How Psychological Empowerment Influences Faculty Members’ Change Orientation: Does Knowledge Inertia Have a Mediating Role?

Muslim Alanoglu · Songül Karabatak

ABSTRACT

Background/purpose – This study aims to determine the effect of faculty members’ psychological empowerment on their change orientation and the mediating role of knowledge inertia (learning and experience) in this effect.

Materials/methods – A cross-sectional research design was used to achieve this goal. The opinions of 398 faculty members working in six universities in Türkiye were collected via the survey method.

Results – The results showed that the faculty members’ psychological empowerment had a favorable effect on their levels of change orientation and a negative effect on their levels of learning inertia. Additionally, it was shown that the faculty members’ psychological empowerment had little effect on their experiential inertia. Additionally, there was no discernible relationship between degrees of faculty members’ change orientation and perceived knowledge inertia (learning and experience).

Conclusion – The study’s results imply that faculty members who see their jobs as meaningful have sufficient knowledge about their jobs, are responsible for making decisions about their jobs, and accept change easily. It was also concluded that these faculty members have high levels of change orientation.

Keywords – psychological empowerment, change orientation, knowledge inertia, faculty member

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1. INTRODUCTION

Change orientation and transformation in education are inevitable due to the rapid changes seen in information and communication technologies that have profoundly affected the education sector. Teaching, learning, and research processes have all been significantly affected by these changes, and it has become largely mandatory for all actors in the teaching profession to adapt to this new era. Universities, as higher education institutions, are in constant close contact with all facets of modern society and often act as links between various organizations, and as such are currently faced with unprecedented and ubiquitous levels of change (Housewright & Schonfeld, 2008). It may be said that the current era is a period of “transforming university[ies]” (Poole, 2005). The fact that universities face constant change makes it significantly important that faculty members both understand and remain open to these changes. Therefore, today’s universities need to operate under a more dynamic structure, and it is equally key that their faculty are dynamic in their openness to change. Universities need to adapt to their new roles in order to maintain their identity (Barblan, 2006, as cited in Gunduz & Balyer, 2013), and this can only be achieved through adaptation. It is often argued that there is a need for change and innovation in different areas of universities (Siemens & Matheos, 2010), and that such transformation is only possible through its faculty members being open to change.

In order to determine the openness of university faculty members to change, it is first necessary to examine the psychological factors that affect the change efforts of individuals, as stated by Cunningham (2006). However, Yuan and Woodman (2010) stated that little research evidence exists on the psychological processes that explain how and why different individual and contextual premises (variables) affect innovative behavior. In this sense, it is crucial to examine the effect of psychologically empowered individuals on their being open to change, innovation, and adaptation. Since psychological empowerment is associated with innovative behavior and managerial effectiveness (Spreitzer, 1995), it may be said that the feeling of empowerment of faculty members will help facilitate their change orientation.

Changes in teaching practices can be seen as efficacy of professional development programs (Darling-Hammond et al., 2009). In terms of research and teaching methods, improvement requires a response to change, which is linked to knowledge inertia. Today, one of the most critical factors that can prevent the production, sharing, and development of information is knowledge inertia (Yalcin & Senturk, 2019). Knowledge is a primary organizational resource (Feiz et al., 2019); however, creating knowledge and stimulating innovation is near impossible without the empowerment of an organization’s members (Doll et al., 2005). Spreitzer (1995) stated that individuals’ access to information regarding various aspects of their work is associated with psychological empowerment. As a concept, psychological empowerment has received considerable attention from both researchers and practitioners due to its enormous impact on outcomes that are beneficial at the level of the individual (Liden et al., 2000). In knowledge-intensive organizations such as universities, it is essential that individuals are psychologically empowered, since international academic competitive pressure requires significant innovation and creativity (Abbas & Raja, 2015). In this sense, empowering faculty members who are knowledge producers is of substantial importance in today’s competitive environment (Baird & Wang, 2010).

The results of the current study may indicate that psychological empowerment can help faculty members to adapt to new situations, which should provide the resources needed to cope with change. It can perceivably help managers, leaders, and policymakers of change.
processes to understand the importance of psychological empowerment, as well as the impact of knowledge inertia on this process. Also, on an individual level, it can give a person in the process of psychological empowerment insight into what they can do to combat knowledge inertia. The current study aimed to examine the effect of psychological empowerment on change orientation. While exploring the direct impact of psychological empowerment on change orientation, its effects on change orientation through knowledge inertia will also be examined.

**Conceptual Framework**

The current study’s conceptual framework is based on the premise of psychological empowerment affecting faculty members’ change orientation directly and indirectly through their knowledge inertia (learning and experience). Today, knowledge is an essential resource used to preserve the heritage of the past, learn new situations, and to solve problems; knowledge can also be said to be a most extraordinary power in creating new sensitivities and conditions in both the present and the future in order to advance in today’s knowledge-driven era (Liao et al., 2004). In this sense, it seems appropriate to suggest that knowledge inertia affects the emergence of innovation. In addition to certain personal characteristics, a tendency to become selfish and inner-focused with a feeling of knowing everything (Sekman & Utku, 2008), as well as strict adherence to organizational patterns and routine behaviors (Soysal, 2010), have a known association with the emergence of knowledge inertia. It is acknowledged that commitment to acquired knowledge and experience, indifference, and resistance to change are all related to knowledge inertia. Individuals who consider that they know everything and have no need for new information will likely oppose innovation, and therefore change, and it will be considerably challenging for them to adapt to changes in today’s world. In addition, it may be said that individuals who lack understanding of what change means or grasp the reality of its consequences will be resistant to change. Liao (2002) stated that knowledge inertia is an obstacle to knowledge management and can therefore hinder problem-solving ability. Liao et al. (2008) concluded that knowledge inertia has a negative relationship with innovation and commitment to learning, hence change models portray inertia as severely restricting change (Sastry, 2001; Tushman & Romanelli, 1985).

Change becoming an established organizational culture is associated with organizational inertia, since being liberated from inertia and adapting to continuous change are the primary conditions for change to take place (Omur & Sezgin-Nartgun, 2014). Shalikar et al. (2011) stated that change does not occur spontaneously but through external factors and emphasized that orientation requires certain forces to be in play. In this sense, it is predicted that psychological empowerment can reduce the knowledge inertia of faculty members and facilitate their change orientation, since psychological empowerment positively affects commitment, job satisfaction, and organizational innovation (Berraies et al., 2014; Idris et al., 2018; Nikpour, 2018). Psychological empowerment, which has a strong relationship with innovation, can also facilitate change orientation. In addition, psychological empowerment positively affects the spread of organizational change and the sustainability of strategic change (Idris et al., 2018). Psychologically empowered individuals can be expected to increase in self-confidence and find the motivation and courage necessary to adapt to change. In contrast, information inertia can cause a person to be resistant to change, making it difficult for them to adapt to change. It is therefore thought that psychological empowerment directly affects faculty members’ level of adaptation to change and indirectly through information inertia. For this reason, the following model and hypotheses were developed.
H1 Psychological empowerment has a direct effect on change orientation.
H2 Psychological empowerment has a direct effect on learning inertia.
H3 Psychological empowerment has a direct effect on experience inertia.
H4 Learning inertia plays a mediating role in the effect of organizational psychological empowerment on change orientation.
H5 Experience inertia plays a mediating role in the effect of organizational psychological empowerment on change orientation.

2. LITERATURE REVIEW
This section details the theoretical basis of the study’s dependent (psychological empowerment), mediator (knowledge inertia), and independent (change orientation) variables.

**Psychological Empowerment**

Included in psychological empowerment are employees’ personal beliefs about their organizational roles (Spreitzer, 2008). Alternatively, psychological empowerment relates to employees’ beliefs about whether or not they feel empowered (Thomas & Velthouse, 1990). Menon (2001) defined psychological empowerment as the power experienced by employees. Psychological empowerment is, therefore, the process of empowering employees to make important decisions about their daily activities (Jafari et al., 2013), and consists of competence, self-determination, influence, trust, and meaning (Whetten & Cameron, 2015). Thomas and Velthouse (1990) first discussed the concept of empowerment within the framework of the cognitive model in the management literature. Researchers have defined psychological empowerment as the process of increasing internal career inspiration, which consists of four recognition areas: competence, feeling effective, meaningfulness, and autonomy. Establishing a theory on this conceptualization, Spreitzer (1995) defined psychological empowerment as the increasing intrinsic task motivation that emerges in a series of informatics that reflects an individual’s orientation to the job role: competence, impact, meaning, and self-determination.

**Competence** refers to the individual’s feelings of self-efficacy or personal mastery whilst successfully performing a certain task (Bandura, 1986) and expresses the individual’s belief in their own knowledge, skills, and abilities regarding their job.
Impact describes the extent to which an individual’s study makes a significant difference in affecting business-related strategic and managerial processes and outputs. In other words, the effect is the belief that the individual creates the impact they want from the job and thereby makes a difference (Thomas & Velthouse, 1990).

Meaning reflects the worth individuals attribute to business values or goals related to their ideals or standards (Huang et al., 2020). Finding a job meaningful in a sense can be attributed to absorbing the work and contributing to the success of the work internally. Finding significance involves the harmony between the needs of individuals’ work roles and their beliefs, values, and behaviors (Spreitzer, 1995).

Self-determination refers to the degree to which individuals have autonomy to initiate and carry out business behaviors and processes.

Together, these four psychological empowerment structures reflect the active orientation of individuals to a job role (Huang et al., 2020). Spreitzer (1995) referred to the direction in which the individual feels and wants their job role to be shaped and its context through active orientation. Thomas and Velthouse (1990) stated that these four dimensions indicate an almost complete or sufficient set of cognitions to understand psychological empowerment.

Knowledge Inertia
Inertia relates to problems experienced in knowledge and skills transfer, and also communication. Generally, it is explained as a preference to preserve the current situation in favor of initiating new ideas and or adopting change (Ozgenel & Cetin, 2021). Inertia is used to describe an irrational or adverse resistance to change that is considered necessary, desirable, or simply unavoidable (Zantvoort, 2015). Information is a practical resource for both organizations and individuals, is an essential part of knowledge acquisition, and is also used for organizational activities. However, when the term inertia is applied to human behavior, individuals utilize their prior knowledge and experience. When individuals encounter a problem, using their experience and prior knowledge to solve the problem, and a desire to solve similar issues, in the same way, is referred to as “knowledge inertia” (Shalikar et al., 2011). Knowledge inertia results from a lack of innovative thinking and behavior (Fang et al., 2011). According to Liao (2002), knowledge inertia occurs when people use routine problem-solving procedures, resort to stagnant sources even when seeking new information, and continue to track past knowledge or experiences.

Inertia in knowledge stems from routine or standard methods of tracking past knowledge and experiences that can strengthen or weaken problem-solving skills (Shalikar et al., 2011). Considering that a significant part of human life is spent in organizations, an inertial life will inevitably negatively affect the performance of organizations and cause conflicts between individuals and organizations (Schein, 1990). The importance of knowledge inertia is more evident in the school setting and other educational organizations since the content of their work relates directly to learning and knowledge. Knowledge inertia can negatively impact on organizational management, hindering the ability of organizations or individuals to solve problems (Xiaorong et al., 2019) and thereby negatively impacting learning efficiency and the effective application of knowledge (Fang et al., 2011). Although knowledge inertia has a negative effect on accessing information, it also risks revealing an organization’s confidential information (Liao, 2002).

The tendency to maintain routine by adhering to past knowledge and procedures enables an individual to maintain their past knowledge and experience (Liao, 2002). Starting from this
definition, Liao et al. (2008) stated that knowledge inertia consists of two dimensions: *learning inertia* and *experience inertia*.

*Learning inertia* refers to the inertia of an organization’s members in learning information (Liao et al., 2008). When individuals see their past experiences and knowledge as sufficient and show laziness in learning new information, then learning inertia is said to occur (Turkan & Esmer, 2019).

*Experience inertia* is based on an organization’s members solving problems based on their past experiences (Liao et al., 2008). Individuals and organizations can solve difficulties at a high level with their prior knowledge and experience and generalize them to new conditions. However, new knowledge may still be required when there is a need for innovation and change or simply when a new problem is encountered. In this case, prior knowledge and experience may not be sufficient. Using prior experience to solve new problems means trying to solve similar events using the same methods; that is, until stable situations change.

**Change Orientation**

The term change orientation can be used to describe both the change development process and the results of this process (Altrichter, 2000). In today’s constantly changing and developing world, individuals have to adapt to change and manage the change process in line with their goals in order to develop and achieve (Omur & Sezgin-Nartgun, 2014). If employees embrace change or believe that change will benefit them in times of change, they develop a positive attitude toward change and thereby adapt to it more quickly. However, negative attitudes can create adverse effects and reduce the likelihood of an individual’s ability to adapt to certain changes (Celik & Gencer, 2019). Change orientation and transformation are inevitable in education, since overcoming both current and future challenges of the 21st century is only possible with a change orientation.

Change orientation is primarily based upon the willingness of individuals to change and their having a positive opinion about any potential consequences that a change may lead to (Demirtas, 2012). In this sense, the vision to perceive what may potentially occur as a result of a change is necessary for faculty members to be able to adapt to change, making it easier for them to adapt and to negotiate and manage the change process. Studies have shown that development of a positive attitude towards change can reap positive benefits in adapting to change (Kareem & Kin, 2018; Oreg, 2003).

Kearney and Smith (2008) stated that there are three dimensions of change orientation in universities: the openness of faculty members to change, the administrators’ openness to change, and the pressure of society towards change. Educational institutions are places where knowledge, values, and skills are taught in order to develop learners’ competencies (Ahmad, 2012). Any positive or negative change in educational organizations will therefore inevitably impact those for whom such an organization is designed to educate (Beycioglu & Aslan, 2010). For this reason, the adaptation of faculty members to changes will critically affect both the quality of their research and teaching, and therefore the students under their charge. In addition, the level of faculty members’ adaptation to change can be considered a primary factor that will enable changes to achieve their intended purpose in the university context. Vrabcová (2015) argued that flexibility and innovative participation have become an essential part of the new value system necessary and tailored for modern educators.
3. METHODOLOGY

In this study, a cross-sectional research design was used to determine the direct effect of university faculty members’ perceptions of psychological empowerment on their change orientation levels and its indirect effect through knowledge inertia. In the cross-sectional research design, it is essential to collect data from a wide range of participants over a certain period (Fraenkel & Wallen, 2006). From this perspective, surveys, the most widely used quantitative data collection tool, were employed within the scope of the current study, and with the aim of reaching six universities.

Participants

The study sample consists of 398 faculty members working in a total of six universities in the eastern and south-eastern Anatolia regions of Türkiye. Different universities were included in the study since each institution has its own particular characteristics. While three of these universities were established more than 40 years prior to the study, three were universities formed within the past 15 years. Of the 398 faculty members who completed the questionnaire, 35.4% (n = 141) were female and 64.6% (n = 257) male. It was observed that the split of female/male faculty members was close to the distribution rate of faculty members at the participant universities (Yüksekokɡretim Kurulu Bàşkanliga [Turkish Council of Higher Education], 2021).

Instruments

Psychological Empowerment Instrument (PEI). The PEI scale was developed by Spreitzer (1995) to measure four dimensions of psychological empowerment, and was later adapted to the Turkish context by Surgevil et al. (2013). The scale is of the 5-point, Likert-type design, with anchors ranging from 1 (strongly disagree) to 5 (strongly agree). The scale consists of four dimensions: meaning (e.g., my job is essential to me), competence (e.g., I have improved the skills necessary for my job), self-determination (e.g., I can decide for myself how to do my job), and impact (e.g., I have control over the events that take place in the department where I work). In the current study, Cronbach’s alpha internal consistency coefficient was found to be .62 for the meaning dimension, .74 for the competence dimension, .82 for the self-determination dimension, .93 for the impact dimension, and .83 for the overall scale.

Knowledge Inertia Scale. This instrument was developed by Liao et al. (2008) and consists of 14 items in two dimensions: Learning inertia (e.g., I seldom use different approaches to solve problems) and experience inertia (e.g., I often learn from experience). The scale is presented as a 5-point, Likert-type instrument ranging from 1 (strongly disagree) to 5 (strongly agree). The Cronbach’s alpha internal consistency coefficient for the current study was established as .87 for the learning inertia dimension and .79 for experience inertia.

Faculty Change Orientation Scale (FCOS). The FCOS was developed by Kearney and Smith (2008) and then adapted to the Turkish context by Omur and Sezgin-Nartgun (2014). The scale consists of 19 items within three dimensions: Faculty openness to change (e.g., In this school, faculty welcomes change), principal openness to change (e.g., In this school, the principal balks at new suggestions), and community press for change (e.g., This community pushes for innovation). The FCOS is a 6-point, Likert-type scale ranging from 1 (strongly disagree) to 6 (strongly agree). In the current study, the Cronbach alpha internal consistency coefficient was found to be .98 for the faculty openness to change dimension, .91 for the principal openness to change dimension, .78 for the community press for change dimension, and .96 for the overall scale.
Procedures

Data were collected during September and October of 2020. The e-mail addresses of the faculty members were obtained from the website of each participant university. An e-mail explaining the purpose of the study was then sent to the faculty members. In the e-mail, it was stated where their e-mail address had been retrieved from, and that they were invited to participate in the proposed study. The faculty members were requested to complete the questionnaire which was available through an online link included in the email. A reminder e-mail was then sent 1 week later, and access to the link was terminated on October 31, 2020 (the defined deadline for participation). All procedures were conducted according to the ethical standards set by the institutional research committee of the authors’ university, and the 1964 Declaration of Helsinki and its subsequent amendments.

Data analysis

In the analysis, we first checked for missing data and outliers, and kurtosis and skewness values were calculated to determine whether or not the data met the univariate normality assumption. Then, the means and standard deviations were calculated, and correlation values between the independent variables were checked to determine whether or not there was multicollinearity. Cronbach alpha was calculated for internal consistency reliability. The average variance extracted (AVE) and composite reliability (CR) were calculated for convergent validity. Finally, structural equation modeling (SEM) was conducted in order to determine the relationships between the variables.

IBM’s SPSS version 22 analytical software was used for descriptive statistics (mean, standard deviation, kurtosis, skewness, AVE, α, and CR) and for correlation analysis. The SEM was tested through MPlus 7, which is a comprehensive form of analysis that allows for the testing of structural relationships between multiple variables and the compatibility of these relationships. The variables of psychological empowerment, knowledge inertia, and change orientation were included in the structural model of the study.

To evaluate the SEM fit index, Chi-square model fit criteria ($\chi^2/df$), Tucker Lewis index (TLI), comparative fit index (CFI), standardized root mean square root (SRMR), and root mean square approximation error (RMSEA) fit indices were used. The $\chi^2/df$ value of the model was established as $< 3$, the SRMR and RMSEA values were $< 0.08$, and both the TLI and CFI values were $> 0.90$, indicating a good fit (Hu & Bentler, 1999; Kline, 2011).

The bootstrap method was used to estimate the SEM and mediating effects. Preacher and Hayes (2008) proposed use of the bootstrap method for the evaluation and comparison of indirect effects in multi-agent models. The bootstrap approach is a sampling estimation technique that calculates the indirect effect of the prediction variable on the outcome variable at a 95% confidence interval (CI) (Fritz & MacKinnon, 2007). In the current study, the mediating effect of knowledge inertia regarding the effect of psychological empowerment on faculty change orientation was examined. Thus, 1,000 sample bootstrap analysis was applied for the CI of total, indirect, and direct effects in analyzing the data.

4. RESULTS

The results of the current study are discussed in three steps. First, the descriptive statistics (mean, standard deviation, kurtosis, and skewness) of the variables in the SEM and the validity and reliability coefficients (AVE, α, and CR) of the variables were evaluated. Then, correlations between variables were examined. Finally, in the third step of the analysis, the mediator role of knowledge inertia in the relationship between psychological empowerment
and change orientation and SEM was tested to predict the relationships between variables. Descriptive statistics for the variables and reliability coefficients of the variables are presented in Table 1.

Table 1. Descriptive statistics, reliability among variables

<table>
<thead>
<tr>
<th>Scale/Dimension</th>
<th>N</th>
<th>(\bar{X})</th>
<th>SD</th>
<th>Skewness</th>
<th>Kurtosis</th>
<th>AVE</th>
<th>(\alpha)</th>
<th>CR</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE</td>
<td>398</td>
<td>4.04</td>
<td>0.49</td>
<td>-0.30</td>
<td>-0.40</td>
<td>.62</td>
<td>.62</td>
<td>.96</td>
</tr>
<tr>
<td>Meaning</td>
<td>398</td>
<td>4.64</td>
<td>0.46</td>
<td>-1.25</td>
<td>1.04</td>
<td>.53</td>
<td>.74</td>
<td>.77</td>
</tr>
<tr>
<td>Competence</td>
<td>398</td>
<td>4.58</td>
<td>0.48</td>
<td>-1.13</td>
<td>0.95</td>
<td>.61</td>
<td>.82</td>
<td>.83</td>
</tr>
<tr>
<td>S-D</td>
<td>398</td>
<td>4.17</td>
<td>0.74</td>
<td>-0.87</td>
<td>0.44</td>
<td>.66</td>
<td>.93</td>
<td>.86</td>
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<tr>
<td>Impact</td>
<td>398</td>
<td>2.69</td>
<td>1.04</td>
<td>0.17</td>
<td>-0.61</td>
<td>.83</td>
<td>.83</td>
<td>.94</td>
</tr>
<tr>
<td>LI</td>
<td>398</td>
<td>2.31</td>
<td>0.73</td>
<td>0.64</td>
<td>0.07</td>
<td>.56</td>
<td>.87</td>
<td>.90</td>
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<td>EI</td>
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<td>2.62</td>
<td>0.60</td>
<td>0.59</td>
<td>1.50</td>
<td>.51</td>
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<td>.80</td>
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<tr>
<td>CO</td>
<td>398</td>
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<td>1.10</td>
<td>-0.30</td>
<td>-0.50</td>
<td>.60</td>
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<td>.97</td>
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<td>POC</td>
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<td>-0.23</td>
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<td>.63</td>
<td>.78</td>
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<tr>
<td>CPC</td>
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<td>3.75</td>
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<td>-0.37</td>
<td>-0.49</td>
<td>.70</td>
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</table>

PE: power empowerment; S-D: self-determination; LI: learning inertia; EI: experience inertia; CO: change orientation; FOC: faculty openness to change; POC: principal openness to change; CPC: community press for change; SD: standard deviation; AVE: average variance extracted; CR: composite reliability.

Table 1 shows that the psychological empowerment of the faculty members is high (\(\bar{X} = 4.04, SD = 0.49\)), their learning (\(\bar{X} = 2.31, SD = 0.73\)) and experience (\(\bar{X} = 2.62, SD = 0.60\)) inertias are low, and their change orientation (\(\bar{X} = 3.59, SD = 1.10\)) is moderate. In addition, the standard deviation values of the variables show that the views of the participating faculty members are heterogeneous. The kurtosis (-1.02, 1.50) and skewness (-1.25, 0.64) values of the variables show a normal distribution in the ±1.5 range (Tabachnick & Fidell, 2013). Reliability coefficients for psychological empowerment, knowledge inertia, and change orientation were shown to be above the minimum desired level of 0.70. In addition, it was observed that the CR > 0.70, the AVE > 0.50, and CR > AVE were above the desired standard values (Fornell & Larcker, 1981). Correlation coefficients between variables are presented in Table 2.

Table 2. Correlation among variables

<table>
<thead>
<tr>
<th>Scale/Dimension</th>
<th>PE</th>
<th>M</th>
<th>C</th>
<th>SD</th>
<th>I</th>
<th>LI</th>
<th>EI</th>
<th>CO</th>
<th>FOC</th>
<th>POC</th>
<th>CPC</th>
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<tbody>
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<td>PE</td>
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<td>Meaning</td>
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<td>Competence</td>
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<tr>
<td>S-D</td>
<td>.77*</td>
<td>.29*</td>
<td>.36*</td>
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<td>Impact (I)</td>
<td>.79*</td>
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<td>.17*</td>
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<tr>
<td>LI</td>
<td>.23*</td>
<td>.10*</td>
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<td>.19*</td>
<td>.16*</td>
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As can be seen in Table 2, there are medium and low-level correlations between the variables examined. The results show that negative and low-level relationships exist between psychological empowerment and learning inertia ($r = -.228; p < .01$) and experience inertia ($r = -.112; p < .05$), and moderate relationships between psychological empowerment and change orientation ($r = .322; p < .01$). In addition, a low-level negative relationship exists between change orientation and learning inertia ($r = -.164; p < .01$) and experience inertia ($r = -.114; p < .05$).

In the third step of the study, besides SEM, the mediating role of knowledge inertia in the relationship between psychological empowerment and change orientation was also examined (see Figure 2).
Figure 2. Structural relationships among study variables

The model fit well with the data ($\chi^2/df = 2.337 < 3$, RMSEA = 0.058 [< 0.08], CFI = 0.901 [> 0.90], TLI = 0.895 [< 0.90], and SRMR = 0.079 [< 0.08]). The model shows that psychological empowerment significantly explains faculty members’ openness to change. The bootstrap approach was used to determine the mediator role of knowledge inertia in assessing faculty members’ psychological empowerment on change orientation levels. The bootstrap analysis applied for 1,000 samples reveals the direct, indirect, and total effects of psychological empowerment on change orientation (see Table 3).

Table 3. Bootstrapping results for mediation models of psychological empowerment and change orientation

<table>
<thead>
<tr>
<th>Construct</th>
<th>Product of coefficient</th>
<th>95% Bootstrap CI</th>
<th>R²</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Point Estimate</td>
<td>SE</td>
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<td>Lower</td>
</tr>
<tr>
<td>Standardized total effect PE → CO</td>
<td>.412</td>
<td>.082</td>
<td>5.047</td>
<td>.278</td>
</tr>
<tr>
<td>Standardized total indirect effect PE → CO</td>
<td>.029</td>
<td>.025</td>
<td>1.185</td>
<td>-.011</td>
</tr>
<tr>
<td>Standardized direct effects PE → CO</td>
<td>.383</td>
<td>.089</td>
<td>4.301</td>
<td>.237</td>
</tr>
<tr>
<td>PE → LI</td>
<td>-.304</td>
<td>.092</td>
<td>-3.304</td>
<td>-.480</td>
</tr>
<tr>
<td>PE → EI</td>
<td>-.131</td>
<td>.082</td>
<td>-1.597</td>
<td>-.164</td>
</tr>
<tr>
<td>LI → CO</td>
<td>-.069</td>
<td>.059</td>
<td>-1.171</td>
<td>-.185</td>
</tr>
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</table>
Upon examining Table 3, the results of the bootstrapping analysis confirm Hypothesis 1 by showing that psychological empowerment had a significant and positive effect ($\beta = .383$, $p < .01$) on the change orientation levels of faculty members. Second, psychological empowerment had a significant and moderately negative effect on learning inertia ($\beta = -.304$, $p < .01$), explaining 9% of the variance in learning inertia and confirms Hypothesis 2. Third, the psychological empowerment levels of faculty members were shown to have a low-level negative effect on experience inertia ($\beta = -.131$, $p > .05$), but that the value was not significant. This result shows that Hypothesis 3 is rejected. Fourth, the effect of psychological empowerment on faculty members’ change orientation levels through learning inertia ($\beta = .021$, $p > .05$) was also not significant at a 95% confidence interval (−.015, .057), and therefore Hypothesis 4 is rejected. Finally, the effect of psychological empowerment on faculty members’ change orientation levels through experience inertia ($\beta = .008$, $p > .05$) was not significant at a 95% confidence interval (−.007, .023), meaning that Hypothesis 5 is rejected.

The results indicate that the total effect of the faculty members’ psychological empowerment on the change orientation levels was shown to be moderate and positive ($\beta = .412$, $p < .01$), explaining approximately 18% of the variance of change orientation. It would be appropriate, therefore, to state that the psychological empowerment of faculty members facilitates their change orientation, but that knowledge inertia has no effect on this.

5. DISCUSSION

The current study’s purpose was to determine the direct effect of faculty members’ psychological empowerment on their levels of change orientation and an indirect effect through knowledge inertia (learning and experience). The results indicate that psychological empowerment negatively and significantly affected the learning inertia of the faculty members, explaining approximately 9% of learning inertia. It was concluded that psychological empowerment negatively affected experience inertia, but that this effect was statistically insignificant. Psychological empowerment enables employees to make decisions that increase quality, reinforce their sense of self-impact, and enable them to own the results of their work (Klagge, 1998). This finding can be interpreted as psychological empowerment enabling faculty members to take responsibility and to continuously learn new information. For this reason, the knowledge inertia of psychologically empowered faculty members may be considered low. In order to overcome inertia, individuals need to produce new solutions in uncertain and dynamic situations (Foss, 2011). Empowering individuals psychologically to produce solutions will facilitate their reduction of informational inertia.
It was concluded that the psychological empowerment of the faculty members had a positive and significant effect on their change orientation levels. One significant reason for the emergence of innovative behavior is said to be psychological empowerment (Priyatama et al., 2022), which enables faculty members to see their work as meaningful and to have more information about the job. The amount and quality of the information provided can therefore affect how individuals respond to change (Oreg, 2006). Psychological empowerment plays an important role in ensuring susceptibility to change (Aksoy & Tolay, 2019). Research results have shown that a positive relationship exists between psychological empowerment and organizational innovation (Nikpour, 2018), and that psychological empowerment positively affects responsiveness to change (Idris et al., 2018), supporting the current study’s result that psychological empowerment positively affects faculty members’ change orientation status. Empowered employees more easily overcome difficulties because they feel innovative, productive, and effective in their work (Fırın, 2021). In order to achieve change orientation, it is first necessary to understand and internalize the nature of change itself. For this reason, it can be said that psychological empowerment facilitates change orientation by ensuring the effect, understanding, competence, understanding of the work done (such as making one’s own decisions), and through taking responsibility for the job. For this reason, psychological empowerment facilitates change orientation, since it provides an understanding of the work done and taking responsibility for the job. Providing information to faculty members about their work in exchange processes, explaining the reasons and possible consequences of change in detail, and determining their responsibilities regarding change can make it easier for faculty to accept the change.

It was found that faculty members’ psychological empowerment did not indirectly affect their change orientation through knowledge inertia (learning and experience). Research has shown that faculty members’ openness to organizational change is negatively related to organizational inertia (Eroglu & Alga, 2019), and that a negative and weak relationship exists between knowledge inertia and organizational innovation (Aqeela & Victor, 2017). However, the current study observed that knowledge inertia has no mediator role in the effect of psychological empowerment on change orientation. Knowledge inertia can interfere with learning and problem-solving abilities, creative thinking, and innovative behavior (Fang et al., 2011). Therefore, knowledge inertia is not valued within organizations. However, it would be appropriate to say that the knowledge inertia of the faculty members in the current study was not high due to the nature of their profession, since faculty are individuals who constantly research and work towards obtaining new information to present to the public. In addition, faculty members are expected to undertake research and to produce new knowledge in order to advance in academic terms. This situation can be interpreted as causing faculty members to experience less knowledge inertia.

The change orientation levels of faculty members who have low knowledge inertia remain unaffected by their knowledge inertia levels. As a result, the psychological empowerment levels can be said to have no mediating effect on their change orientation. Individuals who embrace change and adapt to changes will also likely seek out the knowledge required by the change. However, individuals, who oppose change and do not want it, tend to continue with their routine (Erwin & Garman, 2010) and are unable to adapt to the change since resistance to change is generally seen as an obstacle to effective adaptation and improvement (Oreg, 2003). Conversely, characteristics such as flexibility, openness to change, and innovation are seen as positive in organizational setups, and individuals with such characteristics are generally respected (Oreg & Goldenberg, 2015). These individuals are seen
as more adaptable to change. It can be said that individuals who regard their work as meaningful make decisions about their work and affect the results of their work are generally unafraid of change and are better at adapting to change. It can be said that faculty members work in a profession that constantly produces knowledge which facilitates their change orientation.

Creative performance or creativity is closely linked with innovative behavior (Abbas & Raja, 2015; Gomez & Rosen, 2001) and effectiveness (Bartram & Casimir, 2007), and can therefore lead to the formation of sensitive organizational structures (Mathieu et al., 2006). A strong relationship exists between psychological empowerment and knowledge sharing, which can significantly impact the performance of faculty members (Suherman & Rismayadi, 2022). Psychological empowerment positively affects innovative work behavior (Tekin & Akgemci, 2019); hence, it can be said that innovative behavior starts with adaptation to change. Few studies on individuals’ adaptation to innovation have shown that psychological characteristics such as psychological characteristics (Michael et al., 2011) and psychological processes (Yuan & Woodman, 2010) are associated with adaptation to innovation. Psychological empowerment affords individuals with the feeling that they maintain control over their work and thus experience less negative feelings such as the sense of complexity and uncertainty brought about by change (Aksoy & Tolay, 2019). Therefore, the perceptions of individuals with high levels of knowledge that they are also psychologically supported may cause individuals to adapt to change more easily.

6. CONCLUSION

The current study revealed that faculty members’ psychological empowerment positively affects change orientation, and that knowledge inertia does not mediate the effect of psychological empowerment on change orientation. As a knowledge-intensive profession, all aspects of an academician’s work, including the projects they undertake, requires them to be innovative and to exhibit change orientation tendencies, whilst also generating new knowledge and skills. When psychologically empowered faculty members understand the meaning of their work, exhibit autonomous behaviors, and are influential in the decisions they are involved in making, they will take responsibility for their work and experience no difficulty in adapting to the changes necessary. For example, the COVID-19 pandemic caused significant changes and impact right across academia and the education sector at large, as well as in many other professions. Education and training activities changed wholesale overnight (online classes, exams, meetings, flexible working arrangements), whilst the duties and responsibilities of faculty members become complex and subject to continual change. The obligation to fulfill the requirements of constantly changing processes enabled faculty members to acquire new knowledge, but with low levels of knowledge inertia and positive change orientation. This recent experience represents an up-to-date example of how faculty members can readily adapt to change since they are psychologically intense, they belong to a profession that is naturally open to learning, and that their knowledge inertia does not affect their openness to change.

7. LIMITATIONS AND SUGGESTIONS

The current study is a cross-sectional study that determined the views of faculty members over a certain period. Since cross-sectional studies are descriptive by nature and aim to provide a snapshot of a current situation, they do not inherently reveal any cause-and-effect relationship. The current research was conducted during the time of the COVID-19 pandemic,
hence the participant faculty members’ views may have been somewhat biased since it was a period in which significant change was occurring in every field of life, and especially within their own profession. For this reason, repeating the research is considered essential in order to obtain more accurate results and generalizability of the results.

Another limitation of the current study was that the participant faculty members were unable to be interviewed face-to-face due to the health restrictions in place because of the pandemic, hence the data were only collected via online means. Although information about the purpose of the research was provided via e-mail, face-to-face questionnaire completion and interviews can lead to more reliable results. Especially considering the intense changes seen with educational technologies that became digital platforms in response to the pandemic, providing more information to faculty members and explaining the reasons and possible consequences of the changes in some detail may have facilitated their acceptance of the change.

It can be said that the sample of the current study was relatively small. Whilst the authors would have preferred to have collected data from a larger sample across a broader section of the country (Türkiye), this was not possible at the time due to the restrictions and difficulties during the pandemic of reaching a much larger sample. Since constructs were used and data were collected at the individual level, the results focused on individual views (Boyce & Bowers, 2018). If data were collected from larger samples, more consistent results could be obtained through multilevel SEM at the faculty or university level in addition to the individual level. Also, the results of the current study were limited to faculty members’ responses to the presented scales; however, it should be kept in mind that their responses may have contained bias due to social desirability, especially when evaluating their own level of knowledge inertia.

In addition to the meaning and responsibility of work during periods of change, empowering faculty with education to acquire the necessary knowledge and skills in response to certain changes can help promote their change orientation. The awards and incentives given by universities or faculty management for faculty members’ academic studies (e.g., projects and publications) and any patents lodged can lead to psychological strengthening and make it easier for their adaptation to change. Researchers therefore need to conduct studies in order to explain how and why psychological variables affect change orientation and innovative behavior in terms of understanding behaviors toward change.

DECLARATIONS

Author Contributions: (Muslim ALANOGLU: Literature review, conceptualization, methodology, data analysis, and writing, original manuscript preparation Songül KARABATAK: Literature review, methodology, data analysis, review-editing and writing, original manuscript preparation. All authors have read and approved the published final version of the article)

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Data Availability Statement: The dataset obtained and analyzed during this study is available from the corresponding author upon reasonable request.

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