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THE RELATION BETWEEN TEACHERS' DIGITAL LITERACY LEVELS AND THEIR SUBJECTIVE WELL-BEING

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Abstract

Digital literacy is a fundamental skill, and its significance for teachers increased with the transition to distance education. This competence enables the effective and responsible use of digital technologies, which is expected to positively influence teachers' subjective well-being. Subjective well-being refers to an individual's positive emotions and cognitions about their own life. This study aimed to investigate the relationship between the digital literacy levels and subjective well-being of teachers working in Muş Province, Türkiye. A quantitative relational survey model was used. The sample consisted of 220 teachers from public high schools. Data were collected using the Digital Literacy Assessment Scale and the Subjective Well-Being Scale. The results showed a statistically significant, weak, and positive correlation between the overall Digital Literacy Scale and the Subjective Well-being Scale. Digital literacy levels were found to significantly predict subjective well-being. Further analysis revealed no significant correlation with the School Commitment dimension. However, a positive and significant correlation was observed between all digital literacy dimensions and the Teaching Competence dimension. This indicates that high digital literacy levels enhance teaching competence, leading to increased professional satisfaction and subjective well-being. Educational institutions should support the development of teachers' digital literacy to foster their well-being.

Keywords: Digital literacy, subjective well-being, digitalization, digital literacy in education, subjective well-being in education.

INTRODUCTION

Digital literacy is a fundamental skill that individuals and societies need in today's world, and digitally literate individuals are able to use digital technologies effectively and responsibly. This competence enables the more efficient execution of activities such as learning, production, and communication. Information and communication technologies and the internet have given rise to new literacy skills, which are a set of skills, strategies, and abilities that enable us to adapt to changing world conditions and technological developments, and which we need in every area of our professional and personal lives (Leu et al., 2004). Digital literacy refers to the ability to use digital technologies effectively and responsibly. This encompasses the skills of conducting research online, evaluating information, creating digital content, and navigating digital environments safely (Özerbaş et al., 2018). Lankshear and Knobel (2006) have defined digital literacy as the ability to acquire, produce, and share information across diverse digital environments. Recent frameworks extend digital literacy beyond technical skills to include critical, ethical, and creative dimensions required in an AI-mediated world (Polizzi, 2020). The rapid integration of generative AI tools into education has made AI literacy an indispensable part of teachers' digital literacy, with early evidence suggesting that teachers who feel competent using AI report higher professional self-efficacy and well-being (Shi, 2025; Picton & Clark, 2024; Collie et al., 2024).

Subjective well-being, on the other hand, refers to the state in which individuals hold positive emotions and cognitions about their own lives, positively influencing life satisfaction, happiness, and mental health. According to Diener (1994), subjective well-being is the individual's evaluation of the extent to which they experience positive and negative emotions in their life. A high level of subjective well-being reflects the predominance of positive emotions and thoughts regarding one's own life.

According to Eshet-Alkalai's (2002) theoretical framework, digital literacy consists of three main components: technical-procedural, cognitive, and emotional-social skills. Contemporary models emphasize data literacy, AI literacy, and human–machine collaboration as new core components of teachers' digital competence in the age of generative artificial intelligence (Casal-Otero et al., 2023; Lee et al., 2024). Subjective well-being, on the other hand, can be explained through social constructivism and social comparison theories. It has been stated that digital literacy makes a positive contribution to individuals' subjective well-being by increasing access to information and opportunities and by strengthening social connections.

The effective use of digital resources can provide individuals with a sense of satisfaction and contribute to their subjective well-being. Digital literate individuals, who have access to a wealth of information and opportunities, may feel better and more empowered. A study conducted by Nie et al. (2021) among 493 households in rural China found a very strong relationship between mobile phone use and subjective well-being. More recent large-scale studies confirm that higher digital skills are associated with greater life satisfaction and lower loneliness, even after controlling for socioeconomic variables (Wickramasinghe and Jayatilleke, 2021; EU Commission, 2022). Similarly, another study conducted in rural China concluded that young and middle-aged internet users are happier than older people, emphasizing that older people should also be empowered in this regard with the inclusion of the internet in rural areas (Zhou et al., 2023). In this context, most studies have revealed that access to information and opportunities has a positive impact on individuals' subjective well-being.

According to the results of a survey conducted in 2019 on more than 300 teachers from four different countries (Cyprus, Greece, Slovakia, and Spain) to investigate teachers' confidence in their digital literacy and measure their educational needs in terms of developing their digital competence, teachers' confidence levels varied significantly from country to country, and the need for teachers to be trained in digital literacy was quite high (Perifanou et al., 2019). Various countries are even involving their technology ministries to develop this skill (Rahman et al., 2021). According to a study conducted on 643 Swiss internet users aged 60 and over, it was found that as their internet skills improved, their life satisfaction increased (Hofer et al., 2019).

Teachers' well-being is critical to their students' success. According to the study titled "Happy Teacher, Happy Classroom" published in the Social Psychology of Education journal, a positive relationship has been found between teachers' subjective well-being and their students' physical and mental health. The study revealed that teachers' self-efficacy positively affects students' mental health, and that perceived teacher support positively affects both students' subjective physical and mental health (Pap et al.,2023).

The closure of schools and the transition to distance education during the pandemic period have further increased the importance of digital literacy. Post-COVID research shows that teachers with higher digital competence experienced significantly lower burnout and higher job satisfaction during and after the shift to emergency remote teaching (Jogezai et al., 2023; Rastegar & Rahimi, 2023).

High levels of digital literacy among teachers can positively affect both their professional performance and subjective well-being. The purpose of this study is to reveal the relationship between teachers' digital literacy levels and their subjective well-being.

TIJSEG
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This study sought to answer the research question:

1. What kind of relationship exists between teachers' digital literacy levels and their subjective well-being levels?
2. Is there a significant relationship between teachers' digital literacy levels and their subjective well-being levels?
3. Do teachers' digital literacy levels predict their subjective well-being levels?

The absence of a comprehensive study in the literature examining the effect of teachers' digital literacy levels on their subjective well-being demonstrates the importance of this research and its potential contribution to the field.

METHOD

This study employed a relational survey model; a quantitative research design aimed at determining the existence and degree of covariance between teachers' digital literacy levels and subjective well-being. The relational scanning model provides information about which variables change together and how they change in the process of solving a multivariate problem (Karasar, 2011). Surveys were conducted using online forms with permission from the Provincial Directorate of National Education. Teachers were asked to fill out the surveys on a voluntary basis in line with the purpose of the research.

Population and Sample

The population consisted of 526 teachers working in 22 public high schools located in the city centre of Muş Province, Türkiye, during the 2022–2023 academic year. The sample comprised 220 teachers selected through convenience sampling.

Table 1. Distribution of participating teachers according to gender variable

Gender	n	%
Female	108	49,1
Male	112	50,9
Total	220	100,0

Of the participants, 108 are women and 112 are men. Male participants make up 49.1% of the participants, while female participants make up 50.9%.

Table 2. Age distribution of participating teachers

Age	n	%
20-29	70	31,8
30-39	86	39,1
40-49	41	18,6
50+	23	10,5
Total	220	100,0

When participants were grouped into 10-year age brackets, there were 70 teachers in the 20-29 age group, 86 teachers in the 30-39 age group, 41 teachers in the 40-49 age group, and 23 teachers aged 50 and over, for a total of 220 teachers. Participants aged 20-29 make up 31.8% of the total, those aged 30-39 make up 39.1%, those aged 40-49 make up 18.6%, and those aged 50 and above make up 10.5%.

Table 3. Distribution of participating teachers according to marital status variable

Marital Status	n	%
Bachelor	108	49,1
Married	112	50,9
Total	220	100,0

When we grouped participants according to their marital status, 108 teachers were bachelor, representing 49.1% of the participants. There were 112 married participants, constituting 50.9% of the total participants.

Table 4. Distribution of participating teachers according to educational status variable

Educational Status	n	%
Associate Degree	8	3,6
Bachelor's Degree	152	69,1
Master's Degree	56	25,5
Ph.D.	4	1,8
Total	220	100,0

When participants are classified according to their educational background, it is seen that only 8 out of 220 participants are associate degree graduates. Associate degree graduate teachers constitute 3.6% of the total participants. The reason for this low percentage is that in order to become a teacher, one must be a graduate of a faculty of education or a four-year program and receive teacher training. Therefore, only teachers of certain vocational subjects are accepted from associate degree programs. Bachelor's degree holders constitute a large proportion of the teachers participating in the study, at 69.1% (152 people). This is followed by master's degree holders at 25.5% (56 people). Only 4 teachers have a doctorate, constituting just 1.8% of the total participants.

Table 5. Distribution of participating teachers according to field variable

Field	n	%
Vocational/Occupational Group	20	9,1
Science Group	28	12,7
Foreign Language Group	32	14,5
Mathematics	28	12,7
Turkish Language and Literature	24	10,9
Physical Education (Sports)	16	7,3
Music	4	1,8
History Group	8	3,6
Religious Culture and Ethics	8	3,6
Philosophy Group	4	1,8
Others	28	12,7
Primary School Teacher	20	9,1
Total	220	100,0

When participation is evaluated by field, we see that foreign language teachers had the highest participation rate at 14.5%. When looking at the rates in order, science and mathematics teachers came second with 12.7% (28 people). Twenty-four people from the Turkish language and literature field participated in the study, accounting for 10.9% of the total participation. A total of 20 people (9.1%) from the vocational group teachers participated in the study. The number of classroom teachers participating in the study is equal to that of vocational group teachers. Sixteen teachers (7.3%) from the physical education and sports field participated. Eight teachers each participated from the history and religious culture and ethics fields, while only four teachers each participated from the philosophy and music fields. Twenty-eight teachers who did not belong to these categories were also included in the “other” classification, accounting for 12.7% of the total participation.

Data Collection Tools

A three-part questionnaire was administered to collect data for the study. First, a personal information form was used to determine participants' individual characteristics. The “Digital Literacy Assessment Scale” was used to collect data on digital literacy levels. This scale was developed by Acar in 2015. The subjective well-being scale developed by Renshaw, Long, and Cook in 2015 was used as the subjective well-being scale. This scale was adapted into Turkish by Ergün-Nartgün.

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www.tijseg.org
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Digital literacy assessment scale

The "Digital Literacy Assessment Scale," prepared in a 5-point Likert format, consists of two sections. This scale comprises 41 items. It includes five different sub-dimensions: awareness, contextual use, digital identity management, safe participation, and basic tool and environment knowledge. The Cronbach's alpha value calculated for reliability measurement is .980 for the entire scale and .960 for this study. Based on these values, the scale is considered reliable.

Table 6. Digital literacy assessment scale levels

Options	Ranges	Levels
Not Competent at All	1,00-1,80	Very Low
Slightly Competent	1,81-2,60	Low
Moderately Competent	2,61-3,40	Moderate
Highly Competent	3,41-4,20	High
Fully Competent	4,21-5,00	Very High

Table 7. Normality test for the digital literacy scale

	Contextual Use	Digital Identity Management	Awareness	Secure Participation	Basic Tool and Medium Knowledge	Total
Skewness	-.693	-.905	-.885	-.938	-.168	-.924
Standard Error of Skewness	.164	.164	.164	.164	.164	.164
Kurtosis	-.154	.341	.528	.912	-.737	.683
Standard Error of Kurtosis	.327	.327	.327	.327	.327	.327

Subjective well-being scale

The scale consists of 8 items on a 4-point Likert scale. The scale has two subscales. These are school commitment (items 1, 3, 5, 7) and teaching competence (items 2, 4, 6, 8). The Cronbach's alpha value determining the reliability of the scale is .820. For this study, this value was found to be .652. This indicates that the scale is reliable.

Table 8. Subjective well-being scale levels

Options	Ranges	Levels
Almost Never	1,00-1,75	Very Low
Sometimes	1,76-2,50	Low
Often	2,51-3,25	High
Almost Always	3,26-4,00	Very High

Table 9. Normality test for the subjective well-being scale

	School Commitment	Teaching Competence	Total
Skewness	-.420	-.105	-.297
Standard Error of Skewness	.164	.164	.164
Kurtosis	.029	-.921	.448
Standard Error of Kurtosis	.327	.327	.327

Socio-demographic information form

The form prepared by the researcher includes questions aimed at determining participants' demographic information such as gender, marital status, age and field of study.

The data collection process

The scales used in the study were delivered to the teachers via a link created by the researcher using the Google Forms application during the 2023–2024 academic year. Information regarding the purpose and scope of the research was conveyed to the teachers both through the sent form and

TIJSEG
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www.tijseg.org
Turkish International Journal of Special Education and Guidance & Counseling 2025, volume 14, issue 2

verbally. The scale applications were conducted via online forms after obtaining permission from the Muş Provincial Directorate of National Education.

The data analysis

The data collected in the study were analyzed using the Statistical Package for Social Sciences (SPSS) software. The distribution of the data was considered when selecting the analysis methods. In this context, skewness and kurtosis coefficients were examined. Pearson correlation test and regression analyses were applied in the analysis of the data. The Tukey LSD test was used to determine which groups had significant differences.

The Pearson-moment correlation coefficient was used to demonstrate the relationship between the digital literacy assessment scale and the subjective well-being scale used to obtain the research data. Regression analysis was applied to determine the predictive power of the Digital Literacy scale on subjective well-being. The data obtained are presented in detail in the findings section.

RESULTS

The Findings section presents the results obtained through the analysis of data collected via the "Subjective Well-Being Scale" and the "Digital Literacy Assessment Scale," which were completed by the teachers participating in the study.

Findings Regarding the Relationship Between Teachers' Digital Literacy Levels and Their Subjective Well-Being Levels

The findings address the question: "Is there a significant relationship between teachers' digital literacy levels and their subjective well-being levels?" The relevant findings are presented below.

Table 10. Correlation analysis of the relationship between school engagement and the dimensions of the digital literacy scale

		Awareness	Secure Participation	Contextual Use	Digital Identity Management	Basic Tool And Medium Knowledge
school commitment	pearson correlation	.000	.030	.089	-.053	.090
	P	.999	.658	.190	.434	.183

According to Table 10, the correlation calculations between the school engagement dimension of the subjective well-being scale and the sub-dimensions of the digital literacy scale are presented. Based on the obtained data, no correlation was found in the school engagement dimension, as the P value is greater than .05.

Table 11. Correlation analysis of the relationship between teaching competence and the dimensions of the digital literacy scale

		Awareness	Secure Participation	Contextual Use	Digital Identity Management	Basic Tool And Medium Knowledge
teaching competence	pearson correlation	.272	.412	.303	.305	.368
	P	.000	.000	.000	.000	.000

According to Table 11, the correlation calculations between the teaching competence dimension of the subjective well-being scale and the sub-dimensions of the digital literacy scale are presented. Based on the obtained data, a positive correlation is observed in the teaching competence dimension, as the P value is less than .05. A weak correlation exists between teaching competence and awareness, .272 ($p<.01$); a moderate correlation exists between teaching competence and secure participation, .412 ($p<.01$); a moderate correlation exists between teaching competence and contextual use, .303 ($p<.01$); a moderate correlation exists between teaching competence and digital identity management, .305

TIJSEG
ISSN: 1300 – 7432
www.tijseg.org
Turkish International Journal of Special Education and Guidance & Counseling 2025, volume 14, issue 2

(p<.01); and a moderate correlation exists between teaching competence and basic tool and medium knowledge, .368 (p<.01).

Table 12. Correlation analysis of the relationship between teachers' subjective well-being levels and their digital literacy levels

		Digital Literacy Levels
subjective well-being leves	pearson correlation	.217
	P	.001

Considering the whole of the Digital Literacy Scale and Subjective Well-being Scale, according to the results of the correlation analysis, Pearson's correlation was observed to be.217 and the P-value was.001. The correlation is statistically significant, weak, and positive.

The Predictive Power of Teachers' Digital Literacy Levels on Their Subjective Well-being Levels

This section presents the findings regarding the question: Do teachers' digital literacy levels predict their subjective well-being levels?

Table 13. Regression analysis of teachers' digital literacy levels on their subjective well-being

Model	R	R2	adjusted R2	std. error of the estimate
1	.217a	.047	.043	.331

According to Table 13, the percentage of variance in the dependent variable explained by the independent variable in the established regression analysis model was found to be 0.043. According to the findings, teachers' digital literacy levels predict their subjective well-being by 4%

Table 14. Findings regarding the dimensions of the digital literacy scale based on the school commitment constant

Variable	B	std. error B	ß	t	p	bivariate r
constant	2.896	.314		9.212	.000	
awareness	-.051	.100	-.060	-.511	.610	.000
secure participation	.029	.068	.047	.418	.677	.030
contextual use	.126	.147	.126	.858	.392	.089
digital identity management	-.083	.058	-.154	-1.447	.149	-.053
basic tool and medium knowledge	.052	.079	.076	.660	.510	.090

School Commitment: Predicted Variable
Digital Literacy Scale: Predictor Variable

Based on the p-values in the Table 14, none of the individual dimensions of the Digital Literacy Scale are found to be statistically significant predictors of School Commitment when considered simultaneously in this model. All p-values are well above the conventional significance level of .05.

Table 15. Findings regarding the dimensions of the digital literacy scale based on the school teaching competence constant

Variable	B	std. Error B	ß	t	p	bivariate r
constant	2.693	.215		12.556	.000	
awareness	.035	.068	.054	.504	.614	.272
secure participation	.166	.047	.361	3.561	.000	.412
contextual use	-.153	.100	-.202	-1.523	.129	.303
digital identity management	-.014	.039	-.034	-.354	.724	.305
basic tool and medium knowledge	.156	.054	.301	2.899	.004	.368

Teaching Competence: Predicted Variable
Digital Literacy Scale: Predictor Variable

When examining the bivariate correlations between the predictor variables and the predicted variables in the Table 15, a positive and weak significant correlation (r = .272) exists between the Awareness dimension of the Digital Literacy Scale and Teaching Competence. A positive and moderate significant correlation (r = .412) exists between the Secure Participation dimension of the Digital Literacy Scale and Teaching Competence. A positive and moderate significant correlation (r = .303) exists between the Contextual Use dimension of the Digital Literacy Scale and Teaching Competence. A positive and moderate significant correlation (r = .305) exists between the Digital Identity Management dimension of the Digital Literacy Scale and Teaching Competence. A positive and moderate significant correlation (r = .368) exists between the Basic Tool and Medium Knowledge dimension of the Digital Literacy Scale and Teaching Competence. Through the analyses conducted and the findings obtained, it has been determined that digital literacy significantly and positively predicts teaching competence.

DISCUSSION, CONCLUSION, and RECOMMENDATIONS

In this study, the digital literacy levels and subjective well-beings of teachers working in Muş province of Türkiye were evaluated. Thus, the aim was to determine the relationship between digital literacy levels and subjective well-being. The findings obtained as a result of the study are discussed in this section, addressing the research questions. Suggestions based on these discussions are presented.

A study conducted by Meinel in 2020 addressed the importance of Digital Literacy, noting that it should be considered one of the basic skills, alongside reading, writing, speaking, and arithmetic. It was mentioned that digital literacy will profoundly affect and change the ways we live, think, work, learn, and interact. The article emphasized the need to shape the digital world in a human- and value-centered manner and find new answers to questions regarding how this world should be structured. It was stated that this is a challenge faced by the current generation and will have a defining impact on the lives of subsequent generations (Meinel, 2020). A study conducted by Kleinert in 2022 mentioned that teachers' subjective well-being positively or negatively affects a successful classroom environment. It was noted that teachers with low self-confidence regarding their competencies will also have weak subjective well-being. A study by Liu et al. (2022) focused on how the forced transition of classroom environments to digital platforms during the COVID-19 pandemic affected teachers and students, regardless of the teachers' existing digital literacy and subjective well-being. According to the research findings, teachers' subjective well-being was negatively affected by this situation. When examining the studies in the literature, it is clear that there is a connection between teachers' digital literacy levels and their subjective well-being.

The analysis has revealed that participants' digital literacy levels have a significant effect on their subjective well-being levels. Primarily, the results revealed by the Pearson Correlation test shows that the relationship between them cannot be considered coincidental. Since the findings between the dimensions of the digital literacy scale and the School Commitment dimension of the subjective well-being scale were close to zero, it was concluded that there was no relationship that could be considered significant. On the other hand, when the findings were examined, it was seen that digital literacy levels affected teachers' teaching competencies. When examining the correlation established between the dimensions of the digital literacy scale and teaching competence, it is seen that the sub-dimensions of safe participation, basic tool and environment use, contextual use, and digital identity management have a moderate positive relationship with teaching competence and increase together in a meaningful way. In addition, there is also a weak positive correlation with the awareness sub-dimension.

Digital literacy is an important component of teaching competence. Teachers with a high level of digital literacy can use information and communication technologies to develop their students' creativity and critical thinking skills. This enables them to achieve professional satisfaction and raises their subjective well-being levels. On the other hand, teachers with low levels of digital literacy

cannot use information and communication technologies and are unable to meet their students' needs. This situation has a negative impact on their subjective well-being.

The expectation that subjective well-being would improve as digital literacy increased, which was already present before the study was conducted, has been confirmed by the findings. As mentioned earlier, teachers with high digital literacy may feel more competent and capable. This can help them communicate more effectively in the digital age, access information, and evaluate it. Teachers who can better adapt to the requirements of the current educational environment thanks to this competence can help their students become pioneers in this field and guide them. Teachers who can use digital tools effectively can offer their students interesting and effective learning experiences and thus motivate them.

Through the digital literacy competence that requires critical thinking skills, teachers can effectively manage and evaluate the information they access in digital environments, thereby guiding their students in information literacy. In this context, it is important for teachers to be digitally literate, which is one of the 21st-century skills, but maintaining a sustainable balance in this process is also critical. Educational institutions need to take steps to develop teachers' digital literacy and provide support in this regard. It is important that this process is carried out in a way that enhances teachers' subjective well-being; otherwise, this process may cause difficulties and stress for teachers.

The year 2023 has redefined the concept of digital literacy by introducing artificial intelligence into our lives unexpectedly, marking a new milestone in digitalization. The release of version 3.5 of the GPT technology developed by OpenAI and its availability to the general public through the ChatGPT interface may well be recognized as the beginning of the age of artificial intelligence. Although this technology was initially seen as purely for entertainment purposes, agreements made with Microsoft in the following months transformed the generative artificial intelligence model into a tool that could be used in every area of life, making it easier for individuals in every sector. This newly emerging technology has also brought with it a variety of new questions. For example, concerns about ethics and issues such as the concept of digital ownership, which were embedded in the early days of the internet, have resurfaced as current problems. A paper published by Gillotte in 2019 addressed the concept of digital ownership in works of art produced by artificial intelligence. The existence of published literature on this subject also demonstrates the importance of this technology. This technology will become one of the most important tools for teachers in the future. It will support teachers, particularly in the field of inclusive teaching, positively impacting their teaching competence and enhancing their subjective well-being. Teachers will be able to use this new tool to identify learning difficulties, thereby including students experiencing challenges in the classroom environment. For example, artificial intelligence can analyze a lesson visually for a student with vision problems and then reconstruct and explain it auditorily. Teachers can also use artificial intelligence to measure students' attention levels and performance in class and instantly redesign lectures accordingly.

These examples will enable teachers to leverage their digital literacy levels and enhance their teaching competencies in the future. It is believed that teachers actively engaging in the lesson and their students succeeding will positively predict their subjective well-being.

Ethics and Conflict of Interest

All the rules in the "Higher Education Institutions Scientific Research and Publication Ethics Directive" were followed in this study. None of the actions specified in the second section of the relevant directive titled "Actions Contrary to Scientific Research and Publication Ethics" were taken. The authors declare that they acted in accordance with ethical rules in all processes of the research. The authors declare that they have no conflict of interest.

Author Contribution

All authors contributed equally to the research.

Data availability
The data that support the findings of this study are available on request from the corresponding author.

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REFERENCES

Acar, Ç. (2015). *Anne ve babaların ilkokul, ortaokul ve lise öğrencisi çocukları ile kendilerinin dijital okuryazarlıklarına ilişkin görüşleri* (Unpublished Master's Thesis). Ankara University.

Casal-Otero, L., Catala, A., Fernández-Morante, C. et al. (2023). AI literacy in K-12: a systematic literature review. *IJ STEM Ed 10, 29* https://doi.org/10.1186/s40594-023-00418-7

Collie, R. J., Martin, A. J., & Gasevic, D. (2024). Teachers' generative AI self-efficacy, valuing, and integration at work: Examining job resources and demands. *Computers and Education: Artificial Intelligence, 7*, Article 100333. https://doi.org/10.1016/j.caeai.2024.100333

Diener, E., Suh, E. M., Lucas, R. E., and Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin, 125(2),* 276.-302. https://doi.org/10.1037/0033-2909.125.2.276.

Eshet, Y. (2002). *Digital literacy: A new terminology framework and its application to the design of meaningful technology-based learning environments*. P. Barker and S. Rebelsky (eds.). in: Proceedings of ED-MEDIA 2002--World Conference on Educational Multimedia, Hypermedia & Telecommunications. (pp. 493-498). AACE: Denver.

European Commission: Joint Research Centre (2022). *DigComp 2.2, The Digital Competence framework for citizens – With new examples of knowledge, skills and attitudes*, Publications Office of the European Union, 2022, https://data.europa.eu/doi/10.2760/115376

Gillotte, J. L. (2019). Copyright infringement in ai-generated artworks" *UC Davis Law Review, 53 (5),* 2655-2691.

Hofer, M., Hargittai, E., Büchi, M., & Seifert, A. (2019). Older adults' online information seeking and subjective well-being: The moderating role of Internet skills. *International Journal of Communication,* 13, 1-18.

Jogezai, N. A., Koroleva, D., & Baloch, F. A. (2023). Teachers' digital competence in the post COVID-19 era: The effects of digital nativeness, and digital leadership capital. *Contemporary Educational Technology, 15*(4), ep466. https://doi.org/10.30935/cedtech/13366

Kleinert, S. (2022). Atmosphäre, Wohlbefinden und Zufriedenheit im BRU vor dem Hintergrund der Lehrer: innen-und Schüler: innenäußerungen (nach der bibor-Umfrage von 2019). A. Obermann (hrsg.). in: Wünsche, Ziele und Atmosphäre im Religionsunterricht an berufsbildenden Schulen: Ein kombinierte Lehrer: innen-Schüler: innen-Umfrage. (pp. 51-63). Waxmann: Münster.

Lankshear, C. and Knobel, M. (2006). Digital Literacy and Digital Literacies: Policy, Pedagogy and Research Considerations for Education. *Nordic Journal of Digital Literacy 1(1),* 12-24.

Lee, D., Arnold, M., Srivastava, A., Plastow, K., Strelan, P., Ploeckl, F., Palmer, E. (2024). The impact of generative AI on higher education learning and teaching: A study of educators' perspectives. *Computers and Education Artificial Intelligence, 6*, 100221. https://doi.org/10.1016/j.caeai.2024.100221

Leu, D. J., Kinzer, C. K., Coiro, J. L., & Cammack, D. W. (2004). Toward a theory of new literacies emerging from the Internet and other information and communication technologies. *Theoretical models and processes of reading*, *5*(1), 1570-1613.

Liu, Y., Zhao, L. and Su, Y. (2022). The impact of teacher competence in online teaching on perceived online learning outcomes during the COVID-19 outbreak: A moderated-mediation model of teacher resilience and age. *International Journal of Environmental Research and Public Health,* 19(10), 6282.

Meinel, C. (2020). Digitale kompetenzen und schulbildung. *In Synapsen im digitalen Informations- und Kommunikationsnetzwerk* (pp. 29–35). https://doi.org/10.1007/978-3-658-22109-6_4

Nie, P., Ma, W., & Sousa-Poza, A. (2021). The relationship between smartphone use and subjective well-being in rural China. *Electronic Commerce Research*, 21, 983-009.

Özerbaş, M. A., & Kuralbayeva, A. (2018). Türkiye ve Kazakistan öğretmen adaylarının dijital okuryazarlık düzeylerinin değerlendirilmesi. *Muğla Sıtkı Koçman Üniversitesi Eğitim Fakültesi Dergisi, 5*(1), 16-25.

Pap, Z., Maricuțoiu, L., and Vîrgă, D. (2023). Happy teacher, healthy class? Linking teachers' subjective well-being to high-school and university students' physical and mental health in a three-level longitudinal study. *Social Psychology Education* 26, 811–831. https://doi.org/10.1007/s11218-023-09768-0.

Perifanou, M., Neophytou, L., Petrova, Z., Gomez, N. C. and Antoniou, F. (2019). Investigating teachers'confidence and training needs on digital literacy across four european countries, *INTED2019 Proceedings*, March 11-13, 2019, Spain. 6808-6817.

Rahman, T., Amalia, A. and Aziz, Z. (2021). From Digital Literacy to Digital Intelligence, *4th International Conference on Sustainable Innovation 2020–Social, Humanity, and Education (ICoSIHESS 2020),* October 13-14, 2020, Virtual. 154-159.

Rastegar, N., & Rahimi, M. (2023). Teachers' post-pandemic outlook on the role of Technological and Pedagogical Content Knowledge in coping with burnout under adverse conditions: How a job demand transformed into a job resource. *Frontiers in Psychology, 14,* 1129910. https://doi.org/10.3389/fpsyg.2023.1129910

Picton, I., & Clark, C. (2024). *Teachers' use of generative AI to support literacy in 2024.* National Literacy Trust. ERIC Number: ED660537. https://eric.ed.gov/?id=ED660537

Polizzi, Gianfranco (2020*) Digital literacy and the national curriculum for England: learning from how the experts engage with and evaluate online content*. Computers and Education, 152. https://doi.org/10.1016/j.compedu.2020.103859

Renshaw, T. L., Long, A. C., & Cook, C. R. (2015). Assessing adolescents' positive psychological functioning at school: Development and validation of the student subjective wellbeing questionnaire". *School psychology quarterly*, *30*(4), 534.

Shi, L. (2025). Assessing teachers' generative artificial intelligence competencies: Instrument development and validation. *Education and Information Technologies.* Advance online publication. https://doi.org/10.1007/s10639-025-13684-5

Wickramasinghe, M., & Jayatilleke, A. (2021). The impact of information and communication technology usage on psychological well-being among undergraduates. 8. 77-99.

Zhou, H., Zhang, X., Ge, C., Wang, J., & Sun, X. (2023). Does ınternet use boost the sustainable subjective well-being of rural residents? Evidence from rural China. *Sustainability*, *15*(2), 1652.

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