

The Professional Identity of Primary School Teachers in Light of Digital Learning Practices: A Field Study

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Abstract:

This research paper addresses a contemporary and significant topic in organizational studies by examining the organizational identity of primary school teachers. A descriptive methodology was employed, utilizing a questionnaire to measure identity. The tool was administered to a sample of 82 teachers (male and female).

Confirmation of Hypothesis 1:

The hypothesis stating that primary school teachers exhibit a high level of professional identity in digital learning environments was supported.

The mean total score for professional identity (27.6) significantly exceeded the theoretical mean (24) ($p < 0.01$).

Interpretation: This elevation reflects teachers' clear understanding of their roles and the positive impact of digital learning practices on their professional self-concept.

Rejection of Hypothesis 2:

The hypothesis predicting no statistically significant gender-based differences in professional identity was rejected.

Male teachers ($M = 28.74$) scored significantly higher than female teachers ($M = 26.28$) ($p = 0.04$).

Explanation: Sociocultural factors (e.g., gendered role expectations, technology adoption patterns) and work-life balance challenges among female teachers may account for this disparity.

Confirmation of Hypothesis 3:

The hypothesis asserting no significant differences linked to professional seniority was confirmed ($p = 0.69$).

Teachers with ≤ 5 and > 5 years of experience showed equivalent identity levels, underscoring that digital learning democratizes professional development regardless of tenure.

Keywords: Professional identity, primary school teachers, digital learning.

Introduction

The educational sector faces considerable challenges, placing teachers under significant professional pressure. As a result, educators must develop a professional identity shaped by their academic and practical experiences, as well as their repeated performance in academic settings. This identity fosters professional values, principles, and beliefs that guide their teaching practices, particularly in digital learning environments, and influence their interactions with colleagues and students.

A teacher's professional identity defines their educational trajectory, enabling them to recognize their professional worth, develop self-awareness, and enhance self-esteem. Consequently, they become more capable of addressing various occupational challenges with flexibility, achieving job satisfaction, and avoiding the sense of educational alienation that hinders professional growth. Therefore, it is crucial to support the development of teachers' identities by fostering a positive and encouraging work environment that enhances creative performance.

2. Research Problem

Recent technological advancements have transformed the education sector, shifting from traditional in-person instruction to remote learning—a necessity driven by social and economic changes, such as the COVID-19 pandemic. This shift has introduced digital educational tools, including e-learning platforms, interactive applications, and virtual learning environments. These developments have directly impacted teachers' roles, requiring them to adapt by integrating digital skills into their teaching methodologies. Instead of merely transmitting knowledge, teachers now act as facilitators and guides for their students.

However, teachers' perceptions of their professional roles in virtual learning environments have evolved, influencing their instructional effectiveness. Several researchers (e.g., El-Soussi, 2022)(1) have noted that teachers' conceptions of their professional identity affect their competence, professional development, and ability to

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adapt to changing educational landscapes while incorporating innovation into their teaching practices.

The abrupt transition to remote learning during the pandemic compelled teachers to modify their instructional strategies to suit virtual environments, often without adequate training or technological resources—such as unstable internet connectivity. Many educators turned to social media platforms like TikTok and Instagram to deliver educational content, transitioning from closed classrooms to virtual spaces with millions of viewers. This shift has contributed to their digital presence, shaping their online identity across various e-learning platforms and YouTube channels.

Since teachers' perceptions of their identity are influenced by their personal value systems—rooted in their social upbringing—and the professional values derived from their teaching responsibilities, these factors ultimately shape their behavior in educational institutions. Social media, in particular, has significantly impacted the formation of teachers' professional identities, reshaping their value systems and influencing their pedagogical interactions with students.

Thus, **the study raises the following questions:**

- What is the current state of professional identity among primary school teachers in digital learning environments?
- Are there statistically significant differences in professional identity levels based on gender?
- Are there statistically significant differences in professional identity levels based on teaching seniority?

3.Study Hypotheses:

- The professional identity of primary school teachers in digital learning environments is at a moderate level.
- There are no statistically significant differences in professional identity levels among the study sample attributable to gender.
- There are no statistically significant differences in professional identity levels among the study sample attributable to professional seniority.

4. Study Objectives:

To assess the perceived levels of professional identity among primary school teachers in digital learning contexts.

To examine the impact of educational technology on shifts in teachers' professional identity perceptions.

To analyse variations in Professional identity levels based on teaching seniority and gender.

5. Significance of the Study

This research holds considerable importance as it addresses a critical topic in organizational studies from a psycho-professional perspective. A well-defined professional identity contributes to teachers' occupational stability, enhances instructional performance, and fosters adaptability to educational changes. It strengthens organizational belonging and professional confidence, enabling educators to navigate challenges more effectively and innovate in their teaching practices.

6. Operational Definitions of Key Terms

6.1. Professional Identity: Drawing from theoretical frameworks, professional identity refers to teachers' self-perceptions regarding their teaching role as a vocational practice. This is manifested through their adoption of organizational values, professional standards, and corresponding behaviors. Operationally, it is measured via scores obtained on a multi-dimensional professional identity questionnaire.

7. Research Methodology:

Given the nature of the study—titled "Professional Identity of Primary School Teachers"—a descriptive research design was employed. This approach aligns with the study's goal of diagnosing and analyzing the phenomenon within educational institutions.

8.Pilot Study:

A pilot study was conducted at "Taleb Abdelrahman Primary School" with a sample of 30 primary school teachers (male and female). The objectives were to:
Validate the data collection tool.

Assess teachers’ responsiveness to the professional identity questionnaire. The pilot ran from January 6 to January 24, 2025.

9.Professional Identity Questionnaire:

The questionnaire was developed based on previous Arab and international studies that measured professional identity, such as the study by Marwa Hamdi (2022) and the study by Samsudin, et all (2021). A three-point Likert scale was used, and the items were distributed across three main dimensions:

- **Personal Identity Dimension**
- **Social Identity Dimension**
- **Organizational Identity Dimension**

10.Psychometric Properties:

10.1. Internal Consistency Validity: Pearson correlation coefficients were computed between individual items, subscales, and the total score. Key results are summarized below:

Table 1: Pearson Correlations for Questionnaire Items and Dimensions

Dimensions	items	Correla	sig	Dimensions	item s	Corre l	sig	Dimensions	items	Correla	sig
Identity Personal	A1	0.89	0.05	Social Identity	A5	0.57	0.00	Organizational Identity	A9	0.87	0.00
	A2	0.63			A6	0.57			A10	0.82	
	A3	0.62			A7	0.69			A11	0.84	
	A4	0.34			A8	0.68			A12	0.88	

Sig 0.05

It is observed from Table (01) that all correlation coefficients between the items and their corresponding dimensions are statistically significant, indicating a good internal consistency between the items and the dimensions to which they belong. Based on this, it can be concluded that the questionnaire possesses an acceptable level of

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construct validity, which allows it to be adopted as a suitable tool for measuring professional identity within the context of the current study.

Table 2: Shows Pearson correlation coefficients for the questionnaire dimensions and the total score

Questionnaire	Dimensions	correlation (r)	Sig. Value
Professional Identity	Personal Identity	**0.524	0.000
	Social Identity	**0.837	0.000
	Organizational Identity	**0.931	0.000

Statistically significant at the 0.05 significance level

It is observed from Table 02 that the correlation coefficient values are high and statistically significant for all dimensions of professional identity. Accordingly, it can be concluded that the questionnaire demonstrates a high level of construct and convergent validity, making it suitable for use in the study.

10.3. Reliability: Cronbach's alpha was used to assess internal consistency:

Table 3: Cronbach's Alpha Coefficients for Professional Identity Questionnaire

Dimension Items Alpha Coefficient Personal Identity Items

Questionnaire	Dimensions	Cronbach's Alpha Coefficient
Professional Identity	Personal Identity	0.72
	Social Identity	0.69
	Organizational Identity	0.69
Professional Identity		0.725

Table (03) shows that the total reliability coefficients for the Professional Identity Questionnaire are high, estimated at (0.725). The highest value was recorded in the Personal Identity dimension at (0.72), while the lowest was found in the Organizational Identity dimension, estimated at (0.69). Accordingly, it can be concluded that the Cronbach's Alpha coefficient for the questionnaire indicates a high level of reliability.

11. Study Population and Sample

The study population comprised all primary school teachers working in the Bou Saâda district, distributed across multiple elementary schools. A non-probability convenience sampling method was used, with a sample size of 82 teachers (male and female). This sample size was deemed appropriate for meeting the fieldwork requirements and achieving the research objectives.

12. Study Limitations

This study focused on "Professional Identity among Primary School Teachers" and was conducted as a field study with a sample of primary school teachers in Bou Saâda. Data collection took place from January 20 to February 20, 2025.

13. Presentation of Study Results

Normality Test

Before statistical analysis, the normality of data distribution was verified using the Kolmogorov-Smirnov test.

Table 4: Normality Test Results (Kolmogorov-Smirnov)

Variable	Statistic	df	Sig.	Decision
Professional Identity	0.09	81	0.06	Non-significant (Normal distribution)

Since the data followed a normal distribution ($p > 0.05$), parametric statistical methods were applied.

13.1. Hypothesis 1: Moderate Professional Identity in Digital Learning

A one-sample t-test was conducted to compare observed means against a theoretical mean (24).

Table 5: One-Sample t-Test Results

Dimension	Mean	SD	Theoreti	Mean	t-	Sig.	d	Level
			cal	Difference	value		f	

Mean									
Personal Identity		9.51	2.9	8	1.51	4.65	0.00	8	High
			4				0	1	
Social Identity		9.45	2.8	8	1.45	4.53	0.00	8	High
			9				0	1	
Organizational Identity		8.85	2.6	8	0.85	2.89	0.00	8	High
			7				0	1	
Total Professional Identity		27.69	5.4	24	3.69	6.19	0.00	8	High
			0				0	1	

Interpretation:

The total professional identity score (27.69) significantly exceeded the theoretical mean (24), indicating a high level of professional identity ($p < 0.01$).

Teachers demonstrated clarity in their roles, commitment to responsibilities, and adaptability to digital learning, which enhanced their professional self-perception.

Digital tools (e.g., e-learning platforms, social media) fostered skill development, pedagogical innovation, and professional belonging, contributing to elevated identity levels.

This rise in the levels of professional identity among primary school teachers in the Bou Saada district can be attributed to their clear understanding of their professional duties, their educational role, and their strong commitment to their pedagogical responsibilities.

The increase in professional identity levels among the study sample can be linked to the positive impact of their engagement with digital learning. Digital learning contributes to enhancing their pedagogical skills, expanding their technical knowledge, and developing their teaching and communication methods with learners. This, in turn, strengthens their sense of belonging to the profession, supports their professional development, and increases their motivation and passion for learning.

Thus, the use of digital learning tools by teachers—especially within the context of diverse media platforms and e-learning tools—has played a role in shaping the image

of a teacher who can efficiently and effectively use such tools. This has positively influenced the formation of their professional identity in a clear and noticeable way.

Moreover, the use of educational technology in the learning process has become a necessity in today's world, especially following the global crisis of COVID-19. This crisis prompted education stakeholders to implement hybrid learning models by integrating digital tools such as educational platforms, digital learning spaces, and social media. These tools have helped teachers improve their professional performance by facilitating interaction not only between teachers and students but also between teachers, school administrations, and parents across various digital platforms. Such interaction has enhanced their skills, confidence, and awareness of their duties. The teacher's positive engagement with all components of the educational process has undoubtedly contributed to forming a heightened sense of professional identity across its personal, social, and organizational dimensions.

Digital learning also offers flexibility in education by providing interactive tools and resources, creating a dynamic learning environment that encourages teachers to perform their roles more effectively, boosts their sense of professional belonging, and enhances their awareness of the values and significance of their noble profession.

From this perspective, the use of educational technology has contributed to improving student performance through the smooth and efficient use of digital learning tools. These tools have facilitated teachers' tasks, which, in turn, has strengthened their professional identity and encouraged them to continue developing their teaching methods—reflected in their creative and innovative performance within educational institutions.

The openness brought by the digital society has had a direct impact on the education sector. Teachers have become more exposed to various teaching methods and strategies in diverse social contexts—through platforms like Facebook, Instagram, TikTok, etc.—and through participation in scientific seminars and conferences, as well as involvement in both international and local educational projects. Many studies indicate the widespread use of social media in the educational field, as confirmed by

The Professional Identity of Primary School Teachers in Light of Digital Learning Practices: A Field Study. _____ cheikhaoui Salah Eddine the study of Hawas and Telilia (2025) which highlighted the presence of these digital tools in educational environments.(2)

Teacher performance can be developed through the application of modern theories in both cooperative and individual learning. Indeed, the role of the digital society and e-learning in enhancing and improving this performance is undeniable (3)

This exposure has helped teachers refine their instructional skills and benefit from new knowledge and experiences. Such interactions enhance their psychological capital and increase their sense of professionalism and competence, motivating them to exert more effort to keep pace with developments across all fields of education. By offering educational content through digital media that reaches a wide audience, teachers experience greater self-esteem, which helps explain the high levels of professional identity observed across its three dimensions.

The results of my study are consistent with the study by Saha Hussein and Lina Khadadad (2024) on the professional identity of kindergarten teachers, And the study by Duha Al-Jaabah (2023), whose results showed a high level of professional identity among private school teachers in the Hebron Governorate.

13.2. Hypothesis 2: Gender-Based Differences in Professional Identity

An independent samples t-test was used to compare male and female teachers.

Table 6: Gender-Based Differences (Independent Samples t-Test)

Variable	Gender	N	Mean	SD	t-value	df	Sig.	Decision
Professional Identity	Male	45	28.74	4.86	2.07	80	0.04	Significant (p ≤ 0.05)
	Female	37	26.28	5.83				

Key Findings:

Male teachers (28.74) scored significantly higher than female teachers (26.28) (p = 0.04).

Possible Explanations:

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Cognitive and Role Differences: Males may prioritize analytical/logical tasks and career advancement, while females balance teaching with familial duties, limiting engagement with digital tools.

Sociocultural Factors: Studies suggest males are more likely to adopt technology for instructional purposes, particularly in technical subjects.

Professional Autonomy: Male teachers often associate professional identity with independence and competition, whereas female teachers may emphasize relational aspects.

This result can be interpreted by noting that the differences between male and female teachers are initially due to variations in physical, psychological, and cognitive structure. Male teachers tend to outperform female teachers in achieving objectives, as they focus less on emotional aspects and relationship-building, and more on logical reasoning and the attainment of organizational goals that support their professional ambitions. Male teachers often use digital tools and software to achieve better performance, which can be attributed to their specialization, the nature of their tasks, and their availability—especially among newly trained male teachers. In contrast, female teachers may sometimes struggle to balance personal and family life with professional responsibilities, which leads to reduced use of educational technologies during teaching. This is often due to life pressures, including family obligations or professional burdens. Many research studies have indicated that male teachers tend to show greater interest in using technology, especially in teaching technical and mathematical subjects.

Therefore, the differences between male and female teachers in the context of digital learning can be summarized in several key considerations, primarily the differences in professional perceptions. Male teachers tend to have distinct professional visions for their future and career path. Their representation of professional values is often built on a culture of independence in work, competition for high-level positions, and delivering performance that sets them apart from their female counterparts. This explains the differences in levels of professional identity observed in the study sample.

13.3. Hypothesis 3: Differences Based on Professional Seniority

Another independent samples t-test compared teachers with ≤ 5 and > 5 years of experience.

Table 7: Seniority-Based Differences (Independent Samples t-Test)

Variable	Seniority	N	Mean	SD	t-value	df	Sig.	Decision
Professional Identity	>5 years	67	27.80	5.71	-0.39	80	0.69	
	≤ 5 years	15	27.20	3.91				

Conclusion:

No significant difference ($p = 0.69$) was found between groups, indicating that seniority does not influence professional identity in digital learning contexts.

Rationale:

Digital learning democratizes skill acquisition; both novice and experienced teachers use similar tools and training programs.

Organizational climate and access to technology equalize opportunities, rendering seniority irrelevant to identity formation.

This means that the number of years of work experience does not have an impact on the level of professional identity among teachers in the context of digital education. The digital learning environment provides equal opportunities for work and the acquisition of technical skills, whether for new teachers or those with many years of experience. The development of professional identity in the context of digital learning mainly depends on the extent to which the teacher uses digital e-learning tools, rather than the number of years they have worked.

In the workplace, you may find a teacher with more than five years of experience and another with less than five years, yet both use the same tools and resources, work in a shared organizational environment, and benefit from the same training programs.

14. Study Findings

Our study yielded the following key results:

Confirmation of Hypothesis 1:

The hypothesis stating that primary school teachers exhibit a high level of professional identity in digital learning environments was supported.

The mean total score for professional identity (27.6) significantly exceeded the theoretical mean (24) ($p < 0.01$).

Interpretation: This elevation reflects teachers' clear understanding of their roles and the positive impact of digital learning practices on their professional self-concept.

Rejection of Hypothesis 2:

The hypothesis predicting no statistically significant gender-based differences in professional identity was rejected.

Male teachers ($M = 28.74$) scored significantly higher than female teachers ($M = 26.28$) ($p = 0.04$).

Explanation: Sociocultural factors (e.g., gendered role expectations, technology adoption patterns) and work-life balance challenges among female teachers may account for this disparity.

Confirmation of Hypothesis 3:

The hypothesis asserting no significant differences linked to professional seniority was confirmed ($p = 0.69$).

Teachers with ≤ 5 and > 5 years of experience showed equivalent identity levels, underscoring that digital learning democratizes professional development regardless of tenure.

15. Conclusion:

Professional identity in digital learning contexts is a critical dimension of modern educational organizations. By fostering secure and supportive environments—equipped with digital tools—schools can empower teachers to enhance their performance, mitigate organizational challenges, and ultimately improve outcomes for students and the broader educational community.

Key Implications: For Institutions: Prioritize equitable access to digital training and resources to bridge gender gaps in professional identity.

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For Policy: Integrate digital pedagogy into teacher development programs to sustain identity growth across all career stages.

For Research: Further investigate sociocultural barriers affecting female teachers' identity formation in digital spaces.

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