums. Given the lack of traditional nonverbal cues such as tone, facial expressions, and body language in digital interactions, digital empathy emphasizes the use of imagination, perspective-taking, and explicit communication to bridge emotional gaps and maintain meaningful human connection despite physical distance. It combines emotional empathy (feeling with someone) with cognitive empathy (intellectually comprehending another's point of view), tailored to the limits and affordances of digital communication.

Digital empathy is becoming more crucial as online communication influences social and professional interactions. It encourages trust, emotional engagement, and compassionate understanding in virtual environments such as telemedicine, education, and customer service, creating psychological safety and a sense of belonging. By fostering conscious, socially acceptable communication, the practice addresses the "online disinhibition effect," which has been shown to lower sympathetic behavior. Digital empathy not only benefits personal connections, but it also

improves user experiences in digital design by developing environments that foster emotional support and connection across a wide range of digital contexts through authenticity, responsiveness, and cultural awareness.

### **Social Wellbeing**

The ability of people to establish and sustain meaningful, healthy connections with others while experiencing a sense of connection and belonging within their communities is referred to as social wellbeing. It includes genuine relationships with friends, family, co-workers, and peers that promote mutual respect, trust, and efficient communication. Positive social interaction and emotional support are facilitated by social wellbeing, which enhances general mental health and life satisfaction. It entails managing social circumstances, establishing limits, and valuing diversity, all of which create peaceful and encouraging social networks. In order to feel appreciated and supported, which improves resilience and personal development, this aspect of wellbeing is essential.

Social wellbeing emphasizes social inclusion, equity, and justice and extends beyond interpersonal connections to the larger community and societal level. It entails taking an active part in community events, building social capital, and establishing safe spaces devoid of violence and discrimination. A number of elements, including access to supporting social institutions, cultural and recreational opportunities, safety, and economic stability, have an impact on social wellbeing. In the end, it is a dynamic condition that improves quality of life by encouraging relationships, collaboration, and a common sense of purpose and social belonging.

## **2. OBJECTIVES OF THE STUDY**

1. To compare Social wellbeing of pre service teachers based on
  - i. Gender
  - ii. Locale
2. To compare the Digital Empathy of pre service teachers based on
  - i. Gender
  - ii. Locale
3. To compare Social Wellbeing of pre service teachers with Digital Empathy
4. To identify how Digital Empathy affects Social Wellbeing of pre service teachers

### **Hypotheses of the Study**

1. There is significant difference in the mean scores of Social Wellbeing among pre service teachers based on
  - i. Gender
  - ii. Locale
2. There is significant difference in the mean scores of digital empathy among pre service teachers based on
  - i. Gender
  - ii. Locale
3. There exists a relationship between social wellbeing and digital empathy among pre service teachers

### 3. MATERIALS AND METHODS

To achieve the objectives and confirm the validity of the hypotheses, the survey method was used. The study sample consisted of 200 pre-service teachers from several colleges in the Kozhikode district. The sampling method used here is stratified random sampling.

#### Instrument

Data collection is essentially an important part of the research processes that the interference, hypothesis or generalization, tentatively held might to be identified as valid, verified as correct or rejected as untenable Koul (1984). Two instruments were used for the data collection of this study. Both were prepared taking into consideration the objectives set for the study.

#### Process

The investigation started with the administration of the social wellbeing scale in offline mode. The ethical guidelines of anonymity and impartial treatment were adhered to when collecting the data.

The social wellbeing scale is a five-point scale which consisted of 23 items developed by the investigator. The reliability and validity of the scale was established. The reliability was established using Cronbach's Alpha with a value of 0.83 which is highly reliable.

To find out the details of digital empathy, a digital empathy scale comprising of 27 items were developed. The reliability and validity of the scale was established. With the reliability established with Cronbach's alpha value of 0.69 which is reliable.

#### Data Analysis

Following the completion of data collection, the data were exported and readied for use with the Statistical Package for Social Sciences (SPSS) v.27. the process used preliminary analysis which included descriptives and further which were used for other analysis.

#### Results and Findings

This section aims to present the fundamental findings of the study organized in the form of figures and tables for optimal visualization. The results are organized below.

### 4. ANALYSIS

#### Comparison of social wellbeing of pre service teachers according to gender:

The results obtained for the comparison of social wellbeing of pre service teachers according to gender are reflected in Table 1

**Table 1: t-test for gender differences for social wellbeing of pre service teachers**

Group	N	Mean	SD	t value	p value
Female	159	91	13.5	3.35	0.01
Male	41	83	14.1		

The mean of social phobia scores for female and male pre service teachers are found to be Mean=91 & SD = 13.5 and Mean = 83 & SD = 14.1 respectively. It indicates that male and female pre service teachers have a moderate level of social wellbeing, with female pre service teachers having higher level of social wellbeing than their male counterparts.

t- value is found to be  $t = 3.35$  at significance level of 0.01, which is statistically significant. Therefore, there is significant difference in social wellbeing among male and female pre service teachers.

A Cohen's d test was also done with Social Wellbeing by gender 'd' =0.59, indicating a moderate effect size, with female pre-service teachers showing higher social wellbeing than males.

### **Comparison of Social Wellbeing of Pre Service Teachers According to Years of Experience.**

The results obtained for the comparison of social wellbeing of pre service teachers according to locale are reflected in Table 2.

**Table 2: t-test for social wellbeing of pre service teachers according to locale**

Group	N	Mean	SD	t value	p value
Urban	139	86	12.1	4.7	0.01
Rural	61	95	13.2		

The mean scores of social wellbeing for pre service teachers in urban and rural area are found to be Mean=86 & SD = 12.1 and Mean = 95 & SD = 13.2 respectively. It indicates that pre service teachers in urban and rural areas are having moderate level of social wellbeing.

t-value is found to be  $t = 4.7$  at significance level of 0.01 which is statistically significant. Therefore, there is a significant difference in social wellbeing among pre service teachers from urban and rural areas.

A Cohen's d test was done with Social Wellbeing by Locale 'd' = -0.72, a moderate to large effect size, with rural pre-service teachers having higher social wellbeing than urban counterparts (negative sign indicates the direction with Rural > Urban).

### **Comparison of Digital Empathy of Pre Service Teachers According to Gender:**

The results obtained for the comparison of digital empathy of pre service teachers according to gender are reflected in Table 3

**Table 3: t-test for differences of digital empathy according to gender**

Group	N	Mean	SD	t value	p value
Female	159	97	16.2	2.66	0.01
Male	41	89	10.3		

The mean scores of digital empathy for female pre service teachers and male pre service teachers is found to be Mean=97 & SD = 16.2 and Mean = 89 & SD = 10.3 respectively. It indicates that male pre service teachers and female pre service teachers are having a high digital empathy with female pre service teachers having a high digital empathy.

t- value is found to be  $t = 2.66$  at significance level of 0.01, which is statistically significant. Therefore, there is significant difference in digital empathy of male and female pre service teachers.

The Cohn's d with Digital Empathy by Gender 'd'=0.53, a moderate effect size, with female pre-service teachers showing higher digital empathy than males.

### **Comparison of Digital Empathy of Pre Service Teachers According to Locale**

The results obtained for the comparison of digital empathy of pre service teachers according to locale are reflected in Table 4

**Table 4: t-test for differences of digital empathy according to locale**

Group	N	Mean	SD	t value	p value
Urban	139	101.1	19.2	4.25	0.01
Rural	61	90	10.3		

The mean scores of digital empathy for urban pre service teachers and rural pre service teachers is found to be Mean=101.1 & SD = 19.2 and Mean = 90 & SD = 10.3 respectively. It indicates that urban pre service teachers and rural pre service teachers are having a moderate digital empathy with rural pre service teachers being much lesser in the case of digital empathy.

t- value is found to be  $t = 4.25$  at significance level of 0.01, which is statistically significant. Therefore, there is significant difference in digital empathy of urban and rural pre service teachers. A Cohen's  $d$  with Digital Empathy by Locale ' $d$ ' =0.65, a moderate effect size, with urban pre-service teachers showing higher digital empathy than rural ones.

#### **Relationship Between Social Wellbeing and Digital Empathy:**

The results obtained on the relationship between social wellbeing and digital empathy are reflected in the Table 5

**Table 5: Correlation between Social Wellbeing and Digital Empathy**

Variables	r - value
Social wellbeing	0.61
Digital empathy	

From the correlation value it is clear that there is a high positive correlation between social wellbeing and digital empathy indicating a normal proportional relationship.

## **5. DISCUSSION**

This study highlights significant variations by gender and location and provides valuable insights into the social wellness and digital empathy levels among pre-service teachers. Compared to their male counterparts, female pre-service teachers showed noticeably higher levels of social wellbeing and digital empathy, which is consistent with previous research indicating that women frequently exhibit higher levels of emotional and social sensitivity. The necessity for focused assistance techniques to improve male teachers' social and digital engagement abilities is highlighted by this gender gap.

Locale-based comparisons revealed that while urban instructors scored higher on digital empathy, pre-service teachers in rural areas had much greater levels of social wellbeing. In contrast to more frequent and intensive digital interactions in metropolitan regions that promote higher levels of digital empathy, this finding may reflect the stronger traditional community ties and social networks in rural settings that enhance social wellbeing. These disparate settings highlight the intricate variables influencing teacher readiness in the social and digital spheres.

Digital empathy and social wellbeing had a substantial positive association ( $r = 0.61$ ), suggesting that digital empathy is probably essential for fostering or maintaining social wellbeing among pre-service teachers. Fostering digital empathy may improve teachers' capacity to sustain meaningful social relationships and emotional support in virtual contexts, given the growing reliance on online teaching platforms and digital communication in modern education.

Programmes for teacher education can benefit from these findings. In addition to developing traditional social skills, training modules that foster digital empathy can enable aspiring educators to successfully negotiate the difficulties of digital identity, social presence, and emotional engagement. Better psychological resilience and adaptability, qualities that are crucial in a continually changing educational environment and can result from this all-encompassing strategy.

## 6. CONCLUSION

According to the study's findings, pre-service teachers must possess both social wellness and digital empathy in order to succeed in the modern, digitally mediated educational environment. There may be gender-related differences in emotional and social involvement as female pre-service teachers show far greater levels of digital empathy and social wellbeing than male pre-service teachers. Additionally, due to different socio-environmental implications on these categories, pre-service teachers from rural areas exhibit higher levels of social wellbeing, whilst their urban counterparts exhibit larger levels of digital empathy.

Female pre-service teachers scored significantly higher on social wellbeing and digital empathy than men, with moderate effect sizes (Cohen's  $d = 0.59$  for social wellbeing and  $0.53$  for digital empathy), indicating significant gender differences. Similarly, rural pre-service teachers demonstrated higher social wellbeing, while urban pre-service teachers demonstrated greater digital empathy, with moderate to large effect sizes (Cohen's  $d = -0.72$  for social wellbeing favouring rural teachers and  $0.65$  for digital empathy favouring urban teachers), highlighting the impact of socio-environmental factors on these competencies.

The high positive link between social wellbeing and digital empathy suggests that improving digital empathy, or the ability to engage in compassionate online and digital interactions, may improve pre-service teachers' social health. Given the growing reliance on digital platforms for teaching and communication, teacher education programs should include focused interventions to create digital empathy as well as social skills to promote resilience, adaptation, and effective interpersonal relationships.

The study emphasizes the need for holistic teacher education approaches that blend traditional social competences with digital communication skills, which are critical for maintaining good social relationships and psychological well-being in changing educational situations.

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