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Saudi Schools' Openness to Change in Light of the 2030 Vision

Asmaa Mohamed El Sayed Makhlouf*

Educational Administration Department, College of Education, Suez University, Egypt *Corresponding author: asmaa makhlouf@yahoo.com

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Abstract This study aimed to identify Saudi Arabian schools' openness to change in light of Saudi Vision 2030. The study analyses significant differences in the perception of Saudi schools' openness to change among Saudi teachers, based on their gender, educational stage, the type of school they taught at, and their experience. We used the Faculty Change Orientation Scale (FCOS) to analyse data from 383 teachers in 29 schools in Saudi Arabia. Results indicated that the practice levels of faculty and principal openness to change are high. This means that Saudi teachers predominantly agree that their schools are open to change. The results further revealed that the gender and school type variables had no significant impact on Saudi teachers' perceptions. However, the experience and educational stage variables showed significant differences. These findings contribute to our understanding of the effects of the Saudi Vision 2030 within the educational system.

Keywords: schools' openness to change, Saudi Vision 2030, Saudi Arabia, educational system, teachers

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1. Introduction

Change has long been considered an important factor in the development of any organization. It can be defined as "a movement from one state to another" ([1], p. 287). The term "change" is used to describe the process of improvement, as well as the results of this process [2]. Literature in the field of change has acknowledged the need for schools to adopt change initiatives [3,4,5]. An individual's openness to change—referring to positive or negative attitudes towards change—is a critical factor in influencing whether the proposed change is successfully implemented [6]. Because people have different perceptions regarding change [7], researchers have conceptualized the various reactions that have been made to it [8]. Devos et al. [9] argued that organizations are able to survive and succeed on the condition that they and their employees are open to change.

Regarding schools, Küçüksüleymanoğlu and Terzioğlu, [10] noted that they are required to adjust to the demands of the ever-changing environment of a globalized world. Bareil et al. [11] found that positive attitudes towards change are important for achieving the school's goals, and for the success of change programmes. Similarly, Oreg [8] and Kareem and Kin [6] argued that positive attitudes towards change in schools constituted an important indicator on whether change initiatives would be adopted in these settings. On the other hand, negative attitudes towards change can be a disabling factor when trying to

implement change initiatives within an organization [12]. Previous research on openness in schools [13,14,15] has noted that teachers and principals are among those with the most potential to influence the success of change in schools.

Considering the Saudi context, certain studies [16,17,18] have revealed that, during the past decade, the education system in Saudi Arabia has witnessed dramatic changes. Unlike other countries in the Persian Gulf, Saudi Arabia was not colonized. Consequently, most of its educational changes have been driven by the country's economic needs, as opposed to the pressures of imperialism [19]. In the global economy, Saudi Arabia competes by building an educated and skilled workforce [20]. In an effort to overcome ongoing systemic issues, education reform is fundamental to Saudi Arabia's large-scale policy initiative, known as Saudi Vision 2030 [21]. This initiative is a nationwide effort aimed at reforming the Saudi Arabian economy by decreasing its dependence on oil, improving peoples' quality of life, and establishing the Kingdom's political stance as a regional powerhouse [21]. Included in this effort is Saudi Arabia's emphasis on the importance of reforming its educational systems, to prepare students to participate in a competitive labour force [22], and encourage them to achieve above-average performance, according to international standards [21]. Saudi leaders have acknowledged that long-term economic growth requires focusing less on its oil production and more on the development of knowledge-based economies (i.e. education). This recognition has resulted in a radical and revolutionary change in education systems within the state [23].

1.1. Saudi Vision 2030

Saudi Vision 2030 is an ambitious roadmap for these developments. It was launched in April 2016, by Prince Mohammed Bin Salman, the deputy Crown Prince of Saudi Arabia. It is regarded as one of the most influential documents for Saudi Arabia in recent history [24]. It introduced the Saudi government's long-term goals for economic diversification and social development [25]. As Saudi Arabia's policy initiative for improving the country's standing and reputation in both the Middle East and the world [22], its main objectives are to diversify the Saudi economy, invest in the long-term future of the Kingdom [22], and transform the economy into a balanced and investment-based model [26]. These reforms come as a response to longstanding recommendations by international organizations and observers, that the Saudi government should diversify its economy, reducing direct subsidies to Saudis and decoupling public spending from volatile oil revenues [27]. In other words, Saudi Vision 2030 stresses the link between education and a competitive economy [25]. Education is regarded as a primary agent of enacting this reform [22]. It is also written on the Saudi Vision 2030 website [28]:

We will continue investing in education and training so that our young men and women are equipped for the jobs of the future. We want Saudi children, wherever they live, to enjoy higher quality, multi-faceted education...We will also redouble efforts to ensure that the outcomes of our education system are in line with market needs.

Establishing an improved educational system is one of the most important aspects of Saudi Vision 2030 [20]. Its effective implementation depends on the effective training of different educational cadres [29]. This vision is predominantly geared towards various economic reforms, cultural projects, and business investment endeavours. However, it is not possible to implement these reforms within the country without the foundation of quality education [20]. Saudi Vision 2030 has made changes to the educational system, in an effort to embrace the best possible practices [28]. The improvements and advancements in the educational environment of Saudi Arabia's government schools are also associated with the development of English language teachings [26].

Saudi Vision 2030 aims at increasing the Saudi Arabian economy's adaptability to an increasingly globalized world, by focusing on innovation, growth, and education from the bottom up [22]. A prominent programme within Saudi Vision 2030 is the human capital development programme, which aims to improve the outputs of the education and training system at all stages. This programme also contributes to the development of all components of the education and training system, including teachers, trainers, faculty members, governance, evaluation systems, and curricula, to cope with modern and innovative trends in the fields of education and training. It will introduce new educational and training policies, and systems that will enhance the efficiency of human capital to achieve comprehensiveness, quality, and flexibility, to promote the Kingdom's regional leadership and ensure international competitiveness [28].

1.2. Saudi Education System

Historically, the Saudi education system has changed and adapted in response to both internal and external pressures, and has adopted western curricula and pedagogy with the aim of opening the country to the rest of the world [22]. Habbash [19] noted that many countries have pressured Saudi Arabia to integrate elements of liberalism into its curriculum, to combat extremist viewpoints. As Alnofaie [30], and Alwadai [31] confirmed, adapting western methods of teaching poses unique challenges for the school system in Saudi Arabia. Teachers have felt that Saudi society does not necessarily promote critical thinking, thereby presenting a significant challenge to implementing such thought processes in the classroom.

In addition to foreign pressures, Rugh [32] notes that the private sector has expressed concern over the fact that the educational system has failed to prepare Saudi citizens for the economic challenges that come with globalization. The educational reforms in pursuit of economic initiatives tend to neglect students' needs, even when supposedly directed at improving opportunities for them [33]. One major critique of the Saudi public education system is its reliance on rote memorization over the teaching of critical thinking or other analytical skills [34]. Similarly, Rugh [35] argued that the Saudi education system emphasizes and rewards rote memorization, and fails to impart students with higher-level cognitive skills, such as problem-solving, analytical skills, and synthesis of information. Additionally, previous literature has highlighted that the Saudi education system promotes outdated methods of teaching and learning [26,30,31,34,35]. Alnofaie's [30] work has also identified that the pedagogical strategies employed by Saudi school's limit students' abilities to become active participants in their own education, making it difficult for them to learn the skills necessary for attaining gainful employment and creating economic value. Notably, the consensus between Saudi and western scholars regarding the status quo of the Saudi education system is that "education in the Kingdom does not appear to be equipping young people in Saudi Arabia for employment" ([36], p. 534). Allmnakrah and Evers [37] argue that the Saudi education system overproduces graduates in some areas, such as social and religious studies, but it is far from producing similar numbers in areas critically needed by the country. The education system, therefore, is facing difficulties in meeting outcome quality in relation to work-force needs and difficulties in securing more resources. (p. 26)

The McKinsey Global Institute [38] supported the above viewpoint in their research, which claimed that the Kingdom's outcomes in education are low in relation to its level of spending. Saudi students appear to "score poorly in international comparative tests, and the university dropout rate is about 50 percent" (p. 4). The "scores of Saudi students still lag behind international benchmarks" (p. 26). Allmnakrah and Evers [37] argued that the Saudi education system is producing graduates who do not meet the international standards of excellence. Critics attribute these results to educational systems that are based on didactic rote-learning methods of teaching and learning [39,40,41,42]. Mosaad [43] also criticized the outdated

school curricula, ineffective teaching methods, and low education standards, while Allmnakrah and Evers [37] identified teachers' lack of understanding of new educational changes, which in turn causes students to lack the knowledge and skills required for tomorrow's workforce and workplace.

Alwadai [31] conducted an empirical study to examine Islamic teachers' thoughts on improving critical thinking skills in Saudi elementary schools. In his study, 72% of the respondents—namely teachers—stated that they did not have the time to incorporate instructional practices that encouraged critical thinking into their classes, citing a pressure to cover extensive amounts of course material instead. Several studies [44,45,46,47] revealed that an effective education reform, that enhances teachers' skills and improves the curriculum, needs to be based on teacher engagement. In turn, these teachers will act as change agents and active partners rather than passive recipients to education reform [37].

Although change is necessary for the Saudi Arabian workforce to be competitive in a globalized economy, Saudi Arabia's 2030 vision places significant emphasis on conforming to western ideals, such as open markets; however, it is stressed that it must not sacrifice its own needs and values in order to assimilate [22]. To increase equity for Saudi Arabian citizens, and help them become applicants who are just as competitive as foreign expatriates, Rugh [35] argued that the Saudi education system must provide higher-quality instruction, so that private industries and corporations are willing to look for talent within the Kingdom, instead of importing it from outside. As explained by Fakieh [48], "a flourishing economy gives chances to all by building a training or education framework adjusted to market needs" (p. 46).

In Saudi Arabia, a teacher-centred model is not considered a valued practice. Therefore, it is critical to adopt a more student-oriented approach that prioritizes critical thinking, to facilitate the education process [31,34]. According to Bunaiyan [22], some key reforms are needed to develop a student-centred pedagogy: hiring teachers who are well-trained and familiar with the Saudi culture and values; motivating students to learn, responding to their needs, and encouraging them to participate. Mitchell and Alfuraih [49] stressed that the Saudi curriculum should be paired with modern teaching strategies for greater accessibility. Further, teachers should be trained in how to work with and teach the new curriculum in an effective way [50]. The curriculum should focus on quality, not quantity, as there is currently too much pressure to get through extensive content [51]. Furthermore, the school system must be realistic about how students will use their education and what they need from it, so as to provide students with the education that will empower them to be effective members of society, and prepare them for future employment [33].

Saudi Arabia has conceptualized a political vision that recognizes that education is critical for innovation and sustainable development [28]. In the Saudi Vision 2030, the Saudi government recognizes the challenges facing education, thereby balancing the importance of improving individual achievement with larger systemic changes and reforms [52]. Specific mechanisms need to be adopted to improve the teaching curriculum according to

Saudi Vision 2030, and to achieve teachers' continuous professional development [29]. The MOE has introduced several professional methods to develop effective teaching practices, and teachers' professional development in accordance with Saudi Vision 2030 [20].

1.3. Education Change

Over the past decades, a significant body of international literature on education reforms and education change has been developed [3,46,53,54]. Current terms such as "education change" and "education reforms" have been the subject of an increasing number of studies. However, most of these studies are not based on new developments in the 21st century. Consequently, these studies provide little guidance for governments in making decisions as to designing and implementing their reforms. The Saudi government has placed great importance on education and has made enormous efforts over the past decade to improve the status quo by launching a series of reforms [55]. Although these considerable efforts, there has been much criticism directed towards education quality. Following the launch of the Economic Vision 2030 in 2016, there is an urgent need for educational reform in Saudi Arabia, to meet the vision's aims [37].

Several researchers and experts have argued that essential changes to the education system are also necessary if young Saudis are to compete for 21st-century jobs [39]. To accomplish and build on these objectives, teachers' views on educational reform and skills such as critical thinking and problem-solving should form vital and essential aspects of education reforms in Saudi Arabia [37]. Many scholars have argued that teachers are the most effective factor in the school setting [56,57,58,59,60]. Teachers' perspectives are essential, as they are "agents of change in the reform effort currently under way in education, and thus are expected to play a key role in changing schools and classrooms" ([61], p. 354). Indeed, in several successful global education systems, such as South Korea, Japan, Singapore, Hong Kong, and Finland, teachers play a significant role in education reform [62].

It is worth noting that improving students' performance and outcomes may occur when teachers see themselves as key players and agents of change in the educational reforms because they work directly with students [37]. Based on the above review, the objective of the current study was to examine Saudi schools' openness to change in light of Saudi Vision 2030, from teachers' viewpoint. This study will contribute to the field of educational change in one of the biggest and richest Arab states.

1.4. Purpose and Research Questions

A survey of the related literature revealed a paucity of research addressing the openness to change of Saudi schools in light of Saudi Vision 2030. This study analyses significant differences in the perception of Saudi schools' openness to change, among Saudi teachers, based on their gender, educational stage, the type of school they teach at, and their experience. It addresses the following questions:

1) **RQ1.** How do Saudi teachers perceive Saudi schools' openness to change?

2) RQ2. Are there significant differences in Saudi teachers' perceptions of Saudi schools' openness to change according to gender, educational stage, type of school, and experience?

2. Materials and Methods

2.1. Research Design

This study used a survey research design. Brewer [63] described survey research as a useful tool for educational finding, and best adapted "to gain insight into the thoughts, ideas, opinions, and attitudes of a population" (p. 520). This is a quantitative design study, employing a descriptive research method, and utilizing the Faculty Change Orientation Scale (FCOS) among a randomly selected group of teachers in Saudi Arabia.

2.2. Population and Study Sample

The participants of this study comprised teachers in the Jazan region of Saudi Arabia. According to the Ministry of Education Statistics 2018/2019, the total number of teachers in the Jazan school district amounted to 16,575. The participants were randomly selected, in accordance with the simple random sampling technique. Out of the 29 randomly selected schools, eight were private and 21 were public. Following the selection, researchers hand-delivered an invitation letter, consent form, and scale package to 580 teachers—160 teachers in private schools and 420 teachers in public schools—randomly chosen from nine different grade levels. The data were collected over roughly two months, during the spring semester of 2019. A total of 383 teachers (52 from private schools and 331 from public schools) responded to the survey, which corresponds to a response rate of 66%. In terms of gender, there were: male = 135, female = 248; type of school: private = 52, public = 331; experience: less than 10 years = 139, more than 10 years = 244; and educational stage: primary = 168, middle = 96, and high = 119.

2.3. Instrumentation

The instrumentation used for the survey was the Faculty Change Orientation Scale (FCOS) [64]. The FCOS is a 19-item Likert scale designed to measure a faculty's perceptions of three aspects of change in a school. The scale focuses on faculty perceptions of the orientations of principals, teachers, and community members to change. The FCOS contains a combination of positively and negatively phrased statements. The three aspects of the FCOS are categorized into representative groups as follows:

- 1) Faculty openness to change, consisting of five positively and four negatively worded items (positive items: 1, 2, 5, 8, and 15; negative items: 6, 10, 13, and 14);
- 2) Principal openness to change, consisting of two positively and four negatively worded items (positive items: 9, 12; negative items: 3, 7, 11, and 19);
- 3) Community pressure for change, consisting of three positively worded items and one negatively worded item (positive items: 4, 16, and 17; negative items: 18).

The participants were asked to rank their responses from 1 (strongly disagree) to 5 (strongly agree). In this study, the researchers focused on the first two aspects of the FCOS scale, which contained items representing faculty perceptions of the orientations of principals and teachers to change.

2.4. Translation/back-translation Technique

The researchers used an Arabic version of the FCOS scale; the translation/back-translation technique was used to translate the scale. Geisinger [65] explained that "The quality of the translation is evaluated in terms of how accurately the back-translated versions agree with the original text" (p. 107). Three independent professional translators were involved in the process. One translator converted the scale statements from English to Arabic, and the two other translators independently converted the scale statements back to English. The two English versions of the scale statements were thereafter compared to the original scale statements. Modifications were made to the Arabic versions because of issues raised from the back-translated items. Some statements were rephrased to ensure their suitability for Saudi educators, without altering the original meaning.

2.5. Instrument Reliability

The internal consistency of the variables was analysed using Cronbach's alpha and Pearson's correlation coefficient. A pilot study with 25 teachers was conducted to test the reliability of the scale. This sample did not participate in the final study. Table 1 presents the results of the reliability and internal consistency analysis in the Arabic version of the FCOS scale:

Table 1. Reliability and internal consistency for the Arabic version of the FCOS scale

FCOS subscales	Items	Cronbach's alpha	1	2	3
Principal openness to change	6	0.947	1		
Faculty openness to change	9	0.946	.582**	1	
Overall	15	0.949	.908**	.870**	1

^{**.} Correlation is significant at the 0.01 level (2-tailed).

The Cronbach's alpha coefficients for each variable were higher than the recommended benchmark of 0.70 [66]. Regarding internal consistency, the results indicated that all items have a strong significant correlate (above .70**) with sub-dimensions and total degree of the scale. These values can be considered reasonably satisfactory to support the objectives of the current study. They seem to be valid and reliable measures for use with the population of this study.

2.6. Data Collection and Analysis

Statistical Package for Social Sciences (SPSS) version 21 was used to analyse the data collected from the surveys. Descriptive statistics providing means and standard deviations were calculated for RQ1. T-tests and a one-way analysis of variance (ANOVA) were employed to answer RQ2.

To understand the results of this study, it was important to set specific cut points to interpret the participants' total scores related to their perception of Saudi schools' openness to change. Regarding the cut points, it should be noted that the researchers used the response scale of each item (ranging from 1–5) to determine these cut points in the following manner: 1.00–1.79 = Strongly Disagree, 1.80–2.59 = Disagree, 2.60–3.39 = Neutral, 3.40–4.19 = Agree, and 4.20–5.00 = Strongly Agree.

3. Results

3.1. RQ1. How do Saudi Teachers Perceive Saudi Schools' Openness to Change?

RQ1 sought to determine Saudi teachers' perceptions regarding their schools' openness to change. Means and standard deviations were used to answer this question.

Table 2. Descriptive Statistics for Subsets of the Faculty Change Orientation

Variable	N	Minimum	Maximum	Mean	SD
Principal openness to change	383	3.89	4.16	4.083	1.025
Faculty openness to change	383	3.80	4.01	3.934	.872
Overall	383	3.80	4.16	4.008	.844

Descriptive statistics, presented in Table 2, were computed for the change orientation factors (faculty and principal). Results showed that teachers in Saudi schools perceived a high level of agreement with their schools' openness to change. For the "principal openness to change" and "faculty openness to change" dimensions, mean scores on a 5-point scale were (4.083) and (3.934), respectively. Results showed that the average level of agreement was slightly higher for principal openness to change than for faculty openness to change. This finding indicates that participating teachers perceived that both fellow teachers and school leaders in Saudi Arabian schools are open to change. Change in light of Saudi Vision 2030 is viewed as something inevitable by both Saudi teachers and school principals.

Table 3. Means and standard deviations related to faculty openness to change

No.	Item	Means	SD	Rank
1	In this school, the faculty welcomes change	3.87	1.092	8
2	The school faculty embraces new ideas	3.96	1.016	4
5	In this school, teachers are receptive to substantial changes	3.92	1.037	6
6	In this school, major changes are accepted	4.01	.996	1
8	Teachers in this school readily accept new changes to rules and procedures	3.92	1.000	6
10	The school faculty accepts all but minimal changes	4.00	1.004	2
13	The rhetoric of change in this school is weak but actual changes are noticeable	3.80	1.205	9
14	The school faculty in this school would rather implement change initiatives	3.97	1.009	3
15	than oppose them In this school, the school faculty relishes innovation	3.96	1.015	4

Regarding the "faculty openness to change" dimension in Table 3, four items (namely items 6, 10, 13, and 14) were negatively worded. The negatively worded statements may not be agreeable in the Saudi cultural setting, as Saudis do not normally express things in a directly critical manner, especially in a formal context. Therefore, the negatively worded statements were changed into positively worded ones in the Arabic version of the scale. For example, item 6 ("In this school, major changes are resisted") was changed to "In this school, major changes are accepted"; item 10 ("The school faculty rejects all but minimal changes") was changed to "The school faculty accepts all but minimal changes"; item 13 ("The rhetoric of change in this school is strong, but actual change is negligible") was changed to "The rhetoric of change in this school is weak, but actual changes are noticeable"; and item 14 ("The school faculty in this school would rather fight than switch") was changed to "The school faculty in this school would rather implement change initiatives than oppose them".

In relation to the participants' responses on items of this dimension, all nine items got a high level of agreement with mean scores ranging from 3.80 to 4.01. The highest scored items were: "In this school, major changes are accepted" (M=4.01), "The school faculty accepts all but minimal changes" (M=4.00), and "The school faculty would rather implement change initiatives than oppose them" (M=3.97). These results indicate that most participating teachers agreed that Saudi teachers are open towards change initiatives.

Table 4. Means and standard deviations related to principal openness to change

No.	Item	Means	SD	Rank
3	In this school, the principal welcomes new suggestions	4.16	1.153	1
7	In this school, the principal makes changes rapidly	4.15	1.142	2
9	In this school, the principal is committed to major change	4.14	1.147	3
11	In this school, the principal often accepts the changes suggested by parents	3.89	1.153	6
12	The principal in this school embraces change initiatives	4.08	1.167	4
19	In this school, the principal is committed to change	4.08	1.157	4

Regarding the "principal openness to change" dimension in Table 4, four items (namely items 3, 7, 11, and 19) were negatively worded. To avoid participants from misunderstanding the scale, the negatively worded items were changed into positively worded items. For example, item 3 ("In this school, the principal baulks at new suggestions") was changed to "In this school, the principal welcomes new suggestions"; item 7 ("In this school, the principal is slow to change") was changed to "In this school, the principal is rapid to change"; item 11 ("In this school, the principal often resists the changes suggested by parents") was changed to "In this school, the principal often accepts changes suggested by parents"; and item 19 ("In this school, the principal is not committed to any change") was changed to "In this school, the principal is committed to change".

In relation to the participants' responses on the items of this dimension, all six items got a high level of agreement, with mean scores ranging from 3.89 to 4.16. The highest scored items were "In this school, the principal welcomes new suggestions" (M=4.16), "In this school, the principal makes rapid changes" (M=4.15), and "In this school, the principal is committed to major change" (M=4.14). These results indicate that most participating teachers perceive their leaders and principals as being supportive of change, and open to the change initiatives in schools. Most participating teachers agree that their school principals are committed to change efforts in light of Saudi Vision 2030.

3.2. RQ2. Are There Significant Differences in Saudi Teachers' Perceptions of Saudi Schools' Openness to Change According to Gender, Educational Stage, Type of School, and Experience?

Independent sample t-tests were performed to determine whether the Saudi teachers' perceptions regarding their schools' openness to change varied in terms of their gender, the type of school they taught at, and their experience. The results are listed in Table 5.

Table 5. T-test results for the gender, type of school, and experience variables

Variable	N	Mean	Std. deviation	Std. error mean	t	p
Male	135	3.814	.885	.076	- 3.364	.196
Female	248	4.114	.803	.051	3.304	.190
Public schools	331	3.998	.866	.047	585	.057
Private schools	52	4.072	.694	.096	.363	
Less than 10 years	139	3.812	.952	.080	- 3.478	.000
More than 10 years	244	4.120	.756	.048	3.476	.000

According to the results shown in Table 5, the Saudi teachers' perceptions of their schools' openness to change did not show any significant differences in terms of the gender variable [t = 3.364; p > 0.05], and the type of school variable [t = .585; p > 0.05]. However, there was a significant difference between the participants' responses due to the experience variable [t = 3.478; p < 0.01]. Teachers who had more than 10 years' experience also had a higher mean score (M = 4.12) than those with less than 10 years (M = 3.81). This means that teachers with more than 10 years' experience have more positive views towards their schools' openness to change than teachers with less.

A one-way ANOVA was used to determine whether the Saudi teachers' perceptions regarding their schools' openness to change varied in terms of the educational stage variable (primary, middle, or high). The results are reported in Table 6.

Table 6. Means, Standard Deviation, and one-way ANOVA for the educational stage variable $\,$

Educational stage	N	Mean	SD	F-value	P
Elementary	168	4.09	.776	4.220*	.015
Middle	96	4.07	.903		
High	119	3.82	.865		

^{*.} The mean difference is significant at the 0.05 level.

As shown in Table 6, the results showed that there were significant differences among participating teachers regarding the orientations of principals and teachers to change $[F=4.220,\ p<.05]$ due to the educational stage variable. Scheffe's test indicated that the differences were in favour of elementary school teachers.

4. Discussion

Change is a crucial concept in both business and education organizations. Although the education system of Saudi Arabia has gone through several improvement efforts due to the huge development project sponsored by King Abdullah Bin Abdul Aziz in 2007 (the "Tatweer Project"), the need for further improvement is still evident [67]. The MOE identified 39 steps to implement the Tatweer Project, which includes curriculum development, professional development programmes for teachers, the overall improvement of the educational environment, and extra-curricular activities for students [68]. The initiation of Saudi Vision 2030 in 2016 put a considerable focus on education, which prompted the MOE to set eight strategic objectives and 36 initiatives for the National Transformation Program 2020 [67]. In these contexts, a teacher's effectiveness as a change agent depends on how well they can understand and manage change within the school community.

Therefore, the results of this study may be understood in light of Saudi Vision 2030, revealing that the average level of agreement was slightly higher for principal's openness to change than for faculty openness to change; also, the participating teachers did show a high level of agreement on all scale items. It was further revealed that the gender and type of school variables had no significant impact on Saudi teachers' perceptions regarding their schools' openness to change. However, the results also revealed that the experience and educational stage variables had a significant impact on Saudi teachers' perceptions regarding their schools' openness to change.

The study showed that the average level of agreement among participating teachers was high on the items of the "principal openness to change" dimension, and the highest scored items among the six items in this dimension were: principal welcomes new suggestions, he/she makes changes rapidly, and he/she is committed to making major changes. These results are supported by the findings of previous studies, which reported that principals have a large impact on change processes [69,70]. It is, therefore, difficult to realize change in an organization that is not led by someone with the ability, mission, and vision to manage and encourage change [23]. Regarding the "faculty openness to change" dimension, the highest means scored items among the nine items in this dimension were: teachers that accept major changes, teachers that accept all but minimal changes, and teachers that would rather implement change initiatives than oppose them. These results correspond to the findings of previous studies, such as that of Jamil [71], who claimed that actual changes will not take effect in an organization if its workers do not have a positive attitude, and are not sure of the need for change. Similarly, Devos et al. [9] noted that an organization will survive and succeed if its

employees are prepared to change. Hamzah et al. [72] also concluded that teachers need to realize and understand the importance of change and innovation in education.

The study results can be explained by way of Saudi Vision 2030, which encourages teachers to change. This large-scale initiative originated as a means of preparing the citizens of Saudi Arabia to participate in and contribute to a more sustainable, adaptable, and stable economy [22]. An excerpt from the Saudi Vision 2030 (2020) website reads:

Our ambition is for the long term. It goes beyond replenishing sources of income that have weakened or preserving what we have already achieved. We are determined to build a thriving country in which all citizens can fulfil their dreams, hopes and ambitions. Therefore, we will not rest until our nation is a leader in providing opportunities for all through education and training, and high-quality services such as employment initiatives, health, housing, and entertainment.

Unique challenges have been posed to the Saudi education system to fulfil the nationwide initiatives established by the 2030 Vision. To prepare Saudi citizens for upcoming life and work in a global economy, change should be fostered through advocacy efforts on a national level. Ultimately, this level of understanding of change should prompt all Saudi teachers to engage in effective change processes, to prepare Saudi students to enter a globalized workforce. Teachers, principals, and curricula should assist schools' need for change.

Saudi teachers should recognize that, regardless of their gender or ages of the children they teach, their performance has an impact on achieving the goals of the 2030 Vision. Teachers should expect that, at some point in their professional lives, they will be called to lead the wave of change in their schools. Principals and curricula should work to facilitate a broadening view of change.

The following recommendations are made based on the findings of the study. Additional studies should be conducted on a larger sample to further validate the study outcomes. Further studies across different regions in the Saudi Kingdom are required to gain an insight into the level of Saudi schools' openness to change, so as to conform to the requirements of Saudi Vision 2030. Further qualitative and quantitative research can be conducted to determine why gender and type of school have no significant differences on Saudi teachers' perceptions regarding their schools' openness, and why experience and educational stage do have significant differences. A follow-up qualitative and quantitative study can be conducted at the university level to determine the willingness of faculty members to accept and engage in change initiatives in light of Saudi Vision 2030.

Declaration of Interest

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