

## The Effect of Readiness for Change and Digital Mindset on School Counselors' Intention to use Technology through Digital Competence

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### Abstract

School counselors' use of technology is substantial and has many positive effects on treatment. The purpose of this research is to examine how school counselors' digital competence mediates the relationship between their digital attitude, desire to use technology, and readiness for change. Researchers used a correlational design to survey 90 middle school counselors from the Semarang Residency, who were chosen using a quota area random sampling technique. Participants were asked to rate their own level of preparedness for change, digital attitude, digital competency, and technological intention. Data was examined by multiple regression and path analysis. The Sobel test was used to examine the mediation findings. Looking at the statistics, we can see that digital mindset greatly improves digital competence, and that readiness for change has a major impact on digital competence. Findings also showed that digital competence considerably affects the intention to use technology, and that digital mindset and readiness for change both have substantial impacts. In addition, the mediation analysis's findings showed that digital competence explains how digital mindset and openness for change affect technology use intentions. School counselors and relevant organizations might use this study's findings to foster digital competence by training school counselors to think digitally and be open to change.

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## INTRODUCTION

The two primary factors that determine an individual's purpose are their intrinsic motivation and the extent to which they are influenced by their social environment. The subjective aspect comprises the individual's opinion on the behavior, whether favorable or unfavorable. Second, how much social pressure one feels to act or refrain from acting is a major factor in the severity of the effect (Ajzen, 1981).

The Technology Acceptance Model (TAM) theory was developed to study the complex interplay between beliefs, attitudes, intentions, and behaviors, specifically in the context of technology usage. The Technology Acceptance Model (TAM) is a conceptual framework employed to elucidate and forecast the acceptance or adoption of technology by individuals. This model discerns the crucial aspects that influence persons' attitudes and intentions towards technology usage. The Technology Acceptance Model (TAM), created by Davis in 1989, is grounded in the Theory of Reasoned Action (TRA; Ajzen & Fishbein, 1980). TRA suggests that an individual's beliefs and attitudes might forecast their intention to engage in a certain behavior. An individual's attitude towards an action is shaped by their beliefs regarding the outcomes of that behavior and their emotional assessment of those outcomes. Beliefs refer to an individual's anticipation that engaging in a specific conduct would lead to particular outcomes (Ajzen & Fishbein, 1980). TAM is further utilized to specifically understand the dynamics of behavior related to technology usage (Davis & Davis, 2015).

The utilization of technology in counselor responsibilities is of utmost importance and can provide a multitude of advantages. Nevertheless, the utilization intensity of technology for school counselors does not correlate with several of its benefits. The study conducted by Mason, Griffith, Christopher, and Belser (2018) reveals that school counselors do not fully use the potential of technology. Instead, they primarily employ it for administrative purposes, rather than

utilizing it for communication and information dissemination in guidance and counseling. Additional comprehensive research is required to examine the specific elements that contribute to the limited use of information and communication technology (ICT) by school counselors.

A multitude of issues contribute to the reluctance of many school counselors to utilize ICT in order to enhance school counseling services. One of these causes is the belief that ICT does not make a major contribution to their work. According to a survey conducted by Steele, Jacoke, and Stones (2014), a mere 28% of school counselors hold the belief that ICT (Information and Communication Technology) may be utilized effectively to provide support for school counseling services. Hence, a significant proportion of school counselors (72%) believe that the utilization of ICT will not make a substantial contribution to their job.

Adams, DeFouw, and Maher (2019) state that school counselors may not be able to effectively use technology in counseling and guidance services if their digital abilities are not fully understood. Further investigation is needed to identify the precise elements that impact school counselors' use of digital tools for service provision.

School counselors' perspectives on making the most of information and communication technology (ICT) in counseling were measured in a study by Abdillah, Setyosari, Lasan, and Muslihati (2020). Computer Anxiety (CA), Computer Self-Efficacy (CSA), Collegial Collaboration (CC), Lack Facility (LF), Perceived Usefulness (PU), and Perceived Ease of Use (PEOU) were some of the metrics used to evaluate the effectiveness of information and communication technology (ICT) integration into guidance and counseling (BK) services during the epidemic. All these criteria have a major impact on school counselors' usage of ICT, according to the research. But no one has looked into how school counselors' digital competencies influence their plans or attitudes towards computer use.

School counselors who find ICT user-friendly are more likely to see its benefits and have a positive outlook on it, according to research by Anni, Sunawan, and Haryono (2018). This optimistic outlook can be used to forecast whether school counselors would use technology in their counseling practice. School counselors' openness to and skill with technology, particularly digital competence, are additional factors that could have influenced the results of this study.

Another aspect that is thought to impact how someone tends to use technology is their openness to change, in addition to their digital competence. There is a correlation between teachers' preparedness for change and variables like their involvement in school decision-making, school culture, and proficiency with 21st-century skills, according to studies on teacher readiness for change. A strong correlation between teachers' openness to change, involvement in decision-making, and school culture was discovered by Inandi (2016). Researchers Cavus (2021) looked at how adaptability and teachers' proficiency with modern skills relate to one another. Taken together, these findings stress the need to evaluate educators' adaptability to new circumstances by looking at how well they use 21st-century abilities. This suggests that there is a lack of research on the extent to which digital competence (a type of 21st-century abilities) and readiness for change (a trait that affects the intention to utilize technology) are related.

According to Rafferty et al. (2013), being change-ready is a multi-faceted state that includes receptivity and openness to change. An individual's change readiness is comprised of various factors, including their views and willingness to face particular changes, messages about change, and multidimensional situations (Rafferty et al. 2013), as stated by Madsen and John (2005). A stronger grasp of change is the result of being change-ready, says Berneth (2004). It necessitates being open to change and believing that change is possible.

Digital competence is closely related to an individual's digital mindset. Digital mindset is a complex term that arises from environmental

changes leading to changes in individual behavior. These changes are driven by digital technology and the digital revolution. The way individuals approach a problem has significantly changed as they become increasingly reliant on technology. This, of course, alters how people think and act (Hapudin, 2022).

Research findings indicate the importance of utilizing technology to support the duties of school counselors. However, in different studies, technology has not been maximally utilized by school counselors in supporting their roles as counselors. Several factors influence this, and this research summarizes the usage of variables and findings from previous studies. This study further develops research focus with variables of readiness for change and digital mindset, which impact digital competence and the intention to use technology among school counselors.

Based on the research findings and expert opinions above, there is a need for broader and more in-depth research to understand the influence of readiness for change and digital mindset on the intention to use technology among school counselors, with digital competence as an intervening variable. This study aims to examine the extent of the influence of readiness for change and digital mindset on the intention to use technology and how digital competence mediates this influence.

## METHODS

The respondents in this study were junior high school counselors in the Semarang residency area, including the cities of Semarang and Salatiga, as well as the districts of Semarang, Demak, Kendal, and Grobogan. The study involved 90 respondents determined through area random sampling quotas. Data collection was conducted using Google Forms.

Data on readiness for change were collected using the readiness for change scale, consisting of 7 items to measure positive attitudes toward change, awareness of change, understanding of the impact of change, resilience in facing change, readiness to equip oneself to face change, anticipation of change, and

readiness for change strategy in Likert scale format. This instrument had a Cronbach's alpha reliability coefficient of 0.747 and validity coefficients ranging from 0.530 to 0.719.

The second instrument used was the digital mindset scale, consisting of 17 items to measure 3 aspects: open mind mindset, transformer mindset, and entrepreneur mindset, in Likert scale format. This instrument had a Cronbach's alpha reliability coefficient of 0.907 and validity coefficients ranging from 0.461 to 0.769.

The third instrument employed was the digital competence scale, comprising 35 items designed to assess five dimensions: data and information literacy, communication and cooperation, digital content production, safety, and problem-solving. The scale was presented in a Likert scale format. The instrument had a high level of reliability, as indicated by a Cronbach's alpha coefficient of 0.959. Additionally, the validity coefficients for this instrument ranged from 0.368 to 0.831.

The last instrument used was the intention to use technology scale for school counselors, consisting of 35 items to measure 5 aspects: data and information literacy, communication and collaboration, digital content creation, safety, and problem-solving, in Likert scale format. This instrument had a Cronbach's alpha reliability coefficient of 0.876 and validity coefficients ranging from 0.415 to 0.821. Data processing was conducted using SPSS version 22 software utilizing path analysis. Meanwhile, the mediating effects were tested using the Sobel test technique.

## RESULTS AND DISCUSSION

The data were processed and analyzed descriptively to determine the mean, standard deviation, level of readiness for change, level of digital mindset, level of digital competence, and level of intention to use technology.

**Table 1** N, Mean, Standar Deviation

Variable	N	Mean	SD
Readiness for change	90	30.30	3.673

Digital Mindset	90	67.23	8.40
Digital competence	90	140.42	21.14

As presented in Table 1, the level of readiness among school counselors was high with a mean of 30.30 (SD = 3.673), the digital mindset was high with a mean of 67.23 (SD = 8.40), digital competence was high with a mean of 140.42 (SD = 21.14), and the intention to use technology was high with a mean of 72.58 (SD = 9.75)

**Table 2.** Regression and Sobel Test Results

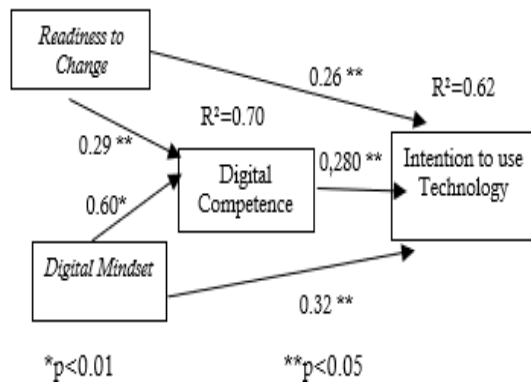
Prediktor	$\beta$	t	P	R	R <sup>2</sup>	F	P
Digital competence criteria (Y1)				0.84	0.70	101.06	<0.01
Readiness for Change (X1)	0.29	3,47	<0.01				
Digital Mindset (X2)	0.60	7,06	<0.01				
Intention to use technology criteria (Y2)				0.79	0.62	46.10	<0.01
Readiness for change (X1)	0.26	2.50	0.01				
Digital mindset (X2)	0.32	2.65	0.01				
Digital competence (Y1)	0.28	2.30	0.02				
Mediating Effect					Sobel Test		P
X1-Y1-Y2					1.92		<0.05
X2-Y1-Y2					2.19		<0.05

Based on the regression analysis results presented in Table 2, readiness for change ( $\beta = 0.29$ ,  $p < .05$ ) significantly influences digital competence, while digital mindset ( $\beta = 0.6$ ,  $p < .01$ ) significantly enhances digital competence. Both readiness for change ( $\beta = 0.26$ ,  $p < .05$ ) and digital mindset ( $\beta = 0.32$ ,  $p < .01$ ) significantly influence the intention to use technology.

Regarding these findings, there is an influence of readiness for change and digital mindset on digital competence as well as the intention to use technology. This has confirmed the hypotheses of this study, which suggest an influence of readiness for change and digital mindset on digital competence, and an influence of readiness for change, digital mindset, and digital competence on the intention to use technology.

Further, a mediation analysis was conducted to observe how digital competence

mediates the relationship between readiness for change and the intention to use technology, and how digital mindset mediates the relationship between readiness for change and the intention to use technology. The path analysis results are presented as follows:



**Figure 1** Path Analysis

The path analysis results indicate that the digital competence variable significantly mediates the influence between readiness for change and digital mindset on the intention to use technology among school counselors.

This study's results on adaptability are in line with those of Razumova and Gerasimenko (2020), who discovered that problems associated with digital transformation can be solved by keeping an open mind and understanding the changes that are taking place, as well as by giving thorough information about the changes' aims, impacts, and consequences as soon as possible, and by highlighting the advantages of these changes. Cavus and Helvaci (2021) also discovered a positive and significant correlation between teachers' transition preparedness and their capacity to employ 21st-century abilities, which is in line with our findings.

According to these results, in order to improve digital competence, it is important to think about how prepared teachers are for change. This includes being able to predict changes, being resilient when faced with change, having positive attitudes towards change, being aware of change, knowing how it will affect them, being prepared to equip oneself for change, and having a strategy to deal with change.

Furthermore, the study's findings reinforce Kondakci, Sincar, Beyciuglu and Ugarlu (2015) research on teachers' readiness for change, emphasizing that schools/educational institutions must adapt to changes occurring among teachers. School counselors, as key agents of change, play a vital role in educational institutions/schools. As an implication, self-development and enhancing the role of school counselors are crucial, especially in terms of acquiring new skills and ways of thinking needed in the future, which will impact students. Digital competence is one of the skills needed in the future, thus readiness for change is essential in efforts to enhance digital competence in response to the demands of development and the increasing role of teachers.

Readiness for change encompasses both mental and physical preparedness, as reflected in individuals' attitudes, behaviors, and beliefs about the goals of change that drive them to adapt. The findings of this study align with Davis's Technology Acceptance Model developed in 1989 based on the Theory of Reasoned Action (TRA; Ajzen & Fishbein, 1980), which states that two main factors influence an individual's willingness to use technology: their perception of the technology's usefulness and ease of use. Thus, readiness for change influences the intention to use technology. School counselors that are adaptable and open to new ideas are those who think about the positive aspects of change and how it will help them achieve their professional and personal goals. The incorporation of technology into counseling services is driven by counselors' opinions of the utility of the technology, which aligns with the goal to employ technology.

The results highlight the significance of school counselors' readiness for change in influencing their intention to employ technology. Particularly in their positions as school counselors, counselors will be motivated to use technology if they have attitudes, behaviors, and beliefs about the advantages and objectives of change. In their research and papers on digital mentality among employees, Solbergh et al. (2020) found that employees' perceptions of their

own digital skill level determine their digital mindset. Because digital transformation programs are fraught with complexity and ambiguity, the beliefs that mold employees' digital mentality have a substantial impact on how they comprehend and react to them. School counselors' digital mentality and competency are the subject of this study, which is in line with that of Solbergh et al. (2020). Digital transformation initiatives in the education sector necessitate teachers to possess digital competence in order to adapt to changing policies (in the education, research, and technology ministries) and institutional/school levels, and the beliefs that shape school counselors' digital mindset impact their comprehension and reactions to these initiatives.

The findings of this study also align with Benke's research, indicating that individuals with a high digital mindset will have high digital competence (Benke, 2013). Therefore, school counselors with a high or increasing digital mindset will also have high digital competence. This forms the basis for the need to consider aspects of digital mindset to enhance the digital competence of school counselors.

Digital mindset refers to a set of mental knowledge-experience structures formed within an individual due to living in a digital society and recognized and utilized by them to succeed in a digital environment. Each dimension has a unique profile. These factors include perspectives such as open-mindedness, transformation, and business (Costa et al., 2022). Regarding the intention to use technology, Davis developed the Technology Acceptance Model based on the Theory of Reasoned Action (TRA; Ajzen & Fishbein, 1980), which states that two main factors influence an individual's desire to use technology: their perception of technology's usefulness (perceived usefulness) and ease of use (perceived ease of use).

Based on the research results, it can be outlined that school counselors with a high digital mindset will have a high intention to use technology. In other words, if a school counselor's digital mindset increases, their intention to use technology will also increase.

Conversely, if their digital mindset decreases, their intention to use technology will decrease.

According to the theory that digital mindset is formed because an individual lives in a digital environment, thus having an open-minded mindset, being receptive to change, this supports school counselors perceiving positively the usefulness of technology usage, thereby motivating them to learn to utilize technology and subsequently increasing their intention to use technology.

The study by Cavus and Helvaci (2021) concluded that the higher the teachers' proficiency in 21st-century skills, the higher their readiness for change. Meanwhile, this study found that the higher the readiness for change, the higher the digital competence as well. Davis (1993) concluded that the easier it is for someone to use technology, the more it will increase their acceptance attitude towards technology. School counselors with a more positive attitude towards ICT have a stronger intention to use ICT in the context of providing counseling services (Anni, 2018). This indicates that digital competence can mediate the influence of readiness for change on the intention to use technology.

Regarding the intention to use technology, school counselors have the intention to use technology in counseling if they perceive it as easy to use, beneficial, and hold a positive attitude towards its utilization, thus prompting self-instruction to engage in behaviors involving the utilization of technology in counseling (Davis, 2015).

Based on the research results, it can be outlined that with a high readiness for change, school counselors will have a high intention to use technology. Increasing readiness for change will prompt school counselors to strive to enhance their digital competence, thereby perceiving technology as easy and beneficial, consequently increasing their intention to use technology. In other words, if school counselors have an increasing readiness for change, they will also have an increasing intention to use technology, through the enhancement of digital competence as an intermediary between these variables.

This study's results corroborate those of Benke (2013), which found that people who have a strong digital mentality also tend to be very competent digital citizens. In addition, according to Anni et al. (2017), school counselors who have a positive outlook on ICT are more likely to want to use it while offering counseling services. Following this, one's intent to use technology is affected by their level of digital competence.

Based on these research findings, it can be summarized that the digital mindset possessed by school counselors will motivate them to enhance their digital competence, perceiving digital technology as easy to use and beneficial in providing counseling services to students and other tasks, thereby influencing their attitude towards technology, subsequently forming an intention and tendency to utilize technology in counseling services.

The implications of these findings indicate the necessity to consider the variables of readiness for change and digital mindset, which will influence the digital competence of school counselors, consequently increasing their intention to use technology.

## CONCLUSION

Based on the discussion regarding the influence of readiness for change and digital mindset on the intention to use technology with digital competence as a mediating variable, it can be concluded that: First, the level of readiness for change, digital mindset, digital competence, and intention to use technology among school counselors in the Semarang Residency is high; Second, there is a significant positive influence between readiness for change and digital competence among middle school counselors in the Semarang Residency; Third, there is a highly significant positive influence between digital mindset and digital competence among middle school counselors in the Semarang Residency; Fourth, there is a significant positive influence between digital competence and intention to use technology among middle school counselors in the Semarang Residency; Fifth, there is a significant direct positive influence between

readiness for change and intention to use technology among middle school counselors in the Semarang Residency; Sixth, there is a significant direct positive influence between digital mindset and intention to use technology among middle school counselors in the Semarang Residency; Seventh, digital competence mediates the influence of readiness for change on intention to use technology; and Eighth, digital competence mediates the influence of digital mindset on intention to use technology in counseling services.

The research findings suggest that the intention to use technology is linked to aspects such as willingness for change, digital mindset, and digital competence. In order to improve their skills in using digital technology, school counselors are advised to be receptive to change and to actively seek opportunities for learning. Institutions responsible for evaluating the competency of counselors, especially those working in schools, should actively promote their development by offering valuable insights that broaden their understanding of different changes.

This will help improve their preparedness for change, their ability to adapt to digital advancements, and their overall proficiency in using technology. Ultimately, this will result in a strong inclination to embrace and utilize technology.

Future researchers are recommended to expand the scope of the study by analyzing gender differences among the research subjects.

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