

The COVID 19 pandemic as a driving force for transformational change in organisations

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ABSTRACT

Purpose of the study: The COVID 19 pandemic forced widespread personal and organisational changes by a scale never experienced before in this generation. It was a driving force which triggered changes in organisations and people. This study uses Kurt Lewin's (1951) model of change to investigate the degree of organisational change and whether the changes implemented by organisations are temporary or transformational. The Kurt Lewin model postulates that change occurs when driving forces overcome restraining forces and/or when restraining forces weaken.

Design/methodology/approach: A survey was conducted among 293 working professionals occupying different hierarchical levels in different size organisations.

Findings: The results showed that a significant majority of organisations (83.3%) changed processes due to the impact of the pandemic. In addition, most respondents acknowledged that they have changed their work processes and are now comfortable with the newly adopted processes. Despite the widespread adoption of these new processes, about 51.9% of respondents still think that their old processes were more effective. Notwithstanding the nostalgia, it is unlikely that most organisations will revert to old processes post pandemic, as new norms are already forming around the newly adopted processes.

Recommendations/value: It is recommended that organisations investigate the impact of the changes brought about by the pandemic on organisational culture and effectiveness of performance management practices.

Managerial implications: Managers should work on building strong functional and collaborative teams supportive of the new norms emerging after the pandemic.

Keywords

COVID 19; Field Force theory; Kurt Lewin's change model; the three steps of change; Transformational change.

JEL Classification: M10

1. INTRODUCTION

The SARS-Cov-2, the virus causing COVID 19, and its variants such as 501.V2 or 501Y, have resulted in huge economic losses and forced organisations to change their operational processes. As at the end of December 2020, 86.8 million people had tested positive and 1.9 million had died worldwide from COVID 19 and its variants (Corona Tracker, 2020). In South Africa, at the end of December 2020, of the 1,127,759 confirmed cases, 30,524 people had died (Corona Tracker, 2020). Statistics South Africa (2020a) estimates that Gross Domestic Product (GDP) shrunk by a record 51 percent in the second quarter of 2020, before making a dramatic recovery of 66.1 percent in the third quarter (Statistics South Africa, 2020b). Though there was a dramatic third quarter recovery, GDP was still 5.8 percent below the end of 2019 GDP values (Trading Economics, 2020). Unemployment increased to 30.8 percent in the third quarter, with expanded unemployment pegged at 43.1 percent (Statistics South Africa, 2020c).

Companies which survived the effects of the pandemic had to transform and adopt new ways of doing business. Many had to embark on a digital transformation while others had to completely reconsider their strategies (Conforto *et al.*, 2020). The pandemic shocked many organisations into unplanned changes which had to be implemented unwillingly (Bosso, 2020) in order to continue operating. For many organisations, these changes were not even under consideration before the pandemic (Bosso, 2020). Organisational change, even under a stable environment is difficult and many organisations have systems designed to maintain the status quo (Raptis, 2019) reinforced by enduring cultures. Management's fear of change within organisations is heightened by significant and public change failures (Christensen *et al.*, 2016) which have led some managers to lose their jobs.

In fact, there are many factors which lead to the status quo persisting. Kurt Lewin's (1951) field force analysis proposes that the status quo is maintained by opposing forces, namely driving and restraining forces (Burnes, 2019). Change is achieved through changes in the force field, which lead the existing reality to be transformed into a desired state by the change agent (Burnes & Bargal, 2017). Taking COVID 19 as a force field, little is known about the extent to which it has been a driving force behind the changes implemented within organisations. It is also unclear whether organisations consider these changes to be temporary or permanent. Despite a plethora of commentary in newspapers and blog posts, research into organisational changes due to COVID 19 is still limited (Meyer *et al.*, 2021), especially in South Africa. Therefore, the aim of this study was to investigate the extent to which COVID 19 triggered transformational changes in South African organisations and

whether the pandemic led to the redesigning of organisations and the subsequent adoption of new norms, systems or practices (Springer *et al.*, 2012). It is important to identify transformational change in organisations because this practice has an impact on related processes such as performance management, organisational culture or even the strategy most appropriate for the organisation.

2. LITERATURE REVIEW

In this section, a literature review is used to explore further concepts underpinning this study. These concepts are transformational change, degrees of organisational change, Kurt Lewin's (1951) three stage model and what makes change sustainable.

2.1 Transformational change in organisations

While change can be incremental or sudden, such a change becomes transformational when it alters the situation from undesirable to a desired state (Weerakkody *et al.*, 2011). Transformational change involves redesigning the organisation's structure and management, redefining its vision and norms, and establishing new norms, systems and practices (Springer *et al.*, 2012). It is a significant challenge which demands proactively changing structures (Barnosky *et al.*, 2012), which sustain the status quo.

The idea that organisations try to sustain the status quo of no changes is not universally held. Scholars like Chia (2014) argue that continuous change is the true nature of reality. An organisation's success depends on its ability to morph the "chaos" into "owned" processes of change. Notwithstanding this fact, Iles and Sutherland (2001) classify change into planned and emergent change; emergent change being implemented as a result of external factors beyond an organisation's control, such as the COVID 19 pandemic.

The mandatory lockdown and the need for social distancing is an emergent change which has forced many organisations to pursue transformational changes (Korkmaz & Toraman, 2020:293). This process occurred because the COVID 19 pandemic has overwhelmed healthcare systems, social and economic services and exposed a lack of resilience in organisations (Dasgupta, 2020). On the positive side, however, the pandemic has led, albeit temporarily, to a dramatic reduction in pollution (Dasgupta, 2020).

The pressure for implementing changes has been apparent for the past 10 years, because organisations needed to update their business models in line with shifting societal dynamics (Kanarick, 2020). However, the success of these initiatives was limited, mostly because organisations were relying on traditional means to change and grow (Kanarick, 2020). With

the manifestation of the pandemic, came the need for many companies to change their modus operandi, such as arranging for the majority of their employees to work from home (Haff, 2020) or create working distances between employees within the workplace.

The focus of this study is to evaluate whether the COVID 19 instigated changes are deemed temporary or have led to transformational changes within organisations. Identifying transformational change is important because it informs managers of appropriate interventions consistent with the new reality. Initially, however, there is need to explain the different degrees of change.

2.2 The different degrees of change

Change can be classified into different degrees, namely, developmental, transitional and transformational change (Anderson & Anderson, 2010; Simion *et al.*, 2019). Developmental change involves improving upon what is already there, whereas transitional change involves changing the old status quo for the new status (Anderson & Anderson, 2010; Simion *et al.*, 2019). During transformational change, there is fundamental change, which requires a modification in mindset and/or culture (Anderson & Anderson, 2010). Another way to evaluate degrees of change is provided by Green (2007) who classifies change as adaptation, reconstruction, evolution and revolution. During adaptation, change occurs slowly through stages; during reconstruction, changes occur a little faster, but the paradigm is not changed (Green, 2007). Evolution involves slow transformational change while revolution comprises rapid fundamental change on many fronts (Green, 2007). These levels of change are illustrated in Figure 1.

Figure 1: Types of Organisational Change

		Result	
		Transformation	Realignment
Nature	Incremental	Evolution	Adaptation
	Big Bang	Revolution	Reconstruction

Source: Balogun *et al* (2016:23)

Figure 1 shows that change occurs on a continuum from insignificant to transformational change. From the above taxonomy, COVID 19 instigated change could be either a reconstruction, characterised by rapid changes but no paradigm shift, or a revolution which is

both rapid and involves a paradigm shift. Within a revolution the change is transformational in a similar context to Anderson and Andersons (2010) classification. As has been shown already, the field of change management is characterised by a myriad of change theories which explore how change occurs (Lewin, 1951; Lippitt *et al.*, 1958; Nadler, 1993; Kotter, 1996). These theories classify change by the rate of occurrence, scale of change or how it comes about (planned, emergent, contingency or choice) (By, 2005). In this article transformational change is evaluated according to Kurt Lewin's (1951) Change Model.

2.3 Kurt Lewin's Change Model

According to Lewin (1951), change is a three-stage process, namely unfreeze, change, refreeze. This organisational change model is based on field theory, which was Lewin's most developed work at the time of his death (Burnes & Bargal, 2017). In the field theory, behaviour needs to be evaluated in the context of forces that influence it (Burnes & Bargal, 2017). The existing context is the field in which related forces play a role, and these powers include the person, possible events and the environment (Burnes & Bargal, 2017). According to Kurt Lewin's field force analysis (a process which integrates with Lewin's three stage theory of change), any change is achieved by either strengthening the driving forces and/or weakening the restraining forces (Connelly, 2020). To start the change process there is need to apply additional force to "unfreeze" the equilibrium, which is the first step of change (Burnes & Bargal, 2017). Lewin's three steps of change are illustrated in Figure 2.

Figure 2: Kurt Lewin's Three Steps of Change



Source: Cummings *et al.* (2016)

During the unfreeze stage there is need to provoke attitudes and behaviours for people to experience catharsis (Burnes & Bargal, 2017). The unfreeze stage arises from disequilibrium introduced voluntarily in planned change or involuntarily in unplanned change (Ritvo, 2017). During the unfreeze stage, Airiodion Global Services (2020) proposes processes such as gaining leadership support, developing change strategy, developing communication plans and managing employee resistance. This study views the onset of the Covid 19 pandemic as the unfreeze period.

During the change stage, everyone should be 'unfrozen' and the leaders should communicate consistently with all stakeholders, address misinformation and engage employees with the change plan (Airiodion Global Services, 2020). This study views the interim solutions adopted

by different organisations as the change stage. The last stage in Lewin's (1951) change model is "refreeze", during which the new behaviours are institutionalised and become the new norms (Burnes & Bargal, 2017). The refreeze period in this study occurs when the interim processes adopted by organisations become the new norm. To accelerate the refreeze stage, there is need to promote ways which sustain change and celebrate success (Airiodion Global Services, 2020).

Critics of the Kurt Lewin's (1951) change model highlight that it presupposes an organisation which works in a stable environment and change to be of a short-term nature (Bakaria *et al.*, 2017). Despite the criticisms, the model remains relevant due to its simplicity and the underlying idea that organisations need to stabilise changed processes (refreeze), for change to be sustainable. Transformational change needs to be maintainable, otherwise the organisation will descend into chaos.

2.4 What makes change sustainable

Before exploring the research objectives, it is important to briefly explore what makes organisational change sustainable. This investigation is necessary because it is widely acknowledged that most change efforts end in failure (Hughes, 2011), some studies pin the planned change failure rate at as high as 70 percent (Balogun & Hope Hailey, 2016). Owing to the numerous changes brought about by COVID 19, it is important to identify characteristics which are likely to lead to sustainable change over time.

Firstly, the nature of leadership followed in the change process is important. Jones and Harris (2014) posit that one of the markers of successful change is "distributive leadership", a process. In which leadership is spread widely throughout an organisation (Harris, 2013) and is not the preserve of a few. Secondly, research by Collins and Hansen (2012) highlighted that companies which performed ten-times better than their competitors, made their decisions quickly and followed through with disciplined execution. In fact, these companies excelled even in challenging environments because they had built a 'collective capacity' for change. Harris (2013) defines collective capacity as strong functional and collaborative teams.

This literature review section has explored concepts of transformational change, degrees of change, Kurt Lewin's (1951) change model and what makes changes sustainable. These concepts are critical elements in the evaluation of the nature and degree of change in organisations caused by the impact of the COVID 19 pandemic. The specific research question, objectives and hypotheses of this study are discussed in the next section.

3. RESEARCH QUESTION, OBJECTIVES, AND HYPOTHESES

The objective of this study is to evaluate whether the COVID 19 pandemic triggered transformational changes in organisations. To remain operational, most organisations had to make some changes, and a few of them had to completely reconsider their strategies (Conforto *et al.*, 2020). The pandemic shocked many organisations into an unplanned transformational path, parts of which had to be implemented unwillingly (Bossio, 2020). The aim of this study was to evaluate if these changes were transformational.

3.1 Research question

To what extent did the COVID 19 pandemic trigger transformational changes in South African organisations?

3.2 Research objectives

Based on the research question, the objectives of this study are as follows:

1. To investigate whether COVID 19 caused transformational changes in the way organisations operate in South Africa.
2. To evaluate whether these changes or new processes, adapted by organisations due to COVID 19, are permanent.
3. To evaluate whether these changes, adapted by organisations due to COVID 19, are deemed to be an improvement to the old processes.

3.3 Hypotheses

Based on the research question and objectives, this study hypothesises thus:

H_0 : The COVID 19 pandemic did not cause transformational changes to the way organisations operate.

H_1 : The COVID 19 pandemic caused transformational changes to the way organisations operate.

4. RESEARCH METHODS

This section presents the research design, research approach, the measurement instrument, population, sampling criteria and statistical analysis.

4.1 Research design and approach

This study used a deductive research approach, which utilised a quantitative research design. Pursuant to this, a survey was conducted among working professional at different levels in

different organisations mostly in South Africa. The survey captured the opinions and attitude of respondents who formed part of a convenience sample. The respondents came from different sized organisations in different industries, and they had varying years of working experience.

4.2 Population and sampling

The population consisted of employed people in South Africa. The resultant sample was drawn from LinkedIn users and other working people professionally connected to the researcher. An electronic message was sent to 1,500 people via email, LinkedIn message or WhatsApp instant messaging platform. The message briefly informed them of the purpose of the study, that participation was optional, that their responses were confidential and requested them to click a link imbedded in the message. Once they clicked the link, they were taken to a questionnaire which was hosted on Google forms. A total of 293 people responded, which translated to a 19.7 percent response rate.

4.3 Instrumentation and pilot study

The questionnaire used in this study was adapted from King's (1997) Learning Activities survey, which was initially conducted among university students. King's (1997) study aimed to evaluate the perspective transformation of students following enrolment into a university. To test validity and reliability of the instrument, King (1997) conducted a pilot study and, subsequently, made necessary adaptations suggested by a panel of experts. The Learning Activities survey has been used in a few other studies (King & Wright, 2003; King & Kerekes, 2008; Kumi-Yeboah, 2012).

Due to the changes made to the questionnaire for this research study, the researcher also conducted a pilot study to test the validity of the adapted instrument. The instrument was sent by email or by WhatsApp instant message to 20 participants with similar demographics to the population. In the pilot message, pilot respondents were asked to complete the questionnaire and afterwards provide feedback of their experience while completing the instrument. Feedback from pilot respondents was that it took about five minutes for them to complete the questionnaire. The researcher deemed this period ideal and consistent with Saleh and Bista's (2017) study who found that people were more likely to respond to shorter rather than longer surveys. Some respondents suggested that there was a need to explicitly cater for respondents working for organisations which did not experience any changes due to the COVID 19 pandemic. The researcher felt that the rating scale used was adequate to deal with this concern.

Unlike the Learning Activities survey, the questionnaire used a 5-point rating scale. In every question in which the rating scale was used, there was a “Not applicable” option. The questionnaire consisted of 24 questions of which eight were demographic questions, eight tested transformational changes in organisational processes, seven tested perspective transformation and one was an open-ended question. To test the reliability of the questionnaire, Cronbach’s alpha was computed. According to Rockinson-Szapkiw (2017), for an instrument to be deemed reliable, the Cronbach’s alpha should be 0.7 or more. The Cronbach’s alpha of the pilot data collected was $\alpha = 0.935$. The questionnaire, thus, was deemed reliable in line with Rockinson-Szapkiw’s (2017) guidelines.

When further analysing the pilot data, a significant percentage of respondents chose the “Neutral” response. In some questions the neutral option was selected by as many as 46 percent of pilot respondents. Fife-Schaw (2006) argues that, sometimes rating scales suffer from respondents overly relying on the “Neutral” option. The solution, not without risk, is to force people to make a choice to “Agree” or “Disagree”, which assumes that everyone has an opinion on the subject under study (Fife-Schaw, 2006). The researcher eliminated the “Neutral” response in the final questionnaire because he felt that if a respondent had no opinion, he/she could choose the “Not Applicable” option which was available under all relevant questions. The response options used in the final rating scales were “Not Applicable”, “Strongly Disagree”, “Disagree”, “Agree” and “Strongly Agree”. A factor analysis of the pilot data could not be conducted, because the number of items exceeded the number of pilot respondents. After pilot data analysis, data collection process was conducted.

4.4 Data collection procedure

Due to the nature of the research, no ethical clearance was obtained. A link to the questionnaire, in the form of a Google Form, was sent to 1,500 working individuals. All participants received an electronic message informing them about the purpose of the study, confidentiality and that they participated voluntarily and could withdraw at any time. Though the questionnaire requested the respondent’s name and email address, these fields were only needed to be completed by people who wanted to receive the study results once these were available. All personal identifying information was stripped from the participants’ electronic response before further analysis, to ensure confidentiality and anonymity. The open-ended question was further processed using thematic analysis. The collected data is only available to the researcher and is only accessible after inputting security authentication on Google Drive or on the laptop.

4.5 Data statistical analysis

After receiving responses, the data was exported from Google Sheets program to the Microsoft Excel 2016 program for statistical analysis. A few response duplicates were removed. RStudio program was used to calculate Cronbach's Alpha (α) and conduct factor analysis. The significance level set was 95% and before factor analysis was conducted, Bartlett's test of sphericity was used to determine common bias variance and whether the majority of variances could be rationalised into a single factor. To test reliability, Cronbach's alpha was calculated for the different items. Bonett and Wright (2015) advise that Cronbach's alpha is used to measure internal consistency or reliability and is mostly used when there are multiple items using a Likert scale in a questionnaire. In social sciences research a Cronbach's alpha above 0.5 can be accepted as reliable for questionnaires designed to measured attitudes (Field, 2013) and an alpha greater than 0.7 is desirable. T-test was used for hypothesis testing, to determine whether the COVID 19 pandemic caused a transformational change to the way organisations operate.

4.6 Participants

From the 1500 surveys sent out, 293 people responded, which translated to 19.7 percent response rate. The distribution of gender and respondents' ages are shown in Table 1:

Table 1: Age and gender distribution of respondents

Gender	Age	No.	%
Female	Below 30 years	9	3.07
	30-35 years	24	8.19
	36-40 years	18	6.14
	41-45 years	15	5.12
	45-50 years	21	7.17
	50-60 years	22	7.51
	More than 60 years	6	2.05
Female Total		115	39.25
Male	Below 30 years	6	2.05
	30-35 years	18	6.14
	36-40 years	23	7.85
	41-45 years	30	10.24
	45-50 years	28	9.56
	50-60 years	52	17.75
	More than 60 years	21	7.17
Male Total		178	60.75
Grand Total		293	100.00

Source: Researcher calculations

As indicated in Table 1, of the 293 respondents, 178 (61%) are male and 115 (39%) are female. The over-representation of males in the sample is mostly driven by the data collection method employed. In terms of age, the majority (32.1%) of respondents are aged 40-50 years, followed by 30-40 years at 28.33 percent which, in turn, is closely followed by the 50-60 years age group at 25.26 percent, and all other age groups make up the remaining 14.31 percent. The age distribution in the sample can also be ascribed to the data collection method utilised.

In terms of organisational size, 26.62 percent (78) of respondents are from micro-organisations employing less than 10 people. This group is followed by organisations employing 10 to 50 people at 24.23 percent (71), then very large organisations of more than 500 people at 21.84 percent (64).

In terms of work experience, 39.59 percent (116) of the respondents have been working for their organisation for more than 10 years, followed by people who have worked for 5 to 10 years at 21.16 percent (62). Respondents working 3 to 5 years in the same organisation totalled 16.72 percent (49) and 1 to 3 years made up 13.65 percent (40). The rest of the respondents (8.53% or 25) have been with their organisations for less than 3 years. The dominance of people who have been employed by the same organisation for more than 10 years is consistent with Schlechter *et al.* (2016) finding that every year of service reduces potential employee turnover by 3 percent.

5. RESULTS

After cleaning the data, descriptive statistics such as mean and standard deviation were computed. This process was followed by the computation of inferential statistics. The results of these calculations are discussed below.

5.1 Reliability and other statistical analysis

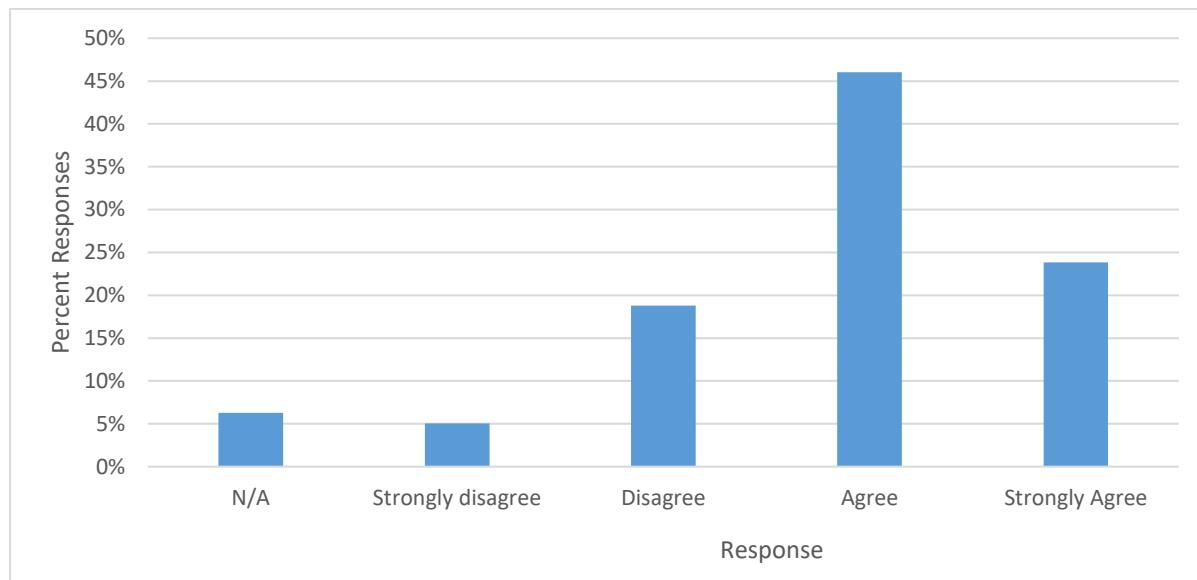
A reliability analysis using Cronbach's alpha was carried out again (in addition to during the pilot study), on the 8 items as shown in Table 2. Cronbach's alpha indicated that the questionnaire maintained an acceptable level of reliability, $\alpha = 0.89$. All the 8 items depicted that they were worthwhile to retain, with the alpha reducing if any of them were deleted (refer to Table 2). Other statistical results from the sample are summarised in Table 2.

Table 2: Summary Change in Work Processes

#	Item	Percentage of Respondents (%)					Mean	SD	α if item removed
		N/A	1	2	3	4			
Q2	Revaluing Work Processes/Methods	4.8	5.5	13.3	39.6	36.9	3.13	1.07	0.87
Q4	Changed My Opinion About Old Processes	7.2	8.2	28.3	39.6	16.7	2.70	1.09	0.87
Q6	Adopting new processes	4.4	4.1	18.8	49.5	23.2	2.96	0.98	0.86
Q8	Uncomfortable with previous Work Processes	5.8	8.9	43.0	28.3	14.0	2.50	1.02	0.87
Q10	Comfortable with New Processes	10.9	3.1	11.6	56.0	18.4	3.01	1.14	0.86
Q12	Reflected before Adopting New Processes	10.2	2.7	15.4	51.9	19.8	2.99	1.13	0.88
Q13	Overall Organisation Process Change	3.4	2.7	10.6	49.5	33.8	3.18	0.93	0.88
Q16	Degree of Organisation Change due to COVID	3.4	5.1	9.6	53.9	28.0	3.08	0.94	0.89

Source: Researcher calculations

As indicated in Table 2, the highest mean is for “Overall Organisation Process Change” (mean = 3.18, SD = 0.93). This result indicates that a significant number of people “Agreed” or “Strongly Agreed” with the statement that “In general, our organisation has adopted new processes critical for ongoing success”. Other items with high means include “Revaluing Work Processes/Methods” (mean = 3.13, SD = 1.07), “Degree of Organisation Change due to COVID” (mean 3.08) and “Comfortable with New Processes” (mean = 3.01, SD = 1.14). These results suggest that the impact of the COVID 19 pandemic made many organisations change their core processes, which forced people to re-evaluate their own work processes (Q2). The majority of respondents (81.9%) believe the changes made by their organisations are important or very important (Q16). It is of interest also that 74.4 percent of respondents have become confident with the changed processes due to COVID 19 (Q10). The distribution of responses to all questions of interest are further summarised in Figure 3.

Figure 3: Overall Distribution of Responses

Source: Researcher calculations

Figure 3 indicates that of the 293 responses received, 70 percent “Agreed” or “Strongly Agreed” to some questions reflecting change to the organisation they work for. The percentage of respondents who “Agreed” or “Strongly Agreed” increases to 75 percent if the “Not Applicable” responses are eliminated. These results show that most organisations experienced some changes triggered by the COVID 19 pandemic. Central to this research is the question of whether these reported changes were transformational in the sense of a fundamental change, which requires a change in mindset and/or culture, as envisioned by Anderson and Anderson (2010). Factor analysis has been utilised in the next section to evaluate the degree of change experienced by respondents.

5.2 Factor analysis

Factor analysis is a dimension reduction mathematical method used to simplify data and achieve parsimony (Yong & Pearce, 2013). The first step in factor analysis in this study was to conduct a Bartlett test to evaluate sampling adequacy. The Bartlett test establishes whether variables are sufficiently correlated to be reduced to fewer factors. A visual analysis of the correlational matrix showed that most of the variables were correlated, with the lowest correlation being 0.3107 and the maximum being 0.695. The Bartlett's test of homogeneity of variances results were K -squared = 18.31, df = 7, p -value = 0.01065. Since the p -value of 0.01065 is below 0.05, factor analysis was considered appropriate. While exploring the 8 potential factors, 2 factors had an Eigenvalue above one, and accounted for 69.99 percent of

the total variance. Factor analysis was conducted using orthogonal Varimax rotation and Table 3 delineates the results.

Table 3: Factor analysis results

#	Items	Factor 1	Factor 2
Q2	Revaluing Work Processes/ Methods	0.724	0.247
Q4	Changed My Opinion about Old Processes	0.778	0.177
Q6	Adopting new processes	0.818	0.28
Q8	Uncomfortable with previous Work Processes	0.715	0.173
Q10	Comfortable with New Processes	0.687	0.409
Q12	Reflected before Adopting New Processes	0.573	0.304
Q13	Overall Organisation Process Change	0.211	0.975
Q16	Degree of Organisation Change due to COVID	0.28	0.577

Source: Researcher calculations

According to Table 3, the first six items correlate highly with the first factor, and the last two items with the second factor. With regard to the first factor, five items have a high factor loading of more than 0.6 while one of the two items has a high correlation with factor 2, which indicates high convergent validity. By analysing item loadings in Table 3 and the literature review above, factor 1 was determined to be personal transformational change and factor 2 organisational transformational change. The next step was to test the hypotheses of this study.

5.3 Hypothesis testing

The two hypotheses for this study are:

H₀: The COVID 19 pandemic did not cause transformational changes to the way organisations operate.

H₁: The COVID 19 pandemic caused transformational changes to the way organisations operate.

To conduct hypothesis testing, a one sample T-test was used. A T-test is used to evaluate if there is a significant difference in means between two samples or between a specific value and the sample (Bevans, 2020). For this study, the T-test is used to evaluate if respondents agree ($M > 2$) that there was organisational transformation due to the impact of the COVID 19 pandemic. The value 2 was selected because it represented disagreement in the questionnaire. The results of this study are shown in Table 4.

Table 4: One sample T-test results

Statistical Measure	Value
Mean	3.027
Standard Deviation	0.842
Observations	293
Hypothesized Mean	2.00
df	292
t Stat	20.896
P(T<=t) one-tail	0.000
t Critical one-tail	1.650

Source: Researcher calculations

The results shown in Table 4 indicate that respondents reported a statistically significant transformation of their respective organisations (df (292), $M = 3.027$, $SD = 0.842$) due to COVID 19, t-stat (20.896), t critical one tail (1.650) and p one tail (0.000). This finding leads the researcher to reject the null hypothesis (H_0) and accept the alternate hypothesis (H_1) that the COVID 19 pandemic led to a transformational change in the way organisations operate. These results are further discussed in the context of previous research in the next section.

6. DISCUSSION

This research study sought to establish whether the impact of the COVID 19 pandemic triggered transformational changes within organisations. The study's interest in organisation transformational change is premised on the reality that the pressure for changes has been increasing in the past decade with businesses needing to update their business models to be in line with the technological shift (Kanarick, 2020). Prior to the COVID 19 pandemic, technology-oriented change initiatives had limited success because the restraining forces were more powerful than the driving forces (Burnes, 2019). The pandemic increased the driving forces for change. This finding is in line with Kurt Lewin's (1951) force field analysis which proposes that change is achieved by either strengthening the driving forces and/or weakening the restraining forces (Connelly, 2020).

This study found that numerous organisations experienced transformational change (df (292), $M = 3.027$, $SD = 0.842$) due to the outbreak of COVID 19. This finding is in line with Anderson and Anderson (2010) who define transformational change as change which requires change in mindset and/ or culture. This result is also consistent with Korkmaz and Toraman (2020) who opined that mandatory lockdowns and social distancing have forced many organisations to pursue transformational changes.

It is interesting to note from the results of this study is that, though most respondents (72.7%) reported that they have adopted new processes, and are comfortable with them (74.4%), a small number are still confident that the old processes were effective (51.9%). This perception could be because most of the change's organisations are implementing have been forced upon them by the COVID 19 pandemic and are being implemented without wide consultation. Organisations have not yet built what Jones and Harris (2014) term "distributive leadership". Leadership for change has been top down and is not widely distributed within the organisations (Harris, 2013).

It is unlikely that the changes implemented by organisations will regress once the COVID 19 pandemic subsides. This situation is because a huge majority of organisations (83.3%) have adopted the new processes. Thus, by the time the pandemic is under control, organisations will have, in terms of Kurt Lewin's (1951) change model, moved to the "refreeze stage", during which the new norms have become institutionalised (Burnes & Bargal, 2017).

Based on the results of this research study, it can be argued that most organisations have experienced transformational changes out of necessity. These changes are mostly irreversible because, due to the passage of time, they are slowly being adopted as the new norm. This fact is aptly expressed by one respondent who stated: "*I can work from anywhere and still deliver value*" and another who commented: "*working from an office is outdated, the world is more flexible and so should we be*". However, there is need to remain cognisant of other people who wait for the return of the old processes, as for example the respondent who said "*Yes in this current situation we make temporary solutions to find another way to conduct our work. Does it mean the way we [are] doing things differently is necessarily better?*"

7. MANAGERIAL IMPLICATIONS

Based on this study, a few managerial implications are apparent. Firstly, when considering the new norms which the new work processes are establishing, organisations should try to understand the long-term impact that these norms have on their organisational culture and performance. Due to the forced nature of the changes, it is likely that many organisations have made necessary changes, without reflecting deeply on the long-term impact of such innovations. There is need for consultation and deeper reflection on the potential future impact of these new structures.

Secondly, many changes instituted by organisations have been the result of a top-down process, because, due to the rapid nature of change required, decisions needed to be made to save lives and organisations. Now that the decisions have been made, organisations, in

line with Harris' (2013) recommendation, should work to build strong functional and collaborative teams supportive of the new norms emerging from the earlier top-down decisions.

Thirdly, since many organisations are exploring making the arrangements for employees to work from home permanent, there is need to investigate the impact of such changes on performance management. Many times, managers have relied on working closely with their subordinates to obtain a sense of their performance. Organisations which are actively trying to make most employees work from home, should evaluate if the old performance management approaches are still appropriate.

Lastly, corporate culture usually thrives in an environment in which people are in proximity. According to Campbell *et al.* (2011), Peter Drucker said "culture eats strategy for breakfast" as a way of expressing how critical organisational culture is to overall performance. Employees are now working away from each other; thus, organisations should find ways to develop effective performance cultures, otherwise, most of their strategies will not materialise due to a lack of a supportive culture.

8. LIMITATIONS

The focus of this study was on the extent to which the impact of the COVID 19 pandemic triggered transformational change in organisations. It has some limitations, as is the case with most other studies. Due to the sampling procedure adopted, it has limited generalisability (Etikan *et al.*, 2016). Since a non-probability sampling strategy was used, it is possible that people exhibiting a specific characteristic or preferences responded to the questionnaire. Secondly, being a cross-sectional study and not a longitudinal study, its predictive power is limited (Carlson & Morrison, 2009). No cause and effect can be deduced, thus limiting any possible predictive conclusion from the study. Thirdly, being a cross sectional study, it also potentially suffers from response bias, which is regarded as the most pervasive weakness of cross-sectional studies (Ramke *et al.*, 2018). Though this study has an acceptable response rate of 19.7 percent, it is possible that respondents were generally predisposed to think that the COVID 19 pandemic led to transformational change.

9. CONCLUSION

The results of this study clearly indicate that many work processes have changed to accommodate the realities of the impact of the COVID 19 pandemic. These changes are likely to become the new norm for most organisations because people have now experienced a different reality. A future study might be needed to explore how employees working from home

are coping with the blurred lines between work time and personal time. Organisations will need to explore ways to promote a performance culture and transform their performance measurement practices to cope with the current reality. Despite a small majority of respondents thinking their old processes were effective, it is unlikely that most organisations will revert to the old processes once the COVID 19 crisis is over. The new processes will have been normalised in line with Lewin's (1951) conceptualisation of change. It could be argued that in the parlance of Lewin (1951), the pandemic increased driving forces for organisational change, which have "unfrozen" existing processes. The "unfreezing" led to changes, which are now being "refrozen".

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REFERENCES

Ariodion Global Services. 2020. Kurt Lewin change model 2020: pros & cons- all you need to know. [Internet: <https://www.ariodion.com/kurt-lewin-change-model/>; downloaded on 19 December 2020].

Anderson, D. & Anderson, L.A. 2010. Beyond change management: how to achieve breakthrough results through conscious change leadership. 36th ed. San Francisco: John Wiley & Sons.

Bakaria, H., Hunjrab A.I. & Masood, T.M. 2017. Managing organizational change in Pakistan: insights from the work of Kurt Lewin. *University of Wah Journal of Management Sciences*, 1:53-64.

Balogun, J., Hope Hailey, V. & Gustafsson, S. 2016. Exploring strategic change. 4th Ed. Harlow, UK: Pearson Education Limited.

Barnosky, A.D., Hadly, E.A., Bascompte, J., Berlow, E.L., Brown, J.H., Fortelius, M., Getz, W.M., Harte, J., Hastings, A., Marquet, P.A., Martinez, N.D., Mooers, A., Roopnarine, P., Vermeij, G., Williams, J.W., Gillespie, R., Kitzes, J., Marshall, C., Matzke, N., Mindell, D.P., Revilla, E. & Smith, A.B. 2012. Approaching a state shift in Earth's biosphere. *Nature*, 486(7401):52-58. [<https://doi.org/10.1038/nature11018>].

Bevans, R., 2020. An introduction to t-tests. [Internet: <https://www.scribbr.com/statistics/t-test/>; downloaded on 31 December 2020].

Bonett, D.G. & Wright, T.A. 2015. Cronbach's alpha reliability: interval estimation, hypothesis testing, and sample size planning. *Journal of Organizational Behavior*, 36(1):3-15. [<https://doi.org/10.1002/job.1960>].

Bosso, E., 2020. Moving from crisis and disruption into positive transformation. [Internet: <https://www.forbes.com/sites/forbesbooksauthors/2020/04/29/moving-from-crisis-and-disruption-into-positive-transformation/#2754d8aa7a3d>; downloaded 16 December 2020].

Burnes, B. & Bargal, D. 2017. Kurt Lewin: 70 years on. *Journal of Change Management*, 17(2):91-100. [<https://doi.org/10.1080/14697017.2017.1299371>].

Burnes, B. 2019. The Origins of Lewin's three-step model of change. *Journal of Applied Behavioral Science*, 56(1):32-59. [<https://doi.org/10.1177/0021886319892685>].

By, R.T. 2005. Organisational change management: a critical review. *Journal of Change Management*, 5(4): 369-380. [<https://doi.org/10.1080/14697010500359250>].

Campbell, D., Edgar, D. & Stonehouse G. 2011. Business strategy: an Introduction. 3rd Ed. Palgrave Macmillan, London. [<https://doi.org/10.1007/978-0-230-34439-6>]

Carlson, M.D. & Morrison, R.S. 2009. Study design, precision, and validity in observational studies. *American Association of Orthodontists* 12:77-82. [<https://doi.org/10.1016/j.ajodo.2015.05.006>].

Chia, R. 2014. Reflections: in praise of silent transformation—allowing change through ‘letting happen’. *Journal of Change Management*, 14(1):8-27. [<https://doi.org/10.1080/14697017.2013.841006>].

Christensen ,C.M., Bartman, T. & van Bever, D. 2016. The hard truth about business model innovation. [Internet:<http://dln.jaipuria.ac.in:8080/jspui/bitstream/123456789/2523/1/The%20Hard%20Truth%20About%20Business%20Model%20Innovation-Sloan%20Management%20Review.pdf>; downloaded on 16 December 2020].

Collins, J. & Hansen, M.T. 2012. Great by choice: uncertainty, chaos, and luck – why some thrive despite them all. New York, NY: Harper Books.

Conforto, E., Vargas, R.V. & Oumarou, T. 2020. Digital transformation in the wake of a crisis: focus on people. [Internet: <https://blogs.lse.ac.uk/businessreview/2020/06/03/digital-transformation-in-the-wake-of-a-crisis-focus-on-people/>; downloaded on 18 November 2020].

Connelly, C. 2020. Force field analysis: Kurt Lewin. [Internet:<https://www.change-management-coach.com/force-field-analysis.html>]; <https://www.change-management-coach.com/force-field-analysis.html>; downloaded on 19 December 2020].

Corona Tracker. 2020. COVID 19 overview. [Internet: <https://www.coronatracker.com/analytics>; downloaded 16 November 2020].

Cummings, S., Bridgman, T. & Brown, K.G. 2016. Unfreezing change as three steps: rethinking Kurt Lewin’s legacy for change management. *Human Relations*, 69(1):33-60. [<https://doi.org/10.1177/0018726715577707>].

Dasgupta A. 2020. After the crisis: how COVID-19 can drive transformational change in cities. [Internet: <https://thecityfix.com/blog/covid-19-can-drive-transformational-change-cities/>; downloaded 17 December 2020].

Etikan, I., Musa, S.A. & Alkassim, R.S. 2016. Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1):1-4. [<https://doi.org/10.11648/j.ajtas.20160501.11>].

Field, A. 2013. Discovering statistics using IBM SPSS statistics. London: Sage Publications.

Fife-Schaw, C. 2006. Questionnaire design. In *Research methods in psychology*, edited by Breakwell, G.M., Hammond, S., Fife-Schaw, C. & Smith, J.A:174-193. London: Sage Publications.

Green, M. 2007. Change management masterclass: A step-by-step guide to successful change management. London: Kogan Page Publishers.

Haff, G. 2020. Digital transformation: 5 ways the pandemic forced change. [Internet: <https://enterprisersproject.com/article/2020/9/digital-transformation-5-changes-post-pandemic>; downloaded on 17 December 2020].

Harris, A. 2013. Distributed leadership matters. Thousand Oaks, CA: Corwin Press.

Hughes, M. 2011. Do 70 percent of all organizational change initiatives really fail? *Journal of Change Management*, 11(4):451-464. [<https://doi.org/10.1080/14697017.2011.630506>].

Iles, V. & Sutherland, K. 2001. Organisational change: a review for health care managers, professionals and researchers. London, UK: SDO R & D Programme.

Jones, M. & Harris, A. 2014. Principals leading successful organisational change. *Journal of Organizational Change Management*, 27(3):473–485. [<http://dx.doi.org/10.1108/JOCM-07-2013-0116>].

Kanarick, B. 2020. Why transformation is essential to a COVID-19 recovery. [Internet: https://www.ey.com/en_za/covid-19/ why-transformation-is-essential-to-a-covid-19-recovery, downloaded on 31 December 2020].

King, P.K. 1997. Examining activities that promote perspective transformation among adult learners in higher education. *International Journal of University Adult Education*, 36(3):23-37. [<https://eric.ed.gov/?id=EJ572999>].

King, P.K. & Wright, L. 2003. New perspectives on gains in the ABE classroom: transformational learning results considered. adult basic education: *An Interdisciplinary Journal of Adult Literacy Educators* 13(2):100-123. [https://scholarcommons.usf.edu/ehe_facpub/196].

King, P.K. & Kerekes, J. 2008. Submarine sandwiches investigation: making fractions more palatable for adult learners. *The New York Journal of Adult Learning* 7(1):47-53. [Internet: <https://www.researchgate.net/publication/314174515 Submarine sandwiches investigation Making fractions more palatable for adult learners>; downloaded on 2 February 2021].

Korkmaz, G. & Toraman, Ç. 2020. Are we ready for the post-COVID-19 educational practice? an investigation into what educators think as to online learning. *International Journal of Technology in Education and Science*, 4(4):293-309. [<https://doi.org/10.46328/ijtes.v4i4.110>].

Kotter, J.P. 1996. *Leading change*. Harvard Business Press, Boston, Massachusetts,

Kumi-Yeboah, A. 2012. Factors that promote transformative learning experiences of international graduate-level learners. Florida: University of South Florida. (PhD Thesis).

Lewin, K. 1951. *Field Theory in social science*. New York: Harper & Row.

Lippitt, R., Watson, J. & Westley, B. 1958. *The Dynamics of planned change*. New York: Harcourt, Brace and World.

Meyer, N., Niemand, T., Davila, A. and Kraus, S., 2022. Biting the bullet: When self-efficacy mediates the stressful effects of COVID-19 beliefs. *Plos one*, 17(1), p.e0263022. [<https://doi.org/10.1371/journal.pone.0263022>].

Nadler, D.A. 1993. Concepts for the management of organizational change. *Managing change*, 2:85-98. London, Harper & Row

Ramke, J., Palagyi, A., Kuper, H. & Gilbert, C.E. 2018. Assessment of response bias is neglected in cross-sectional blindness prevalence surveys: a review of recent surveys in low-and middle-income countries. *Ophthalmic epidemiology*, 25(5-6):379-385. [<https://doi.org/10.1080/09286586.2018.1500613>].

Raptis P.R. 2019. The Role of First-Person Inquiry and Developmental Capacity on Transforming Perspectives About Facilitating Organizational Change. *Journal of Transformative Learning* 6(1): 50-58.

Ritvo, R.A. 2017. Developing NGOs in Post-Soviet Azerbaijan: expanding Kurt Lewin's ideals. *American Journal of Business and Society* 2(1):1-9. [<http://www.aiscience.org/journal/ajbs>].

Rockinson-Szapkiw, A. 2017. Choosing a valid and reliable instrument. [Internet: <https://www.youtube.com/watch?v=O4FvB-W4Siw>; downloaded on 8 October 2020].

Saleh, A. & Bista, K. 2017. Examining factors impacting online survey response rates in educational research: perceptions of graduate students. *Online Submission*, 13(29):63-74. [Internet: <https://files.eric.ed.gov/fulltext/ED596616.pdf>; downloaded on 12 February 2021].

Schlechter, A.F., Syce, C. & Bussin, M. 2016. Predicting voluntary turnover in employees using demographic characteristics: A South African case study. *Acta Commercii*, 16(1):1-10. [<https://dx.doi.org/10.4102/ac.v16i1.274>] [<https://dx.doi.org/10.4102/ac.v16i1.274>].

Simion, C.P., Popescu, M.A.M. & Bucovetchi, O.M.C. 2019. Analysis of different change types in the management process of an organisation. *Advanced Engineering Forum*, 34:326-332). [<https://doi.org/10.4028/www.scientific.net/AEF.34.326>].

Springer, P.J., Clark, C.M., Strohfus, P. & Belcheir, M. 2012. Using transformational change to improve organizational culture and climate in a school of nursing. *Journal of Nursing Education*, 51(2):81-88.

Statistics South Africa. 2020a. Business impact survey of the COVID-19 pandemic in South Africa. [Internet: <http://www.statssa.gov.za/publications/Report-00-80-01/Report-00-80-01April2020.pdf>; downloaded on 13 November 2020].

Statistics South Africa. 2020b Gross Domestic Product: Third Quarter 2020. [Internet: <http://www.statssa.gov.za/publications/P0441/P04413rdQuarter2020.pdf>; downloaded on 25 January 2022].

Statistics South Africa. 2020c. Quarterly Labour Force Survey. [Internet: <http://www.statssa.gov.za/publications/P0211/P02113rdQuarter2020.pdf>; downloaded on 25 January 2022].

Weerakkody, V., Janssen, M. & Dwivedi, Y.K. 2011. Transformational change and business process reengineering (BPR): lessons from the British and Dutch public sector. *Government Information Quarterly*, 28(3):320-328.

Yong, A. G. & Pearce, S. 2013. A beginner's guide to factor analysis: focusing on Exploratory Factor Analysis. *Tutorials in Quantitative Methods for Psychology*, 9(2):79-94. [DOI: <https://doi.org/10.20982/tqmp.09.2.p079>].