

# The role of change readiness in the relationship between learning organisation and successful change implementation

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## Abstract

**Purpose** – Although change is a necessary part of organisational life, achieving a successful change is complex. Change readiness is a critical element in successful change implementation, yet studies assessing change readiness as an underlying mechanism in the link between organisational-level factors and successful change implementation are scarce, particularly in the African context. Accordingly, the present study examined the extent to which change readiness mediates the link between learning organisation and successful change implementation in the Ghanaian context.

**Design/methodology/approach** – The study utilized a standardized questionnaire to collect data from 364 participants, working in public and private universities in Ghana. The participants were selected via the convenience sampling strategy to complete the survey on the main variables at a single point in time. The study was purely quantitative, as path analysis – a form of structural equation modelling was employed to test the hypothesized relationships in the study.

**Findings** – The results show that both learning organisation and change readiness facilitated successful change implementation. Finally, it was observed that change readiness served as an important mediating mechanism in the link between learning organisation and successful change implementation.

**Practical implications** – Change readiness was found to explain the link between learning organisation and successful change implementation. Thus, it is important that managers and leaders of public and private sector educational institutions in Ghana invest resources into preparing and getting employees to accept, be committed to and ready for change.

**Originality/value** – The present study contributes to the scarce knowledge of the mediating role of change readiness in the link between learning organisation and successful change implementation in the African context.

**Keywords** Ghana, Learning organisation, Change readiness, Industrial-organisational psychology, Successful change implementation

**Paper type** Research paper

## Introduction

Successful change initiatives benefits organisations (Karasvirta and Teerikangas, 2022). Organisational change represents those strategic changes that impact structures, processes, cultures and systems, leading to improved organisational and individual level outcomes, such as organisational and employee performance (Quattrone and Hoper, 2001). Change is a necessity that provides organisations with a renewed sense of positive energy, focus and direction to confront the fast-evolving and highly competitive business environment with hope. While change is critical for organisational success, studies indicate that most change efforts have failed, with the failure rate ranging from 20 to 40% and 70–80% (cf. Albrecht *et al.*, 2022; Beer and Nohria, 2000; Burnes, 2011; Choi, 2011; Weiner *et al.*, 2008). Notwithstanding this, change remains a prominent feature of organisational life (Karasvirta and Teerikangas, 2022; Tsaousis and Vakola, 2018). Studies on successful implementation of change in African-based organisations is still in the nascent state (cf. George *et al.*, 2016), talk less of institutions of higher learning. Studies on the antecedents of organisational change remains a vital area of scientific research. Given the dynamic and highly competitive



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environment businesses are confronted with, learning remains the most strategic way by which organisations can gather business intelligence and use that information to actualize their change goals. The present study proposes learning organisation as an important antecedent of successful change implementation because learning allows the organisation to understand the dynamic nature of the business environment, interact with the market and appreciate the relevant changes going on in the business (cf. [Beus et al., 2020](#); [Thundivil et al., 2015](#)). Learning organisation facilitates organisational transformation and adaptability ([Watkins and Marsick, 1996](#)).

It is frequently noted that there is interchangeable usage of the terms “organisational learning” and “learning organisation,” which is considered inappropriate ([Akwaowo and Kalio, 2021](#); [Ortenblad, 2001](#)). These are two interrelated, yet distinct ideas predicated on abstract descriptions ([Akwaowo and Kalio, 2021](#); [Ortenblad, 2001](#)). While a learning organisation pertains to the organisation itself, possessing necessary traits and the capacity to frequently learn from experiences to enhance their work, organisational learning is a multi-level process occurring at an individual or group level ([Akwaowo and Kalio, 2021](#); [Ortenblad, 2001](#)) that may involve institutionalisation or integration ([Akwaowo and Kalio, 2021](#)).

Contemporary organisations operate in a highly competitive and dynamic context. To succeed in such a context, organisations need to embrace a learning mind-set. In the current knowledge economy, learning has become a strategic tool for organisational survival and effectiveness. Through learning, organisations proactively develop and enhance their capacities and existing knowledge resources as well as the utilization of such knowledge for organisational progress and productivity ([Tan and Olaore, 2021](#)). Researchers contend that learning is that invaluable resource that enables businesses to adapt and survive in dynamic and technologically evolving context ([Kools and Stoll, 2016](#); [Senge, 1990](#)). Learning enhances an organisation’s capacity to compete with peers as well as survive the heat of the competition ([Marquardt, 2002](#)); and to appreciate the need to adapt effective organisational processes, systems and procedures to achieve greater productivity. For example, the emergence of the Covid-19 pandemic compelled businesses to migrate some of their operations onto a virtual platform. Thus, change in the form of work structure, procedures and processes was implemented by many organisations so they can remain in business. These strategic changes organisations embarked upon during the Covid-19 era highlight the strategic role of learning organisation for both survival and performance (cf. [Kim et al., 2017](#)) because organisations had to acquire knowledge about the happenings in the global and local economy in terms of the effect of the Covid-19 pandemic on business operations. The business intelligences gathered enabled organisations to develop systems and policies to support the “new normal”. This highlights the value of learning for organisational transformation and development.

Learning organisation has been associated with beneficial individual and organisational outcomes. For example, learning organisation is associated with a higher level of work engagement ([Parul and Pooja, 2017](#)), organisational performance and productive employee attitudes, such as job satisfaction and commitment ([Ju et al., 2021](#)). Further, learning organisation has been associated with improved organisational effectiveness, organisational performance and organisational innovativeness ([Hussein et al., 2014](#)).

In every change situation, there is a reaction, in various forms; either resistance to, or readiness for change, or both (depending on the mix of employees involved). In discussing attitudes towards change in organisational studies, scholars use several terminologies, common among these are resistance to change, willingness to accept change, openness to change, reaction to organisational change and readiness to change ([Oreg et al., 2011](#)). The present study focuses on readiness for change, but to discuss this variable, it is important to mention briefly what resistance is, and the possible implication for readiness. Where change

initiative is not welcome by the people who will be affected, they are likely going to demonstrate resistance to that change (Burke, 2011). It is important to note that readiness for change could just be one very important way of minimizing employee resistance to change (Walinga, 2008), but the two concepts are not necessarily directly opposite (Burke, 2011). The literature in organisational studies shows that the importance of change readiness has not been reflected in extensive theoretical development or empirical study (Weiner, 2009) especially in educational administration. As such, examining the concept of readiness for change would help add to the knowledge in the area. Moreover, efforts made in the present study to understand readiness for change, learning organisation and successful change implementation has the potential to provide a scientific basis for decision making for purposes of running effective human resource management and being effective in goal attainment. For instance, it has been observed that learning organisation as a concept affects job satisfaction and leadership (Kim *et al.*, 2017; Nyukorong, 2016; Sheng *et al.*, 2021). Knowledge and understanding of how these variables play a significant role in the Ghanaian context will help not only the locals but also the international community to make decisions on whether to invest in Ghanaian universities in terms of research funding and collaboration and/or knowledge acquisition in the African sub-region.

Given the benefits associated with learning organisation, it is important to investigate the extent to which it facilitates other important organisational level outcomes, particularly successful change implementation. In Africa, research on learning organisations has typically centred on other disciplines, with only a limited amount of research and application in educational settings (Sarange, 2018). Indeed, studies on the link between learning organisation and successful change implementation are virtually absent in the Ghanaian context, particularly those that focus on public and private sector organisations, yet learning provides an important basis and justification for change in organisations. This absence in Ghanaian context has implications on understanding the extent to which learning organisation influences successful change implementation especially in Ghanaian institutions of higher learning, hence the focus of this paper on public and private universities in Ghana. It is anticipated that effective learning organisation might influence the extent to which change can be implemented successfully, and this is one of the hypotheses in this paper. Education is one of the most important and critical service-related business in a country's economic growth and transformation. As the centres for learning and innovation, universities need to embrace change to achieve their strategic objectives.

The extant change literature highlights the important role of employee support in successful change implementation (Kotter and Cohen, 2002). Consequently, change readiness, which highlights the support employees give, as well as the belief they have in the change agenda has become a burgeoning area of research in the field of organisational change (Armenakis and Harris, 2002; Oreg *et al.*, 2011).

Change readiness can be conceptualized as the psychological and behavioural preparedness of employees in an organisation to initiate and implement changes (Weiner *et al.*, 2008). It implies a shared conviction in the proposed changes, a collective capability to carry them out successfully and can also be referred to as change efficacy (Armenakis *et al.*, 2007; Weiner, 2009). Ultimately, if created correctly, this preparedness could indicate the shared determination of organisational members to participate in change implementation (Weiner, 2009). Hence, this paper evaluates the impact of readiness on change success (Armenakis *et al.*, 2007; Lewin, 1952; Weiner, 2009). It has been found that studies on the antecedents of change readiness are few (Rafferty *et al.*, 2013), yet change readiness is an important driver of successful change implementation (Armenakis and Harris, 2002; Oreg *et al.*, 2011). Previous studies have associated management processes (Rafferty *et al.*, 2013) and perceived organisational support (Gigliotti *et al.*, 2019) with successful change

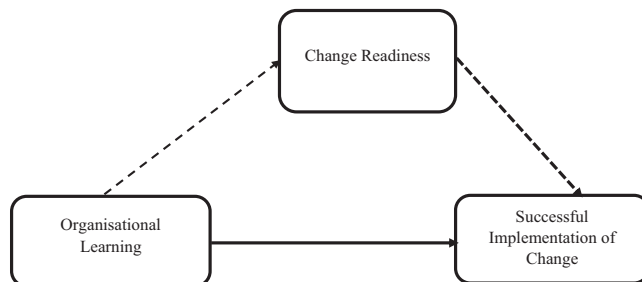
implementation. Drawing on the above, the present study contends that change readiness might serve as an important mediating mechanism in the link between learning organisation and successful change implementation in the Ghanaian context. Figure 1 denotes the hypothesized relationships and the potential contribution the study makes to the change literature.

## Theory and hypothesis development

### *Learning organisation and successful change implementation*

Conceptually, a learning organisation is one that learns to continually transform itself (Watkins and Marsick, 1997). Such organisations tend to be proactive, using the sharing of experience in an integrated way to support growth at all levels, including individuals, groups, whole organisations, and (sometimes) the institutions and communities to which they are linked, and communities with which they are associated (Marsick and Watkins, 2003). Learning for organisations has the potential to move them closer to achieving their goals and thereby contribute to success (Kools *et al.*, 2020; Kools and Stoll, 2016). This is in line with Senge's (1990) assertion that learning organisations, among other things, continually expand their capacity to produce results, holistically (Abdul-Nasiru, 2014). This study contends that learning organisation might facilitate successful change implementation. Previous studies have association learning organisation to beneficial organisational outcomes including organisational effectiveness and financial performance (Kaminska and Borzillo, 2017; Reese and Sidani, 2018), operational efficiency, employee as well as management performance (Tan and Olaore, 2021). Learning organisation is the catalyst through which the organisation actively and continually collect business intelligence to inform the change required to make the organization effective and competitive. It is important to note that learning organisation helps organisation determine the nature and type of change that align with the mission and vision of the organisation. Consequently, learning helps determine the policies and strategies that might facilitate successful change implementation (Rupcic, 2019). Learning organisation is particularly important in the current highly unstable and fast evolving business context (Reese, 2020) and in education where adapting and responding to unforeseen circumstances is crucial for survival (Tan and Olaore, 2021).

Organisational studies indicate that change initiatives that fail to materialize outnumber those that succeed (Beer and Nohria, 2000; Burnes, 2007) and the observation is that the intended change initiatives may be well thought of and planned, but the failure could be attributable to implementation failure (Kotter, 1995; Schein, 1999). For purposes of this study, change implementation success has been operationalized as technology acceptance.



Source(s): Authors work

**Figure 1.**  
Hypothesised  
relationships between  
variables

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Within the context of this study, technology acceptance can be seen as a voluntary behavioural outcome, as reflected in [Ajzen and Fishbein's \(1980\)](#) theory of reasoned action (TRA). The theory, among others, suggests that an individual's intention to engage in a particular action is a key determinant of a person's behaviour, and to a large extent, intentions and attitudes vary subjectively. Successful implementation in the form of acceptance can also be an indication of planned behaviour, predicting deliberate behaviour, especially where such a behaviour can be explained using the theory of planned behaviour (TPB) ([Ajzen, 1991](#)) based on the argument that an individual's attitude towards a particular behaviour has the tendency of predicting that behaviour. It has been observed that one factor that serves as a differentiating factor between the TRA and TPB is what [Ajzen \(1991\)](#) and [Ajzen and Fishbein \(1980\)](#) describe as perceived behavioural control, which refers to the perception people have about how capable they are or can be, in performing a given behaviour. [Venkatesh et al. \(2003\)](#) observed that several studies have been done to ascertain the successful application of TPB to the understanding of the way individuals tend to accept and use many different technologies (e.g. [Harrison et al., 1997](#); [Mathieson, 1991](#); [Taylor and Todd, 1995](#)). In a university setting, the introduction of technology and the subsequent acceptance to use technology are both planned behaviours and reasoned actions. Therefore, the extent to which staff, academic and administrative workers, as well as students, take decisions to accept (or not accept) to use computers is, and should be a source of concern for the various human resources outfits. However, pertaining to technology acceptance, the prominent among is the technology acceptance model (TAM). [Straub et al. \(1997\)](#) argue that the Technology Acceptance Model (TAM) can be said to be a strong and appropriate model that can be used to understand how people use IT and that users tend to think about how easy it will be and how useful the technology can be for the purposes of delivery before accepting technology when it is introduced into an organisation. Some studies have been conducted and it is observed that among the various factors that influence the acceptance of technology are the perceived usefulness for the individual as well as the extent to which they perceive how easy (difficult) it would be to use the platform or technology related devices such as digitised libraries ([Thong et al., 2002](#)). The role of libraries in higher education is enormous, so steps taken to introduce digitised versions of reading materials are in the right direction, especially in this era of advanced technology. Technology acceptance is useful not only for the teaching staff but also for the students who may be eager and willing to further explore how they can benefit from the internet world and web-based learning platforms. It is therefore not surprising that since the 1980s there has been a great deal of investment in information technology based research ([Westland and Clark, 2000](#)). The objectives of most of these researchers have focused on how to improve productivity using advanced technologies, and it is for this reason that they argue for the need for technology acceptance ([Venkatesh et al., 2003](#)), alongside the idea of improving service delivery through this important tool. The psychology behind getting people to accept technology can be better served with appropriate models in place, and this is expected to have a broader outlook covering a combination of different fields such as psychology and information systems ([Venkatesh et al., 2003](#)).

Drawing on the above literature on learning organisation and successful change implementation (using technology acceptance), it is hypothesized that:

*H1. Learning Organisation will relate positively and significantly with successful change implementation*

#### *Learning organisation and change readiness*

Change readiness represents the beliefs and attitudes employees demonstrate toward changes in organisation ([Shea et al., 2014](#)). Organisational change readiness is associated with sustainable organisational performance ([Faulks, 2021](#)). As change is constant and its

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effective implementation depends on acceptance, it is important that organisations take steps to ensure that employees accept the change that is being introduced. One organisational factor that might facilitate change readiness is learning organisation, because learning has the potential to facilitate change readiness. Researchers contend that learning allows organisations to gather concrete and relevant information to ensure effective change communication. Business intelligence gathered through actively and continually collecting market information helps managers to convince employees of the need for the change, the organisational and employee benefits associated with the change. Accordingly, researchers posit that employees are more likely to accept and demonstrate commitment to a change agenda when the reason for the change is meaningful to them (cf. [Armenakis et al., 2007](#); [Ashford, 1988](#); [Soenen et al., 2017](#)). Previous studies support the possible link between learning organisation and change readiness, as observed in a recent survey involving 124 lecturers at the Widyatama University ([Brahmana and Christina, 2020](#)). Furthermore, a study among 169 experts drawn from the Ministry of Sport and Youth revealed that learning organisation was beneficial for readiness for change; and dimensions of learning, such as continuous learning, research and study, group learning, merged systems, systematic relation and strategic leadership facilitated readiness for change ([Safania, 2015](#)). Drawing on these studies, the present study hypothesizes that:

*H2. Learning organisation will relate positively and significantly with change readiness*

#### *Change readiness and successful change implementation*

Change readiness is an important driver of successful change implementation ([Armenakis et al., 2007](#)). According to researchers, change readiness highlights acceptance, commitment and support for change ([Armenakis et al., 2007](#); [Ashford, 1988](#); [Soenen et al., 2017](#)). Readiness for change is among numerous contributing factors to the success or failure of change initiatives ([Armenakis et al., 1993](#); [Bartunek et al., 2006](#)). This is comparable to [Lewin's \(1947\)](#) concept of unfreezing, which is one of the three popular conceptions in change literature and organisational studies. Scholars conceptualise change readiness in various ways. Some see readiness as a combination of psychological and behavioural preparedness on the part of organisational members to implement organisational change initiatives ([Weiner et al., 2008](#)). To be psychologically prepared and behaviourally ready could also mean that there is a shared belief in, and collective fitness to carry on with the planned change to its success, and can also be termed as change efficacy ([Armenakis et al., 2007](#); [Weiner, 2009](#)). Eventually, when this readiness is properly created, it could reflect organisational members' collective resolve to be committed in implementing change ([Weiner, 2009](#)). As a psychological variable, readiness for change goes beyond believing and understanding the change, to encompass a collection of thoughts and intentions toward the specific change effort ([Bernerth, 2004](#)). Successful change implementation is anchored on readiness for change. Thus, when employees are ready, committed and support change, implementation tends to be smooth and effective ([Alolabi et al., 2021](#)). Readiness for change might result from the benefits and value employees associate to the change ([Armenakis et al., 2007](#); [Von Treuer et al., 2018](#)). Further, employees who demonstrate a higher level of readiness tend to show cooperative behaviours and efforts that facilitate effective change implementation ([Alolabi et al., 2021](#)).

It is important to note that one key component of doing things is the acceptance and use of modern technology, and therefore this aspect cannot be ignored by organisations in their stride to succeed. For instance, experts in information and communication technology (ICT) note that the ICT revolution has affected every sphere of life (work-life and non-work-life) with tremendous benefits in varying ways, especially to those nations which embraced this as a tool to work with ([Alemna and Sam, 2006](#)). University education delivery and the use of ICT in the process, is very necessary ([Budu et al., 2002](#); [Burke, 2011](#)). This could be because of the

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benefits involved, in terms of speed, accuracy and reliability. Therefore, there is the need to use technology acceptance as a measure of successful change implementation in this study. Drawing on these studies, the present study hypothesizes that:

*H3.* Change readiness will relate positively and significantly to successful change implementation

#### *Change readiness as a mediator*

The nexus between learning organisation and successful change implementation is a complex one given that organisational change readiness is a crucial element in the process. The present study contends that change readiness would serve as an important underlying mechanism through which learning organisation might facilitate successful change implementation. According to Burnes (2020), readiness for change is important as demonstrated in the unfreezing component of Lewin (Burnes, 2020) and this has the potential for ensuring and sustaining behavioural change (Burnes, 2007). As a result, the present study hypothesizes that:

*H4.* Learning Organisation will relate significantly and positively to successful change implementation through change readiness.

## **Method**

### *Sample and procedure*

The phenomena of learning organisation, change readiness and successful change implementation, and their associations are important areas of study in the field of industrial-organisational psychology and behaviour. Although studies on these phenomena have received much research attention, particularly in wealthy western nations, studies in the educational context are scarce. However, education is a dynamic process, which means that educational institutions, particularly universities (which are the foci of the present study) learn from other universities, locally and globally in order to implement new and better ways of delivering enhanced knowledge and skills, to develop the needed human capital. As universities strive to create enabling environments to provide quality teaching and research, the need to adopt and implement creative and innovative practices is critical for success. In this regard, studies on learning organisation, change readiness and successful change implementation was found to be relevant in the Ghanaian university context, as findings would identify practical ways to prepare employees for change, and to implement change successfully.

The study involved ten (10) accredited universities, which consented to participate in the study. These universities were invited through a letter, introducing the purpose of the study and the ethically sound nature of the study to the registrars of these universities. The participating universities were required to advertise the study on departmental notice boards. These advertisements highlighted the purpose of the study, indicated that the study was anonymous and that interested participants could voluntarily pick the survey packet at the general office of their various departments. The researcher took steps to satisfy the requirement of confidentiality and anonymity, as envelopes were provided for participants to put completed surveys into and seal before depositing them at the general office. All completed surveys were picked up by the researcher at the general offices of the participating universities.

This anonymous survey was completed by Three Hundred and Sixty-four ( $N = 364$ ) employees, comprising academic and non-academic employees. The participants were predominantly male (69.8%); 59.9% of the participants were from the public universities;

48.6% were within the age bracket of 41–60 years; 89.3% were full-time employees and 64.6% had worked for at most 6 years in their current university. Finally, the participants included lecturers/research fellows (36.3%), senior lecturers (5.5%), professors (2.7%), junior assistant registrars (5.8%), assistant registrars (6.9%), senior assistant registrars (5.2%) and others (37.6%).

### *Measures*

All the measures were administered in English. Apart from the successful change implementation measure, which was based on a 5-point Likert response option (1 = rarely true and 5 = always true), learning organisation and change readiness were anchored on a 7-point Likert scale, ranging from 1 = strongly disagree to 7 = strongly agree.

*Learning organisation.* Learning organisation was conceptualised and assessed with 7-items adopted from the learning organisation scale (Marsick and Watkins, 2003). Sample item includes: “In my organisation, people spend time building trust with each other”. Confirmatory factor analysis results produced significant factor loadings for all the 7-items (factor loadings  $> 0.60$ ,  $p < 0.001$ ); and Cronbach alpha value obtained in the present study was acceptable ( $\alpha = 0.88$ ).

*Change readiness.* Change readiness was assessed with the use of the change readiness scale developed by Armenakis *et al.* (2007), which is made of five dimensions, namely; appropriateness (5-items), efficacy (5-items), discrepancy (4-items), valence (4-items) and principal support (6-items). Confirmatory factor analysis led to the withdrawal of three items, which loaded below 0.30. These items were associated with efficacy, valence and discrepancy; and they were: “I believe we have successfully implemented all the major changes in my university”, “I will earn higher pay from my job now that these changes have taken place”, and “This change was needed to improve my university’s operation”, for efficacy, valence and discrepancy, respectively. Consequently, out of the 24 items, 21 were utilised for statistical analysis in the present study. However, because of the significantly high correlation between the dimensions of change readiness: principal support related positively to appropriateness ( $r = 0.78$ ,  $p < 0.001$ ) and valence ( $r = 0.76$ ,  $p < 0.001$ ); and between appropriateness and efficacy ( $r = 0.67$ ,  $p < 0.001$ ) as well as appropriateness and valence ( $r = 0.73$ ,  $p < 0.001$ ), the responses were aggregated into a single measure of change readiness. Reliability coefficient for change readiness in the present study was acceptable ( $\alpha = 0.90$ ).

*Successful change implementation.* This was conceptualised using items on technology acceptance as a measure of successful change implementation. The scale was developed from two perspectives: content and process. The content aspect focuses on the technology acceptance model (as the study specifies technological changes). This brings out the behavioural and cognitive construct dimensions. This scale consists of five variables (perceived usefulness, perceived ease of use, subjective norm, facilitating conditions and attitude towards use) and behavioural intention to use the technology. The process aspect varies depending on the type of change, so the researcher adapted questions from Smith (2011) that reflect process satisfaction. It was assessed with 8-items, with each item loading significantly (factor loadings  $> 0.60$ ,  $p < 0.001$ ) on the latent construct (i.e. successful change implementation). Sample item included “When I encounter difficulties using the new technology, a specific person is available to provide assistance”. Cronbach alpha value for this scale in the present study was acceptable ( $\alpha = 0.88$ ).

### **Results**

Table 1 shows descriptive statistics, bivariate correlation and Cronbach alpha values of the study variables. Results show that learning organisation related more positively to successful

Variables	M	SD	1	2	3	4	5	6	7	8	9
Gender	0.30	0.46	–								
Age	2.0	0.80	–0.12*	–							
Institution type	0.40	0.49	–0.07	0.00	–						
Job position	4.1	2.68	0.26***	–0.22***	0.16**	–					
Employment status	0.11	0.31	0.00	–0.08	0.01	0.04	–				
Tenure	1.41	0.69	0.16**	0.22***	–0.05	0.01	–0.05	–			
Learning organisation	4.56	1.26	0.00	0.09	0.08	0.11*	0.08	0.00	(0.88)		
Change readiness	5.49	0.72	–0.04	–0.04	0.07	–0.04	0.07	–0.06	0.39***	(0.90)	
Successful change implementation	3.46	0.71	0.09	–0.07	0.05	0.17**	0.05	–0.04	0.35***	0.44***	(0.88)

Note(s): Cronbach alphas in parenthesis, \*\*\* $p < 0.001$ , \*\* $p < 0.01$ , \* $p < 0.05$

Source(s): Authors work

Change  
readiness

**Table 1.**  
Descriptive statistics,  
bivariate correlation  
and reliability  
coefficient of study  
variables

change implementation,  $r = 0.35, p < 0.001$  and change readiness,  $r = 0.39, p < 0.001$ ; and change readiness related more positively to successful change implementation,  $r = 0.44, p < 0.001$ . Reliability coefficients for the study variables were acceptable. Further, confirmatory factor analysis results show that items measuring each of the variables loaded significantly (factor loadings  $> 0.60, p < 0.001$ ).

*Hypothesis testing*

SPSS Amos version 21 as used to facilitate the analysis. Path analysis approach was used to test the null, direct, and indirect effect simultaneously. The hypothesized model fit the data well:  $\chi^2 = 0.33.46, df = 17, p = 0.010$ ; CFI = 0.93, TLI = 0.86, RMSEA = 0.05. Table 2 shows result of the hypothesized relationships. After controlling for demographic factors, learning organisation related more positively to successful change implementation,  $\beta = 0.20, p < 0.001$  and change readiness,  $\beta = 0.40, p < 0.001$ , confirming hypotheses 1 and 2, respectively. Further, change readiness related more positively to successful change implementation,  $\beta = 0.37, p < 0.001$ , supporting hypothesis 3. Because change readiness related significantly to successful change implementation ( $p < 0.001$ ), an indirect effect from learning organisation to successful change implementation via change readiness was tested. The indirect effect test was conducted with a bootstrap sample of 2000. The bootstrap estimate showed a significant indirect effect,  $\beta = 0.07, p = 0.001$ , and the bias corrected confidence interval did not have zero in the middle (0.05 - 0.13; MacKinnon et al., 2004). This result supports hypothesis 4.

**Discussion**

Although change is critical for operational efficiency and survival of businesses, it becomes realistic when there is higher level of readiness for the change. The present study investigated

**Table 2.** Path analysis results of the mediation effect of change readiness on the relationship between learning organisation and successful change implementation

	Estimates	95% confidence interval	
		LL	UL
Gender → Change readiness	-0.03	-0.21	0.10
Gender → Successful change implementation	0.07	-0.06	0.26
Age → Change readiness	-0.10*	-0.19	-0.10
Age → Successful change implementation	-0.03	-0.11	0.06
Job position → Change readiness	0.14**	0.01	0.06
Institution type → Change readiness	0.05	-0.08	0.20
Institution type → Successful change implementation	0.04	-0.09	0.19
Employment status → Change readiness	-0.04	-0.13	0.30
Employment status → Successful change implementation	-0.00	-0.18	0.91
Tenure → Change readiness	-0.02	-0.12	0.06
Tenure → Successful change implementation	-0.02	-0.11	0.05
Learning organisation → Successful change implementation	0.20***	0.05	0.18
Change readiness → Successful change implementation	0.37***	0.23	0.48
Learning organisation → Change readiness	0.40***	0.17	0.30
Learning organisation → Change readiness → Successful change implementation	0.07**	0.05	0.13

**Note(s):** Standardized beta values are shown; LL = lower limit; UL = upper limit; \*\*\* $p < 0.001$ ; \*\* $p < 0.01$ ; \* $p < 0.05$   
**Source(s):** Authors work

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the link between learning organisation and successful change implementation, and the extent to which change readiness might mediate that relationship among employees in public and private universities in Ghana. The outcome of the study indicates that change readiness plays a crucial role in ensuring the successful implementation of change. Indeed, the results showed that although learning organisation is crucial, its effect of change implementation is anchored on readiness for change. Thus, readiness for change is an important explanatory variable in the learning organisation-successful change implementation relationship.

### *Theoretical contribution*

As expected, the prediction that learning organisation will relate positively and significantly with successful change implementation was supported. This outcome shows importance of learning in the current dynamic and fast evolving business environment (Reese, 2020), where learning is critical for survival and competitiveness of businesses. Specifically, the present result is consistent with previous findings, showing that learning organisation facilitates organisational effectiveness, financial performance (Kaminska and Borzillo, 2017; Reese and Sidani, 2018) and operational efficiency as well as individual and management performance (Tan and Olaore, 2021). Learning organisation provides organisations with the unique opportunity to understand the dynamics of the market and to adapt work processes and procedures to achieve greater productivity and competitiveness.

Also, the study revealed that learning organisation was beneficial for change readiness within the tertiary educational context of Ghana. This outcome confirms the view that learning organisation is an important antecedent of change readiness (cf. Ashford, 1988; Soenen *et al.*, 2017). Specifically, the results highlight the view that learning fosters change readiness. Importantly, the empirical evidence obtained in the Ghanaian tertiary education context corroborates previous studies in education (Brahmana and Christina, 2020) and non-education context (Safania, 2015) conducted elsewhere. In line with the expectation of the study, change readiness was found to be associated positively with successful change implementation. This finding supports the view that change readiness is an important prerequisite for successful change implementation (Ashford, 1988; Soenen *et al.*, 2017). Employees with a high level of change readiness show commitment toward the change agenda, which potentially helps in the realization of the change goals. In the context of this study it is important to indicate that university environment provides a learning situation, and coupled with workers' readiness for change, there would be successful change implementation (technology acceptance). Where education workers accept technology as part of what they need to work effectively with, lecturers/researchers will deliver effectively on their job, administrators will be efficient and students will benefit from good service delivery. This can generate relevant research output and uptake in support of university's strategic vision and mission. It also has the potential to place the university in higher circles of university ranking across the world. This finding is novel because in the 1980 and 1990s, there were technological challenges in the West-African subregion (and Africa in general) affecting education delivery (Alemna and Sam, 2006; Budu *et al.*, 2002) and competition with others. This also has implications for the business world, and stakeholders in education (from around the world) who have interest in the viability of educational settings they invest in.

Finally, although both learning organisation and change readiness had significant main effects on successful change implementation, change readiness was found to significantly mediate the relationship between learning organisation and successful change implementation (cf. Ashford, 1988; Soenen *et al.*, 2017). As it stands, the results suggest that a combination of learning organisation and change readiness might lead to successful

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change implementation by organisations (cf. [Brahmana and Christina, 2020](#); [Safania, 2015](#); [Soenen et al., 2017](#)).

#### *Implications for practice*

The study reported some significant findings, which have significant research implications for the field of industrial-organisational psychology, and management studies. For practitioners, it adds to their understanding of change conceptualisation and practices in organisations within the tertiary education space of Ghana. First, the results highlight the need for organisations, particularly those within the tertiary education space of Ghana to embrace a learning culture to facilitate work efficiency. Psychologically, by embracing a learning culture, organisations would actively and continuously interact with the business environment, and through this process adapt work processes and procedures to achieve strategic advantage and performance goals. Second, the study shows that change readiness which is a psychological variable ([Bernerth, 2004](#)) is crucial for the implementation of change. As change is an inevitable aspect of organisational life, it is important that organisations get the buy-ins, commitment and support of their members if they want to successfully initiate and implement change especially in this era of rapid technological change in the world of work. Employees support change programmes that have beneficial individual and organisational consequences. Thus, rallying employees behind the change objectives might facilitate acceptance, leading to the realization of the global change agenda. Finally, organisations need to embrace a learning culture as well ensure that organisational members accept the change agenda. Ultimately, learning and acceptance are important factors that drive successful change implementation in organisations.

#### *Limitations and recommendation for future studies*

Although the study reported significant outcomes, some limitations are worth mentioning. First, the researcher employed a cross-sectional design, where data were collected from the same participants on all the variables at a single point. This approach to data collection increases the chances of common method bias being an issue. While this might be a problem, common method bias analysis via Harman's single factor analysis revealed that none of the variables accounted for more than 50% of the variance. Nevertheless, future studies should consider using a multi-source data collection approach or a longitudinal model to test the mediation hypothesis. Also, the study focused on universities in Ghana. Although the scope of the study helps us appreciate the antecedents and mediating mechanism of change readiness within the educational space, the findings cannot be generalized to organisations outside the scope of the present study.

#### **Conclusion**

Change is important for the growth and survival of organisations. The present study within the tertiary education sector of Ghana demonstrates that learning organisation and change readiness are important antecedents of successful change implementation. Also, change readiness was found to be an important underlying mechanism in the learning organisation-successful change implementation nexus. Indeed, the study revealed the complexity involved in successful change implementation. Successful change implementation as a variable yields numerous benefits not only to universities and their workers, but also to the wider international community. This study makes a significant contribution to the literature in this area, addressing the identified knowledge gap. It is essential for successful implementation of change to foster renewed hope and confidence in individuals as they work, ensuring they and their universities remain competitive with other universities. This can be achieved through

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the widespread adoption of technology. The recognition that universities function as learning institutions provides greater assurance to the global community in considering enrolment, investment or research funding. This is particularly relevant as the world faces challenges that require humanity to unite in solving them, regardless of location.

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**Further reading**

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