

The Impact of Leadership on the Effective Implementation of Organizational Change

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Abstract

The study investigates the influence of leaders' behavior on the effective implementation of organizational change. The study also examines the mediating role of followers' response to change and the moderating role of leaders' behavior on followers' dispositional resistance to change in the change process. Data was collected from 238 academic staff working in higher education institutions in the Gambia and analyzed with the help of SmartPLS 4.1.0.0 using partial least squares structural equation modeling (PLS-SEM). The results indicate a positive relationship between leaders' behavior and change effectiveness. Furthermore, followers' response to change mediates the relationship between leaders' behavior and change effectiveness. However, the results do not provide support for the moderating role of leaders' behavior on the relationship between dispositional resistance to change and followers' response to change. The article is concluded with implications and directions for future research.

Keywords: Leaders' behavior; response to change; change effectiveness; dispositional resistance to change.

JEL Classification: L11, L21, M11, M12

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1. Introduction

“Change is the only constant thing in life”. This is a very famous saying and it is more relevant and applicable to today’s business environment than ever before. As Kiefer (2005) nicely put it, change has increasingly become a part of organizational life. Businesses must adjust constantly to adapt to the ever-changing and volatile global environment. These changes are often implemented by leaders of the organization thus dramatically shifting the traditional role of managers. Instead of focusing on balance, stability, and control, managers today as leaders of organizations are required to respond quickly to changing circumstances by actively looking for new opportunities and leading their followers to seize them. Ultimately, leaders must constantly examine how things could be done better, get their employees to share their change goals, and collaborate with them to reach those objectives (Paglis & Green, 2002).

The concepts of leadership and organizational change have long been intertwined and have usually been explored together. Although we know a lot about both concepts independently, our understanding of the integration of the two is relatively limited. The impact of leadership on organizations during periods of change is extensively studied, and the roles that change agents and managers play as change leaders are often highlighted in organizational change literature (Oreg & Berson, 2019). In fact, Bass (2008) and Zaleznik (1977) argued that it is impossible to talk about leadership without mentioning, at least implicitly, a change process. Yet, surprisingly, after a deep review of the literature, Oreg and Berson (2019) noted that there has not been any systematic research to explore the relationship between leadership and change. Therefore, they did just that and identified several gaps in the literature and gave suggestions on the direction of future studies. This study set out to fill some of the gaps they identified.

Recently, the impact of COVID-19 has forced higher educational institutions in the Gambia to change the way they conduct their lessons. Most lessons are now conducted online as opposed to the traditional ways of delivering lessons to students (i.e., on-campus or face-to-face). Therefore, the aim of this study, broadly speaking, is to determine the impact of higher education institution leaders’ behavior on the successful implementation of this change in the Gambia. More specifically, the study seeks to provide answers to the following questions:

- What is the impact of leaders’ behavior on change effectiveness?

- What is the relationship between leaders' behavior and followers' response to change?
- What is the role of recipients' responses to change in mediating the relationship between leaders' behavior and change effectiveness?
- What is the role of leaders' behavior in moderating the relationships between follower attributes (specifically dispositional resistance to change) and followers' responses to change?

2. Literature Review

Oreg and Berson (2019) did a study on leadership and change and based on their analysis of the literature, they proposed a model that can be useful for future research on the topic. However, their model is a huge model that will be almost impossible to be completely tested in one study. Thus, we modified the model to achieve the objectives of the present study. The various model paths are described in figure 1. We begin by explaining the behavior of leaders and their influence on change-related organizational outcomes (path 1). We then look at the mediating role of followers' response to change on organizational outcomes (paths 2 – 3). Finally, we describe the moderating role of leaders' behavior on the relationship between followers' personal attributes and their response to change (path 4).

2.1 Leaders' Behaviors

According to Oreg and Berson (2019), there are more than fifty studies in the literature that showed that the behavior of leaders was associated with change effectiveness and recipients' response to change. The theories that underpin these studies rely on “concepts that focus on the change-related aspects of leaders' behavior”. Theories such as “transformational leadership” (Bass, 1985), “issue selling” (Dutton, et al., 2001), and more specifically, “change-related leadership” (Brockner, et al., 1994) are mainly explored.

However, in their review and in the process of developing the model, they identified and “singled out” three key leadership styles or functions to be “particularly important in the context of leading change”. These are 1) “effective communication”, 2) “being supportive and attentive to recipients' concerns”, and 3) “involving followers”. These leadership style classifications correspond exactly to the essential elements of the change process, which are generally referred to as “change

information”, “change support”, and “change participation” (Oreg & Berson, 2019). Therefore, these three key leadership functions or styles will be used to conceptualize leaders’ behaviors.

2.2 Leaders’ Behavior and Change/Organizational Outcomes (Path 1)

Numerous studies have demonstrated the relationship between leaders’ behavior and organizational or change-related outcomes. For instance, in a study of 38 top management teams (TMT) and their CEOs to determine whether CEOs’ leadership behavior influences team performance and change effectiveness, Stoker, et al. (2012) show that both TMT performance and organizational change effectiveness are positively related to leaders’ behavior. Waldman, et al. (2001) also used data from 48 Fortune 500 companies and their results indicate a positive relationship between leaders’ behavior and performance under conditions of uncertainty. In yet another study, leaders from 33 organizations were interviewed by Higgs and Rowland, (2011) and found that “leader-centric (shaping) behavior” impedes change implementation. On the other hand, “facilitating” and “engaging” leader behaviors are positively linked to change success. In other words, leaders who display “facilitating” and “engaging” behaviors are more likely to succeed with change. Their results replicated the findings of their previous study (Higgs & Rowland, 2005). In another study, Dutton et al., (2001) conducted interviews with department directors and vice presidents of a hospital and highlighted that the process of “issue-selling” was used by leaders to promote change by drawing the attention of members of the organization to and shaping their understanding of major organizational events. As a result of the literature cited above, the following hypothesis is drawn regarding leadership behavior and organizational change.

Hypothesis 1:

Leaders’ behaviors such as ‘effective communication’, ‘being supportive and attentive to recipients’ concerns’, and ‘involving followers’ will positively influence change effectiveness.

2.3 Leaders’ behavior and followers’ resistance to change (Path 2).

The most frequently studied link in the leadership and change literature is the link between leaders’ behavior and recipients’ response to change (Oreg & Berson, 2019). The theoretical argument that “leaders promote change by engaging followers and shaping their emotional and attitudinal responses” is the basis for much of this research (Bartunek, et al., 1999; Shamir et al., 1993 as cited

in Oreg & Berson, 2019). Based on their review of the literature, Oreg and Berson (2019) separated recipients' responses to change into three categories: emotions, change attitudes, and behavioral consequences and outcomes. However, it is worth noting that these components are interrelated and overlapping. This is particularly demonstrated in the study conducted by Oreg (2006) on resistance to change which is one of the variables captured under change attitude. He conceptualized resistance to change as a "tridimensional (negative) attitude towards change, which includes affective, behavioral, and cognitive components." The affective component involves people's feelings about the change; the cognitive component considers people's perceptions of the change and the behavioral component deals with people's actions and intentions toward the change. He argued that even though the three components are not independent of one another as people's feelings, thoughts, and behavioral intentions about the change are interlinked, they are "distinct of one another and each highlights a different aspect of the resistance phenomenon." Since this conceptualization includes all three dimensions of followers' response to change, it is ideal for the present study to use it to capture the essence of recipients' response to change and avoid the issue of multicollinearity between two independent variables.

Several studies have been conducted on resistance to change. For instance, Oreg (2006) found a strong relationship between leaders' behavior and resistance to change. There was a strong correlation between followers' lack of confidence in the organization's leadership and an increase in anger, frustration, and anxiety about the organizational change, increased actions against it, and a negative evaluation of whether or not the organizational change was necessary and beneficial. The results of Huy, et al. (2014) suggest that effectively communicating the need for radical change and involving followers in defining the change content improves the followers' judgment about the legitimacy of their leaders to lead the change process and leads to a positive emotional reaction from the followers. This in turn improved their trust in their leaders and thus invigorated their supportive actions and decreased their resistance to radical change. However, when leaders fail to keep their promises, followers change their legitimacy judgment and emotional reactions from positive emotional reactions to negative ones such as disappointment, anxiety, and frustration thus leading to growing resistance to the change.

Using an experimental simulation study involving 263 German employees, Helpap (2016) assessed how change communication influences change commitment and followers' intention to resist change. The findings revealed that participatory communication positively influences change commitment more than 'programmatically communication'. Thus, employees' resistance to change is lowered with better communication and involvement in the change process. In yet another study by Jones and Van de Ven (2016), supportive leadership has a significant negative impact on resistance to change and the effect becomes stronger over time. This shows that supportive leadership has a stronger capacity to reduce resistance to change as the change initiative progresses. This brings us to our second hypothesis:

Hypothesis 2: Leaders' behaviors such as 'effective communication', 'being supportive and attentive to recipients' concerns', and 'involving followers' will positively influence followers' response to change.

2.4 The Mediating Role of Followers' Resistance to Change (Path 2 and 3).

The impact of leaders' behavior on change effectiveness is usually mediated by their change recipients' response to change (Oreg and Berson, 2019). Several studies have manifested that in their findings. For instance, the results of Huy (2002) indicate that organizational change implementation is facilitated when leaders attend to their followers' emotions. Huy et al (2014) also noted that communicating well and involving followers in defining the change content enhances both their legitimacy judgment of their leaders and emotional reactions to change which also strengthens the effective implementation of change. On the other hand, employees' legitimacy judgment of their leaders diminishes, and they display negative emotional reactions to change when their leaders fail to honor their promises. This leads to stiff resistance to change and hence the eventual failure of the change program. In another study, Bartunek, (1984) proposes that the behaviors of organizational members and their emotional responses to change mediate leaders' influence on change. Correspondingly, Graebner (2004) suggested that for change to be successfully implemented, it is critical for leaders to effectively manage the emotions of their followers.

The results of Jones and Van de Ven, (2016) also indicated that the relationship between supportive leadership and perceived organizational effectiveness was mediated by attitudinal

resistance to change such that supportive leadership greatly impacts resistance to change which in turn leads to improvements in organizational effectiveness. Overall, these studies have shown that the relationship between leaders' behavior and change effectiveness is mediated by change recipients' responses to change.

Hypothesis 3:

Followers' response to change will mediate the relationship between leaders' behavior and change effectiveness.

2.5 The moderating effect of leaders' behaviors (Path 4)

In addition to having a direct impact on organizational outcomes and followers' responses to change, leadership may also interact with followers' personality traits to affect their responses to change (Oreg & Berson, 2011). Thus, we suggest that leaders' behavior may moderate the relationship between employees' personal attributes (dispositional resistance to change to be specific) and responses to change (path 4). It has been shown in several studies that employees' personality traits are related to how they respond to change (e.g. Lau & Woodman, 1995; Oreg, 2003; Nov & Ye, 2008; Oreg, 2006). However, only a limited number of studies have explored the moderating effect of leaders' behavior in the context of change. For instance, in a multilevel study of data from 75 school administrators and 568 teachers, Oreg and Berson (2011) found that transformational leadership behaviors moderate the relationship between followers' intentions to resist change and their dispositional resistance to change making this link weaker as transformational leadership levels rise. The results of Hon, et al. (2014) also indicated that the relationship between employees' creative performance and dispositional resistance to change is moderated by empowering leadership, such that under more empowering leaders, the negative relationship is weaker. In yet another study, Griffin, et al. (2010) suggested that leaders' vision clearly moderates the relationship between the personal characteristics of followers and their change-related behaviors.

As can be seen above, even though there are very few studies that investigated the moderating effect of leaders' behavior in the context of change, their results aligned with our suggestion that the influence of leaders' behavior on followers may extend beyond its direct influence on their

reaction to change, as it may influence their response to change indirectly through its interaction with followers' personality traits or attributes.

Hypothesis 4:

Leaders' behavior will moderate the relationship between employees' dispositional resistance to change and their responses to change such that the relationship will be weaker in the face of positive leader behaviors such as 'effective communication', 'being supportive and attentive to recipients' concerns', and 'involving followers'.

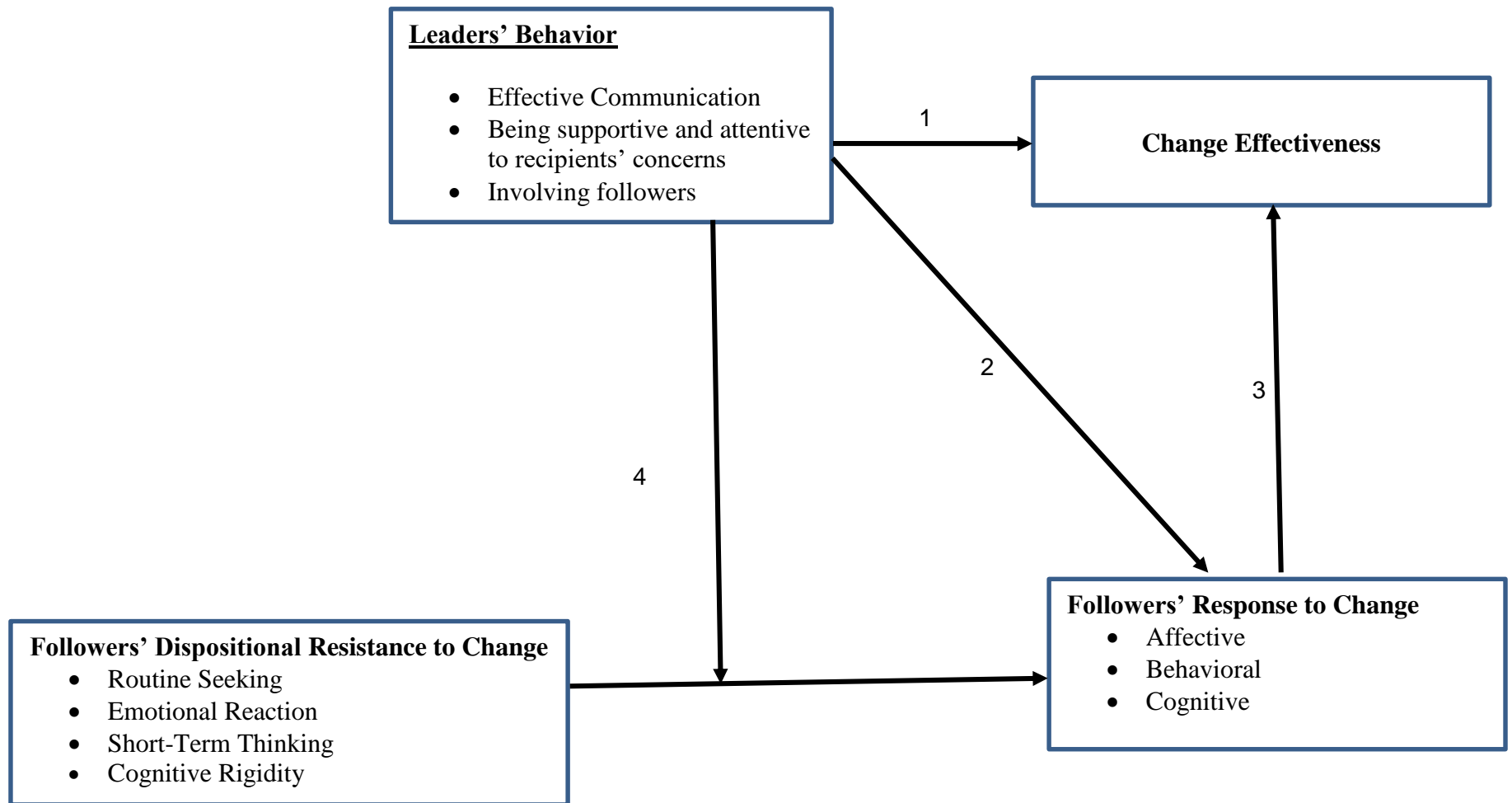


Figure 1 – Model of Leadership and Organizational Change

3. Research Methodology

3.1 Research Design

The purpose of this research is to undertake explanatory or hypothesis-testing research – to establish the impact of leaders' behavior on change-related organizational outcomes. We also wish to establish the relationship between leaders' behavior and change recipients' responses to change. To achieve the study's objectives, primary data will be collected using a cross-sectional survey design, in which a single group of respondents will provide information about themselves through an online questionnaire (Leary, 2001). Additionally, the dependent and independent variables will be simultaneously measured using a single questionnaire (Bhattacharjee, 2012).

3.2 Measures

3.2.1 Dispositional Resistance to Change

Dispositional resistance to change will be measured using Oreg's (2003) 17-item resistance to change (RTC) scale. There are four dimensions on the scale (routine seeking, emotional reaction, short-term focus, and cognitive rigidity), which together constitute the encompassing disposition to resist change. Response options are designed with a 5-point Likert-type scale ranging from 1 = *strongly disagree* to 5 = *strongly agree*. The validity and reliability of the scale have been established by Oreg (2003). Moreover, the scale has repeatedly shown high structural stability and reliability in a variety of contexts (Oreg, 2003, studies 2 – 7; Oreg, 2006; Oreg et al, 2008; Oreg & Berson, 2011; Hon, et al., 2011).

3.2.2 Response to Change

Followers' response to change will be measured using the 15-item change attitude scale of Oreg (2006). The items on the scale formed three dimensions: affective, behavioral, and cognitive.

Respondents' level of agreement with each item is measured on a 5-point scale ranging from 1 = strongly disagree to 5 = strongly agree. The scale has been used in several previous studies and has consistently proved to be a valid and reliable measure of employees' response to change (Oreg, 2006; Sverdlik & Oreg, 2009; Oreg & Berson, 2011; Chung, et al., 2012; Meier, et al., 2013; Helpap, 2015).

3.2.3 Leaders' Behavior

The three key leadership styles, often referred to as “change information, “change support” and “change participation” which are essential to the change process are used as measures for leaders' behavior. All items are measured on a 5-point Likert-type scale ranging from 1 = strongly disagree to 5 = strongly agree. *Change information* is measured using Wanberg and Banas's (2000) modified version of Miller Johnson, and Grau's (1994) scale. There are four items on the scale. This scale has been used in previous studies (Wanberg & Banas, 2000; Oreg, 2006) and has proved to be a valid and reliable measure of change information.

Change participation is measured using Daly and Geyer's (1994) four-item scale of “voice” (a form of participation). The scale was developed to measure the impact of participation in facility relocation decisions. So, it will be adapted and modified a bit to reflect the purpose of the current study which is about moving lessons from traditional face-to-face classroom education to online.

Change support is measured using the 5-item management support scale of Caldwell, Herold, and Fedor (2004). Principal-components analysis was conducted to validate the scale using varimax rotation and its reliability was also assured with an alpha value of 0.79.

3.2.4 Change Effectiveness

Change effectiveness will be measured using a single item based on the scale used by Stoker et al. (2012). The respondents will be asked to rate the effectiveness of the change on a 5-point Likert-type scale ranging from 1 = not effective at all to 5 = highly effective.

The target population for this particular study constitutes the entire staff body of higher education institutions in The Gambia. According to the Tertiary and Higher Education Act (2016) of the Gambia “higher education institution means a university, or a center of education affiliated to a university other than a tertiary institution”. From the list obtained from the National Accreditation and Quality Assurance Agency of the Gambia, there are currently eight (8) higher education institutions in The Gambia: The University of The Gambia (UTG), American International University West Africa (AIUWA), International Open University (IOU), Al Ihsan University College, Al Hikma University College, Management Development Institute (MDI), Euclid Online

University, and The University of Applied Science, Engineering and Technology (USET). Two of the universities from this list (International Open University, and Euclid Online University) are predominantly online universities. Hence their courses are conducted online and thus not affected by the COVID-19 pandemic. Therefore, they are not within the scope of this study since they did not experience any changes in terms of moving their lectures from face-to-face to online. Two other universities from the list (Al Ihsan University College, and Al Hikma University College) are Arabic Universities, and their staff have little to no formal education in English. Therefore, they cannot participate in the study because they are unable to read, understand, or respond meaningfully to the self-administered online questionnaire due to their insufficient comprehension of and proficiency in the English language. In addition, the Vice-Chancellor of AIUWA did not grant permission for the questionnaire to be administered to the staff of his university. Hence AIUWA was also excluded from the study.

The total staff population of the remaining three institutions is shown in Table 1.

Table 1: Population, Sample, and Response Rate.

Name of the Institution	Total Population	Staff Academic Staff Population	Respondents	Response Rate
UTG	625	271	150	55%
MDI	82	23	19	82%
USET	256	141	69	49%
Total	963	435	238	55%

In this particular study, in addition to the five institutions that were excluded due to the scope or language barrier, the administrative staff of the remaining four institutions were also excluded because their work was not affected by the change. They continued coming to the office to work during Covid-19. Thus, a probability sample was not possible. Therefore, the researcher had to resort to judgment sampling (Sekaran, 2003). Since, “survey research is generally notorious for its low response rates” (Bhattacharjee, 2012, p. 80), the remaining entire academic staff population of 435 was used as the sample. 238 staff responded to the questionnaire, which is a response rate of 55% as shown in Table 1.

The demographic profile of the respondents is presented in Table 2.

Table 2: Demographic Profile of Respondents. N = 238.

	Frequency	Percent
Institution		
UTG	150	63
MDI	19	8
USET	69	29
Status		
Full Time	214	89.9
Part-Time	24	10.1
Gender		
Male	203	85.3
Female	35	14.7
Age		
Below 30	20	8.4
30 to 40	108	45.4
41 to 50	72	30.3
51 to 60	30	12.6
Above 60	8	3.4
Education		
Bachelor's Degree	31	13
Master's Degree	111	46.6
Doctoral Degree	58	24.4
Others	38	16
Work Experience (in Years)		
Less than 6	87	36.6
6 to 10	86	36.1
Above 10	69	27.3

3.4 Data Analysis Methods

The data will be analyzed with the help of SmartPLS 4.1.0.0 using partial least squares structural equation modeling (PLS-SEM). As Hair, et al. (2019) recommended, we started with assessing the measurement model by first evaluating the factor loadings which is followed by construct reliability and construct validity. After a satisfactory measurement model assessment, we then assess the structural model by following the systematic structural model assessment procedure recommended by Hair, et al. (2022). This is done by assessing: the structural model for collinearity; the statistical significance and relevance of the structural model relationships; the model's explanatory power; and the model's predictive power.

4.1 Measurement Model Assessment

The measurement model is evaluated to assess the quality of the constructs. The quality criteria assessment starts with the evaluation of the factor loadings which is followed by construct reliability and construct validity (Hair et al., 2019). From the assessment of the factor loadings, only one indicator (Cognitive Rigidity) with a loading of 0.348 is below the minimum acceptable level of 0.4 and it is therefore removed from the model (Hair et al., 2019). The remaining indicators in Table 3 are retained because they are all well above the required minimum acceptable level of 0.4 and either very close to or above the preferred level of 0.7.

Table 3. Factor loadings, reliability, and convergent validity.

	Factor Loadings	Composite Reliability (rho_c)	Average variance extracted (AVE)
Resistance to Change		0.800	0.572
Affective	0.888		
Behavioral	0.834		
Cognitive	0.832		
Leaders' Behavior		0.793	0.563
Change Information	0.757		
Change Participation	0.673		
Change Support	0.814		

Dispositional Resistance to Change		0.888	0.726
Routine Seeking	0.833		
Emotional Reaction	0.684		
Short-Term Thinking	0.745		
Change Effectiveness	1.000		

As can be seen in Table 3 all the composite reliability values, which are more consistent with PLS-SEM algorithm's operation, are more than the satisfactory level of 0.70 (Hair, et al., 2014). Also, none of the values are above 0.95 (Hair, et al. 2022, p. 119). Therefore, construct reliability is established. All the AVE values as shown in Table 3 are above 0.50 and thus convergent validity is assured. To assess the discriminant validity, the most recent and accurate heterotrait-monotrait ratio (HTMT) proposed by Henseler, et al. (2015) is used in this study. When the HTMT is 0.85 and below, we say that discriminant validity is established in the model. All the HTMT values reported in Table 4 are less than 0.85. Hence discriminant validity is established.

Table 4: Heterotrait-monotrait ratio (HTMT) - Matrix

	CE	DRTC	LB	RTC	LB x DRTC
CE					
DRTC	0.056				
LB	0.675	0.138			
RTC	0.272	0.677	0.213		
LB x DRTC	0.046	0.166	0.168	0.045	

Note: LB: Leaders' Behavior; DRTC: Dispositional Resistance to Change; RTC: Response to Change; CE: Change Effectiveness

4.2 Significance of Structural Model Relationships (Hypothesis Testing)

Once we are sure that collinearity is not an issue, the next step is to run the PLS model to get estimates of the path coefficients "to assess the significance and relevance of the structural model relationships" (i.e. to test our hypotheses) (Hair et al., 2022, p. 188). To assess the significance of

the relationship between the path coefficients in our model, we run the bootstrapping procedure. The result of the bootstrapping procedure is presented in Table 5.

Table 5: Results of Structural Model Path Coefficient (Direct Relationships).

Hypotheses	Relationship	Beta Coefficient	Standard deviation (STDEV)	P values	Decision
H1	LB -> CE	0.540	0.047	0.000	Supported
H2	LB -> RTC	-0.171	0.064	0.008	Supported

Note: LB: Leaders' Behavior; CE: Change Effectiveness; RTC: Response to Change

H1 evaluates whether leaders' behaviors such as effective communication, being supportive and attentive to recipients' concerns, and involving followers positively influence change effectiveness. The results in Table 5 reveal that leaders' behavior (LB) exerts a positive (0.540) and significant ($p < 0.05$) influence on change effectiveness (CE). Hence, H1 is supported.

H2 evaluates whether leaders' behaviors such as effective communication, being supportive and attentive to recipients' concerns, and involving followers positively influence followers' responses to change. Response to change is measured by the resistance to change scale of Oreg (2026). The results in Table 5 reveal that leaders' behavior (LB) exerts a negative (-0.171) and significant ($p < 0.005$) influence on followers' resistance to change (RTC). Thus, we can conclude that positive leader behaviors such as effective communication, being supportive and attentive to recipients' concerns, and involving followers lead to a reduction in followers' resistance to change. In other words, leaders' behavior is positively related to followers' response to change. Hence, H1 is supported.

4.3 Mediation Analysis

The mediation analysis results are reported in Table 6.

Table 6: Summary of the Mediation Results

Hypothesis	Relationship	Beta Coefficient	Standard deviation (STDEV)	P values	Decision
	LB -> CE	0.540	0.047	0.000	

H3	LB -> RTC -> CE	0.030	0.015	0.043	Supported
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Note: LB: Leaders' Behavior; CE: Change Effectiveness; RTC: Response to Change

H3 evaluates whether followers' response to change mediates the relationship between leaders' behavior and change effectiveness. The results in Table 6 indicate that both the direct and indirect effects denoted by LB -> CE and LB -> RTC -> CE respectively are significant ($p < 0.05$). The significance of the indirect effect means that followers' response to change (RTC) mediates the relationship between leaders' behavior and change effectiveness and hence our H3 is supported. However, given the significance and meaningfulness of both the direct and indirect effects, we infer that the relationship between leaders' behavior and change effectiveness is partially mediated by the response to change (RTC). Furthermore, since both the direct and indirect effects are positive, we can conclude that RTC represents "complementary mediation" of the relationship from LB to CE (Hair et al., 2022, p. 243).

3.5 Moderation Analysis

H4 evaluates whether leaders' behavior will moderate the relationship between employees' dispositional resistance to change and their responses to change such that the relationship will be weaker in the face of positive leader behaviors such as effective communication, being supportive and attentive to recipients' concerns, and involving followers.

Table 7: Summary of the Moderation Results

Hypothesis	Relationship	Beta Coefficient	Standard deviation (STDEV)	P values	Decision
	DRTC -> RTC	0.503	0.053	0.000	
H4	LB x DRTC -> RTC	-0.050	0.068	0.463	Not Supported

Note: LB: Leaders' Behavior; DRTC: Dispositional Resistance to Change; RTC: Response to Change

It can be seen from Table 7 that while the simple effect of DRTC on RTC is 0.503, the interaction term (LB x DRTC) has a negative influence on RTC (-0.050). Taken together, these findings imply that the relationship between DRTC and RTC is 0.503 for an average level of leaders' positive behavior. For higher levels of positive leader behaviors (e.g. one standard deviation unit increase

in LB), the relationship between DRTC and RTC decreases by the size of the interaction term (i.e., $0.503 - 0.050 = 0.453$). Conversely, the relationship between DRTC and RTC increases by the size of the interaction term (i.e., $0.503 + 0.050 = 0.553$) for lower levels of positive leader behaviors (e.g. one standard deviation unit decrease in LB). However, Table 7 also indicates that the moderating effect denoted by LB x DRTC \rightarrow RTC is insignificant ($p > 0.05$). Thus, hypothesis four is not supported.

3.6 The Model's Explanatory Power

A model's explanatory power is determined by how well it fits the available data by measuring the degree of association that the PLS path model indicates (Shmueli, et al., 2016). For assessing the explanatory power of a structural model, the coefficient of determination (R^2) value is the widely used metric. The R^2 value ranges from 0 to 1, where higher values signify greater explanatory strength (Hair et al., 2022). The R^2 values of the two endogenous latent variables of change effectiveness (CE) and Resistance to Change (RTC) are reported in Table 8. The R^2 value CE (0.315) can be considered moderate, whereas the R^2 value of RTC (0.266) is rather weak. However, both can be considered satisfactory as they are both above the minimum value of 0.10 (Falk & Miller, 1992) and thus support the model's explanatory power.

Table 8: R-Square

	R-square	R-square adjusted
CE	0.315	0.309
RTC	0.266	0.256

Note: CE: Change Effectiveness; RTC: Response to Change

Cohen's f^2 was used to determine the effect size assessing the changes in R^2 when a specific endogenous construct is removed from the model (Hair et al., 2022). The f^2 values for every combination of exogenous (predictor) constructs and corresponding endogenous constructs as well as the test of moderation are presented in Table 9. The results indicate that DRTC has a large effect size of 0.337 on RTC. LB also has a large effect size of 0.373 on CE but a small effect size of 0.039 on RTC. RTC has a small effect size of 0.045 on CE. Finally, considering the moderation test, the interaction term LB x DRTC has a small effect size of 0.004 on RTC.

Table 9: f-square

	f-square
DRTC -> RTC	0.337
LB -> CE	0.373
LB -> RTC	0.039
RTC -> CE	0.045
LB x DRTC -> RTC	0.004

Note: LB: Leaders' Behavior; DRTC: Dispositional Resistance to Change; RTC: Response to Change; CE: Change Effectiveness

3.7 The Model's Predictive Power

Finally, we used PLSpredict to assess the model's predictive power and the results are reported in Table 10. We first check the Q^2 predict values and all the Q^2 predict values shown in Table 10 are greater than zero, suggesting our model has predictive power. We then compare the RMSE values to confirm if PLS-SEM_RMSE is less than LM_RMSE. We use RMSE because the prediction errors are distributed symmetrically. For Table 10, the RMSE values for the PLS-SEM are all less than the RSME values for the LM for all our indicators. Thus, our results suggest that our model has high predictive power or relevance. This means that our results can be generalized with more confidence and hence very relevant for managerial decision-making.

Table 10: PLSpredict Results Report

	Q^2 predict	PLS-SEM_RMSE	PLS-SEM_MAE	LM_RMSE	LM_MAE
CE1	0.274	0.856	0.674	0.868	0.683
A	0.198	0.900	0.693	0.900	0.704
B	0.170	0.915	0.720	0.922	0.721
C	0.132	0.936	0.706	0.950	0.713

Note: CE: Change Effectiveness; A: Affective; B: Behavioral; C: Cognitive

4. Discussions

Our focus in this study was leaders' behavior, their followers' response to change, and how effectively the change was implemented. To achieve this objective, a cross-sectional survey method of data collection was used to collect primary data with the help of a self-administered questionnaire. The data was analyzed with the help of SmartPLS 4.1.0.0 using partial least squares structural equation modeling (PLS-SEM). First, the measurement model was evaluated to assess the quality of the constructs. The quality criteria assessment starts with the evaluation of the factor loadings which is followed by construct reliability and construct validity. All quality criteria were assured before assessing the structural model. After a satisfactory measurement model assessment, the structural model was then assessed for collinearity issues followed by an assessment of the significance and relevance of the structural model relationships. Finally, the model's explanatory and predictive powers were assessed. No collinearity issues were identified, and the model has good explanatory and predictive powers. The study reveals several key findings.

Firstly, the results confirm and support our expectation that leaders' behaviors such as effective communication, being supportive and attentive to recipients' concerns, and involving followers have a positive influence on change effectiveness. This finding aligns with the results of previous studies (e.g. Stoker, et al., 2012; Beatty & Lee, 1992; Waldman et al., 2001; Higgs & Rowland, 2005,2011). Furthermore, positive leader behaviors such as effective communication, being supportive and attentive to recipients' concerns, and involving followers were found to exert a significant positive effect on followers' response to change. This result is not only consistent with previous studies (e.g. Huy, et al., 2014; Helpap, 2015; Van de Ven, 2016; Buchanan and Boddy, 1992; Burnes and Jackson, 2011; Hon et al, 2014) but it is also in line with resistance to change theories such as cognitive dissonance theory, the dept of intervention theory, and psychological contract theory.

Also, our findings empirically support the mediating role of response to change in our leadership and change model. More precisely, followers' response to change mediates the relationship between leaders' behavior and change effectiveness. Again, this result lends support to the findings of previous studies such as Huy (2002); Huy et al (2014); Bartunek, (1984) Graebner (2004); Jones and Van de Ven, (2016). Moreover, although not hypothesized, as expected, the relationship between followers' dispositional resistance to change and their response to change

was found to be positive and significant. Previous studies (e.g. Lau & Woodman, 1995; Oreg, 2003; Nov & Ye, 2008; Oreg, 2006; Oreg & Berson, 2011) also had similar findings and the result is also supported by the dispositional resistance theory. However, one of our hypotheses (4) was not supported. Contrary to our expectations, the results do not provide support for the moderating role of leaders' behavior on the relationship between dispositional resistance to change and followers' response to change. This could be because leaders could not tailor their behavior to the context of the change. After all, they were neither prepared for the change nor comprehended the situation due to its unplanned nature (Burnes, 2017). It could also be because our statistical power is limited since only three institutions were included in the sample. Thus, only tentative conclusions should be drawn from this nonsignificant finding.

5. Implications

We believe that numerous noteworthy theoretical contributions are provided by our study. Firstly, although leaders' behavior is frequently studied in the context of organizational change in the literature, organizational scholars mainly depend on broad leadership concepts which consist of several unique components that are combined to form a single leadership construct instead of focusing on specific 'change-related behaviors' (Van Knippenberg & Sitkin, 2013; Oreg & Berson, 2019). On the contrary, by focusing on 'specific change-related' leaders' behaviors, this study has started the process of filling the conceptual gap in the literature.

Another very important novelty of this study is the fact that, to the best of our knowledge, it is the first study to have conceptualized the dispositional resistance to change theory by looking at the moderating role of leaders' behavior on the relationship between dispositional resistance to change and followers' response to changes in the context of unplanned change, particularly in a pandemic situation.

The results of this study might provide several practical implications for the leaders of organizations, especially educational institutions. First, the study demonstrated that positive leaders' behaviors such as effective communication, being supportive and attentive to recipients' concerns, and involving followers are very key to the effective implementation of organizational change. These results could increase the awareness of leaders on the importance of these behaviors especially during change.

The study also provides positive implications for leadership development programs. Such programs should include modules that highlight the importance of effective communication, supporting and paying attention to followers' needs, and involving followers in decision-making.

Finally, knowing that followers' response to change mediates the relationship between leaders' behavior and change effectiveness, indicates that change agents should pay more attention to the reaction of their followers. Leaders should ensure that the positive reactions of their followers during change are reinforced, and the negative ones reduced or eliminated to effectively implement the change.

6. Limitations and Directions for Future Research

Although the study provides interesting contributions both theoretically and practically, it is not without limitations. One of the limitations of the study is the level of confidence in the generalizability of the results. This is because judgement sampling which is a non-probability sampling technique was used in this study. Hence, we cannot confidently generalize the findings of the study to the entire higher education institutions of the Gambia; to other institutions in or outside of the education sector in the Gambia. So, for future research, it would be great if a random sampling technique could be utilized to improve the external validity. Moreover, before our results can be conclusively generalized, more studies need to be conducted in other sectors, and countries with different cultural settings.

Also, this study is a cross-sectional design because data is collected once over several months between April 2023 and November 2023 which raises significant concerns about the direction of casualty (Lazarus, 2003 as cited in Agote, et al., 2016). Since the responses involve recalling past experiences, emotions, and thoughts, memory bias could amplify the findings and taint the stated relationships with reverse causality (Agote et al., 2016). To help address this, in future research, a longitudinal design should be used by collecting data at different stages of the change process encompassing periods before, during, and after the change because followers' reactions to the change might vary at different stages of the change.

7. References

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