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Examining generational differences as a moderator of extreme-context perception and its impact on work alienation organisational outcomes—implications for the workplace and remote work transformation

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Abstract

There is no doubt that extreme contexts (e.g. warzones and pandemics) represent substantial disruptions that force many companies to rethink the way they do business. With so much workforce now working remotely and concerns about resulting work alienation, the question becomes: how can this be translated into the generational divide in workplaces based in extreme contexts? Using COVID-19 as an example trigger of extreme-context experience, therefore, we investigate generation as a moderator of the effects of extreme-context perception upon anxiety leading to alienation with subsequent behavioural outcomes on job insecurity, job satisfaction, and organisational citizenship behaviour (OCB). A time-lagged survey procedure yielded 219 valid responses from a three-generation sample of employees working in multiple service organisations. The data were analysed using partial least squares structural equation modelling (PLS-SEM). Our analysis suggested that intense extreme-context perception led to elevated anxiety and alienation, which, in turn, heightened job insecurity and worsened job satisfaction and OCB outcomes. Finally, during the experience of extreme-context times, generation was found to moderate our model, such that both Generation Y and Generation Z experienced higher anxiety due to extreme-context perception and hence higher job insecurity due to alienation compared to Generation X respondents. Our results endorse the criticality of implementing agile and generationally-non-sectarian management for effectively functioning generationally-diverse workforces in pandemic times.

Keywords. Extreme Contexts; COVID-19 Perception; Remote Work Transformation; Generational Differences; Work Anxiety; Alienation; Job Insecurity; Job Satisfaction; Organisational Citizenship Behaviour (OCB); Psychosocial Factors; Job Attitudes; Services Sector; Middle East.

Introduction

Maintaining the positive emotions and attitudes of firm-level labour, especially during prolonged exposure to extreme circumstances, such as those created by the sustained grip of pandemics (e.g. COVID-19), proves to be a challenge across many industries and across many types of jobs. During the COVID-19 pandemic, as an extreme context, service jobs where personnel is perceived to be particularly vulnerable to COVID-19 exposure risks due to continuous interactions with the customer as part of in-person service delivery both in the front and back office (the external and internal customer), have been particularly hard hit during the pandemic. Loss of jobs due to the initial wave of lockdowns worldwide followed by re-openings under modified safety rules and protocols have led to the development and implementation of innovative and agile safety protocols, many of which are based on technological innovations and strategic redesign efforts (cf. Mahmoud, Grigoriou, et al., 2022) aimed at reducing risk while still delivering efficient and reliable services. For service employees, emerging literature (Mahmoud, Reisel, Fuxman, & Hack-Polay, 2022; Park & Kim, 2021) shows that learning new protocols and measures while being able to integrate them into their daily customer service routines feeds into COVID-triggered negative perceptions and anxiety, leading to the subsequent attitudinal (job insecurity, job satisfaction) and behavioural (OCBs) implications which ultimately cause deterioration of customer service, hence worsened organisational effectiveness. Furthermore, the lines between work and home have been blurred more than ever, with people working remotely, aka from home, now more than ever. Such that it can be easy for employees to start feeling like work is taking over their life and not getting enough personal time, hence burnout, whilst feeling separated from the workplace as a result of the lack of social interaction with colleagues and reduced opportunities for collaboration and teamwork, hence work alienation. Given the heightened stress levels expected during the

experience of extreme contexts, there is a recurring need to understand the potential outcomes of the personal experiences of extreme contexts.

Furthermore, there are notable cognitive and social differences across generations that are known to contribute to the development of dissimilar values, causing variations in mental attitudes and behaviours (Schullery, 2013, Torsello, 2019, Sharabi *et al.*, 2019) in technologically disrupted generationally diverse workplaces (Mahmoud, Hack-Polay, Reisel, et al., 2021; Mahmoud, Reisel, Fuxman, et al., 2021). Yet, scholarly evaluations of multigenerational work environments assert that data regarding multigenerational variations in a range of work-related factors, such as work values, personal characteristics, leadership preferences, and motivation, are thought to be *fragmented* (Van Rossem, 2021). And thus, more empirical investigations are warranted to pull the shreds of evidence together for more rigour in articulating generational differences in the workplace, especially whilst experiencing an extreme context. Unlike cultural and gender diversity, little research has been done on the influence of age diversity on HRM policy and practises (Mahmoud, Reisel, Fuxman, et al., 2021); yet, workplaces are growing more age-diverse, with older employees reporting to younger managers (Cogin, 2012). In an extreme context, like the COVID-19 pandemic, the perception of the pandemic-related changes is likely to vary across generations (Mahmoud, Hack-Polay, Reisel, et al., 2021), with differentiated consequences to employees' anxiety, alienation, and job insecurity and the OCB. For instance, older generations are thought to be used to working in an office environment. In contrast, millennials and Generation Z tend to be more adaptable to working from home due to their digital nativity (Mahmoud, Fuxman, et al., 2020). Understanding these differences is critical not only to our ability to accurately recognise the ongoing effects of the COVID-19 pandemic but also to the development and implementation of effective policies, operating methods, and strategic initiatives to transform the workplace, especially in extreme contexts. Thus what we are seeing is a period of

suboptimal efficiencies for firms still needing to deliver performance and complete processes vital to financial stability. Therefore, studying generational differences amongst employees in the services sector in the context of the COVID-19 pandemic can provide valuable insights into how different generations respond to extreme circumstances and how they navigate the challenges associated with such contexts. Furthermore, studying this phenomenon in the Middle East is particularly important, given the region's unique social, cultural, and economic context, which can affect the way employees in the services sector experience and cope with the pandemic's impacts. Moreover, the Middle East is a region that has experienced frequent political upheaval, social unrest, and armed conflict, which presents significant challenges for workers in terms of job security, safety, and mental health. This extreme and unstable setting offers a rare chance to investigate how external factors, such as the COVID-19 pandemic, can shape work alienation and its attitudinal and organisational outcomes leading to possible generalisations for other contexts facing pandemics amidst political unrests or conflicts. The central thesis of this paper is, thus, to probe the effects of extreme-context perception effects on work alienation outcomes in the generationally-diverse service sector, drawing on the COVID-19 pandemic as an extreme event and the organisations in the Middle East, a region that – outside the oil industry— significantly relies on key service sectors such as hospitality and tourism, as a setting for this study.

Following this introduction, the rest of the paper is divided into three main sections. The first discusses the emerging literature on COVID-19's impact on organisational life and establishes the hypotheses. The second section clarifies the methodological approach and data collection and analysis. The third section discusses the key findings, including the implications and limitations of the study, as well as future research directions.

Literature review and conceptual framework

Generational differences in the workplace

Given today's increasingly competitive global market, the heterogeneity and multigenerational structure of organisational workforces provide a considerable challenge for leadership amidst technological disruption and wartime-like public health crises (Mahmoud, Hack-Polay, Reisel, et al., 2021). Generational gaps are sometimes overlooked when discussing diversity and developing resilient work environments (Drinkwater, 2021), even though theories like the Theory of generations (Mannheim, 1952) and the Social Identity Theory (Tajfel & Turner, 1986) have established the necessity for further exploration of generational differences in the workplace. Whilst Mannheim (1952) postulates that the way life experiences shape attitudes, behaviours, and expectations occurs differently across the generations, Tajfel and Turner (1986) suggest that individuals form self-concepts based on their perceived membership in social groups, in this case, generational cohorts.

However, both scholars (e.g. Grobman & Ramsey, 2020; Mahmoud, Reisel, Fuxman, et al., 2021; Tortorella et al., 2019) and practitioners (Drinkwater, 2021) have highlighted variations in attitudes about the workplace driven by generational differences, whilst others implicitly have acknowledged the differences by reporting results based on samples drawn from a specific generation (e.g. García et al., 2019). We refer to different generational cohorts in our research. They comprise (Dimock, 2019) the Baby Boomers (those born between 1946 and 1964); Generation X (those born between 1965 and 1980); Generation Y or the Millennials (those born between 1981 and 1996); and finally, Generation Z (those born between 1997 and 2011).

Recent literature, however, has cast doubt on the assumption of similarities within generational categories (Mahmoud, Hack-Polay, Reisel, et al., 2021; Rudolph & Zacher, 2016).

For example, Rudolph and Zacher (2016) argue that generational differences have little effect on work processes and outcomes, while other scholars conceptualise generational cohorts based on non-age criteria like tech-nativity (Mahmoud, Ball, et al., 2022). However, age-defined generational groups remain the most common classifications utilised in addressing generational differences in business studies. While younger and older individuals may have distinct views at any point in time, generational cohorts enable scholars to investigate how today's older adults felt about a particular issue when they were younger and characterise how attitudes change over time (Dimock, 2019). This leads to the reason that a generational cohort is a distinctive group of people who share significant social or historical life experiences throughout pivotal developmental periods (Hernaus *et al.*, 2014). Yet, we use generational categories conservatively to maintain conceptual coherence with mainstream sociological research while accepting the theoretical limitations identified by Rudolph and Zacher (2016). For example, Baby Boomers, as they retire, provide an ideal opening for younger generations to assume a more significant role in the workplace (Flippin, 2017b; Mahmoud, Fuxman, et al., 2020). However, as Rudolph and Zacher (2016) contend, generational differences do not always have an effect on job outcomes. Their immediate impacts are on work values, expectations, and attitudes, resulting in conflict and altering an employee's willingness to change (Bresman & Rao, 2017).

Recent events lend credence to studying generational differences in the employment setting, where economic progress and globalisation have increased the complexity of modern workplaces (Mahmoud, Hack-Polay, Reisel, et al., 2021). The pandemic has forced many people to stay home, and as a result, working from home has become more popular. Whilst there are many benefits to working from home, including avoiding the commute and being able to work flexible hours; however, there are also some challenges, such as distractions, isolation, and lack of human interaction. Therefore, understanding how the remote work movement

influences mainstream practices, such as design thinking and employee experience, and the implications of recent developments for HR procedures, the resilience of the HR system, and HR roles and duties have been central to international HRM practice and scholarship (Mahadevan & Schmitz, 2020; Mayer et al., 2021; Mayer & Oosthuizen, 2020; Syed, 2020) in generationally-diverse workplaces (Mahmoud, Hack-Polay, Reisel, et al., 2021).

Various other aspects of workplace generational differences have emerged in the past three decades. These largely centre on technological use among generations. This has led to the theorisation of what is increasingly known as the generational digital divide (Seland & Hyggen, 2021). Building on the earlier theory of the digital divide (van Dijk, 2013), Seland and Hyggen (2021) argue that the notion of the digital divide has several societal ramifications and does not apply only at the macro level to the North-South divide or inequalities in technology access. In fact, previous theorists (Guillén & Suárez, 2005; Korupp & Szydlik, 2005) alluded mainly to the fact that there are sharp differences in the availability of digital technologies between the rich nation of the northern hemisphere and the predominantly poorer nations of the southern hemisphere. Further sociological enquiries found that the digital divide was more complex and profound than the macro-binary division between developed and emerging economies. It encapsulates differences within each of these spheres, and some of these major divisions concern genders and generations, particularly vis-à-vis the access to and use of the internet in the workplace (Dobson & Willinsky, 2009). With regard to the generational digital divide, a major explanation focuses on the period of the birth of groups of users. Those born further from the digital age (1990s to present) – therefore Generations X and Y - are said to be more generation more technology-resistant due to the digital shock (the fact that technology advances accelerated dramatically in the 1990s, causing these older generations to fall behind. In contrast, Generation Z born after 1995, is said to be born in the digital age, which led sociologists to qualify them as digital natives to express the perspective that this

generation is more technology-savvy (Mahmoud, Ball, et al., 2022). Recent statistics illustrate these differences well. For example, Vogels (2019) found that 93% of Millennials have smartphones, compared to Generation X (90%) and well under 70% of Baby Boomers and 40% of older generations.

The metaverse is projected to be the next evolutionary phase of the internet's transformation that many businesses in nearly all sectors are anticipating will become the next frontier as individuals may live, work, and interact together in a virtual environment (Kelly, 2021). *Meta* (formerly known as Facebook), for instance, began public testing of a workplace-collaboration application called "Horizon Workrooms" (Uberti, 2022), which might be favoured by younger generations and less well received by the prior generations. Further, better general health conditions over the last few decades have resulted in increases in retirement age (Osborne, 2021; Yi et al., 2015). Moreover, developing a culture capable of attracting and retaining employees of all generations is critical during a period of mass resignations (Drinkwater, 2021) that has characterised the post-pandemic era, where the availability of workforce can pose a crucial threat to the production and processes (Dora & Kumar, 2022), especially in the services sector where human resources are the most valuable asset to organisations. Hence, our work teases out this substantial consideration of performance and process effects related to generational categories. This establishes the significance of our study.

Generation X is defined as self-directed, sceptical, and independent individuals born during an era themed with rapid change (Mahmoud, Hack-Polay, Reisel, et al., 2021). In contrast to their Baby Boomer bosses and supervisors, who were noted for embracing heavy workloads, Generation X workers place great value on work-life balance, ensuring they have more time to spend with their families and social networks (Waltz et al., 2020). Bresman and Rao (2017) found that 61% to 77% of Generation Y and Generation Z would take more

aggressive approaches to achieve their leadership goals, typically by taking more risks, compared to 57% of Generation X cohorts.

Workers from Generation X are taking on leadership roles in the workplace as Baby Boomers retire and make room for their offspring (Generation Z) to rise through the ranks (Seemiller & Grace, 2019). Consequently, many members of Generation X have interests in social media and mobile phones that are akin to those of younger generations (Mahmoud, Hack-Polay, Reisel, et al., 2021). Then again, workers of Generation X tend to communicate in ways distinct from those of younger generations. For example, Generation Z employees prefer to connect with coworkers by text messages rather than emails, which Generation X employees find less convenient (Mahmoud, Fuxman, et al., 2020; Seemiller & Grace, 2019).

By 2025, Generation Y workers will account for 75% of the global human capital (Deloitte, 2014). Moreover, Generation Y is becoming the workforce's largest generational group in the Middle East (Mahmoud, Hack-Polay, Reisel, et al., 2021). Generation Y and Generation Z employees have both been described as technology-native (Lebowitz, 2018; Mahmoud, Ball, et al., 2022). Certainly, Generation Y is often portrayed as connected, self-assured, and nimble (Taylor & Keeter, 2010).

The youngest generation entering the workforce is Generation Z (Rikleen, 2020). Employees of Generation Z understand the value of financial stability and are recognised for their enthusiasm for work excellence and desire for professional achievement (Flippin, 2017a; Mahmoud, Fuxman, et al., 2020). Their use of technology and desire for job flexibility are comparable to those of Generation Y (Ryback, 2016). Additionally, both Millennials and Generation Z are seen as more ethnically and culturally diverse than any preceding generational cohort (Bresman & Rao, 2017; Flippin, 2017a, 2017b; Mahmoud, Fuxman, et al., 2020).

COVID-19 perception and anxiety

The COVID-19 outbreak is one of the most substantial health challenges in modern history (He & Harris, 2020). Existing literature reports that the ongoing effects of the COVID-19 pandemic increased workforce anxiety levels across the Middle East and worldwide (Mahmoud, Reisel, Fuxman, & Hack-Polay, 2022; Mahmoud, Reisel, Hack-Polay, et al., 2021). The unfolding pandemic caused abrupt structural and policy changes with considerable consequences across a wide span of social and economic activities (Bartik et al., 2020). In response to these developments, organisations have implemented numerous operating and strategic changes that influence employees' career prospects and job security (Seetharaman, 2020). Notably, some of the COVID-19-related structural changes are expected to become permanent, with long-lasting effects on work-related conditions and the overall level of anxiety (Mahmoud, Reisel, Hack-Polay, et al., 2021).

Conservation of Resources (COR) (Hobfoll, 1991) theory states that threatening and *traumatic* events result in a loss of personal resources. The theory also suggests that fears and uncertainties are potential stressors that can impact employees' emotional and behavioural outcomes (Toker et al., 2015). COR theory points out that a significant stressor has objective environmental elements (Hobfoll et al., 2018) that provide "shock(s) to one's cognitive processing that pushes the individual to carefully assess this new information" (Halbesleben et al., 2014, p. 18). Building upon the COR perspective, researchers have uncovered that fear of COVID-19 can create sleep disturbances among employees because of lessening resources while facing pandemic threats leading to job insecurity (Chavan et al., 2021; De Clercq et al., 2021; Reizer et al., 2022). Specifically, the COVID-19 crisis can be considered an external traumatic event that changes both the ecological and organisational environments and depletes employees' resources (Reizer et al., 2022), thus impacting their job productivity and satisfaction (Mahmoud, Reisel, Fuxman, & Hack-Polay, 2022).

As noted earlier in this paper, there are cognitive and social differences across generations (Twenge et al., 2010). These generational differences are known to contribute to the development of dissimilar values, causing variations in mental attitudes and behaviours (Schullery, 2013). In the context of the COVID-19 pandemic, the perception of pandemic-related changes is likely to vary across generations (Mahmoud, Hack-Polay, Reisel, et al., 2021). For example, people of generations X, Y, and Z tend to have different attitudes toward work and authority, technological adaptation, as well as personal and professional communication methods (Gursoy et al., 2008). In contrast, pandemic-related developments have enacted changes in many aspects of organisational governance as well as in the use and application of communication technologies. Accordingly, we expect the association between COVID-19 perception and work-related anxiety to varying across generations (Mannheim, 1952; Seland & Hyggen, 2021; Tajfel & Turner, 1986; van Dijk, 2013). Therefore:

Hypothesis 1: *The positive relationship between COVID-19 perception and anxiety is not invariant across Generations X, Y and Z.*

Anxiety and alienation

Previous research documents the positive association between anxiety and alienation (e.g. Cheng & Chan, 2008). Research further shows that COVID-19 perceptions positively predict adverse psychosocial variables, such as anxiety and depression (Mahmoud, Reisel, Hack-Polay, et al., 2021). As discussed earlier, the COVID-19 pandemic has altered global socio-economic realities and political policy in many pertinent ways. Governments and organisations worldwide have enacted restrictions on people's mobility, implemented lockdowns, and sanctioned severe limitations on various types of social gatherings (OECD, 2021). While these effects have been particularly profound in customer-facing industries, such as hospitality, retail, and airlines (OECD, 2020), the overall consequences of the COVID-19 pandemic have

translated into widespread elevation in anxiety across societies worldwide (Mahmoud, Reisel, Hack-Polay, et al., 2021; Sonmez et al., 2020). As such, when fear of COVID-19 is activated, it leads to anxiety, and it may affect all spheres of life, leading to many emotional and behavioural responses because, with high levels of fear, individuals may not think clearly and coherently (Ahorsu et al., 2022). For example, fear of COVID-19 may lead to future career anxiety (Mahmud et al., 2020), additional media consumption (Bendau et al., 2021), and cyberchondria (fear and anxiety activated due to a health-related search online) (Wu et al., 2021).

Regarding the generational perspective, we expect differences among generations to manifest in the relationship between anxiety and alienation during the COVID-19 time. Past literature (e.g. Mahmoud, Hack-Polay, Reisel, et al., 2021) indicates that the perception of pandemic-related changes is likely to vary across generations due to fundamentally different work-related objectives and preferences. Moreover, millennials and Generation Z could be more vigilant about threats to their work-life balance than older generations (Brauner et al., 2021). These generational variations are likely to influence the manner in which individuals perceive COVID-19 changes and how they respond to related circumstances. For example, generation Z employees tend to be more intrinsically motivated when compared to Generations X and Y (Mahmoud, Fuxman, et al., 2020), whereas Generation Y is often found to be more confident and adaptable to work-related changes (Mahmoud, Grigoriou, et al., 2022; Vogels, 2019). Accordingly, we expect the positive association between anxiety and alienation to vary across generations (Mannheim, 1952; Seland & Hyggen, 2021; Tajfel & Turner, 1986; van Dijk, 2013) during the pandemic. Therefore:

Hypothesis 2: *The positive relationship between anxiety and alienation is not invariant across Generations X, Y and Z.*

Alienation, job insecurity, and job satisfaction

Alienation refers to an individual's estrangement from self, other people, and occupation (Lang, 1985, Banai and Reisel, 2007). Alienation has a substantial relationship with a range of work outcomes involving employees' attitudes and job performance attributes (Chiaburu *et al.*, 2014). Alienation is known to correlate positively with job insecurity (Mahmoud, Reisel, Fuxman, & Hack-Polay, 2022), while negatively associate with job satisfaction (Cheng and Chan, 2008). Unsurprisingly, the cognitive and/or physical circumstances that alienate employees are likely to decrease the perception of job security, employment-related confidence, and overall job satisfaction. In fact, the adverse effects of job insecurity on job satisfaction are among the most frequently reported associations in related literature (Reisel et al., 2010). Continuous threats outside the workplace deplete individuals' personal resources (both cognitive and emotional). This vicious loss cycle may lead to undermining employees' ability to assign significant energy to other cognitive consuming tasks and work assignments, leading to a decrease in the perception of job security, employment-related confidence, and overall job satisfaction (Abhishek et al., 2021; Behl et al., 2022; Holmgreen et al., 2017).

The implications of the COVID-19 pandemic on employee alienation, job insecurity, and job satisfaction have also been previously examined, with indications that the alienation caused by pandemic-related restrictions to mobility, lockdowns, and economic distress, has increased work-related insecurity and decreased satisfaction (Mahmoud, Hack-Polay, Reisel, et al., 2021).

Further, the COR theory too emphasises that resource loss in one domain (e.g. situational or external stress) may lead to resource constraints in other domains (work or educational outcomes) due to a *downward spiral*. For example, research has shown that employees who undergo gradual resource depletion because of the fear of a terror attack may

develop job burnout or have a loss of energy in productive job behaviours (De Clercq et al., 2019; Hobfoll, 1989; Toker et al., 2015).

While these findings are informative, the potential relevance of the generational context to this dynamic remains unclear and is, therefore, the focus of our examination. Given previously discussed relevance of the generational variations to cognition, values, perceptions, and behaviours (Schullery, 2013; Twenge et al., 2010) and building on Mannheim's (1952) Theory of Generations and Tajfel & Turner's (1986) Social Identity Theory, we expect such differences to influence the relationship among alienation, job insecurity, and job satisfaction during the COVID-19 time. Specifically, we expect the positive association between alienation and job insecurity during the pandemic time to vary across generations (Mannheim, 1952; Seland & Hyggen, 2021; Tajfel & Turner, 1986; van Dijk, 2013). Therefore:

Hypothesis 3: *The positive relationship between alienation and job insecurity is not invariant across Generations X, Y and Z.*

Similarly, the generational-differences theories (Mannheim, 1952; Seland & Hyggen, 2021; Tajfel & Turner, 1986; van Dijk, 2013) discussed earlier suggest that unique generational experiences and social identities may lead to varying perceptions of and responses to workplace alienation, thereby influencing job satisfaction differently. That said, we expect the negative association between alienation and job satisfaction during the pandemic time to vary across generations. Therefore:

Hypothesis 4: *The negative relationship between alienation and job satisfaction is not invariant across Generations X, Y and Z.*

Alienation and OCB

Organisational Citizenship Behaviour (OCB) refers to employees' discretionary efforts that promote the effective functioning of organisations but are not explicitly recognised by organisations' formal reward system (Organ, 1988). OCB reflects numerous discretionary behaviours, such as portraying an organisation favourably to outsiders or making a sincere effort to excel in all professional functions at all times, regardless of the reward-tailored circumstances. Alternatively, fears and uncertainties will increase psychological distress, which may trigger an avoidance ("flight") response (Cannon, 1927). According to stress models, this avoidance action is generated when the situation is too hostile (Folkman & Lazarus, 1980). The pandemic is considered a major traumatic and stressful life event (Reizer et al., 2021); therefore, it is likely to activate an avoidance ("flight") response (Reizer et al., 2022).

As noted in our rationale for hypotheses 3 and 4, the circumstances that alienate employees are likely to decrease the perception of job security, employment-related confidence, and overall job satisfaction. Accordingly, alienation is shown to influence job insecurity and job satisfaction (Cheng & Chan, 2008). In contrast, job insecurity and job satisfaction are, in turn, important determinants of the OCB (Sverke et al., 2019). Specifically, past research (Mahmoud, Reisel, Fuxman, & Hack-Polay, 2022) indicates that alienation increases stress levels and reduces employees' discretionary contributions as they conserve mental and physical resources by not engaging in OCB-related behaviours.

In regard to the COVID-19 developments, research shows that the consequences of pandemic-related restrictions to mobility, lockdowns, and economic challenges, contribute to alienation (Sönmez et al., 2020) and, therefore, affect job insecurity, job satisfaction, and the OCB (Cheng & Chan, 2008; Mahmoud, Reisel, Fuxman, & Hack-Polay, 2022; Sverke et al.,

2019). However, the potential relevance of the generational context to this dynamic is, once again, understudied. We expect differences among generations to be relevant to the relationship between alienation and OCB during the COVID-19 time. Past literature (e.g. Mahmoud, Hack-Polay, Reisel, et al., 2021) indicates that cognitive and behavioural responses to pandemic-related changes are likely to vary across generations. As such, generational variations are likely to influence the manner in which individuals perceive COVID-19 changes, respond to alienation, and translate this response to the OCB. Accordingly, we expect the negative association between alienation and OCB to vary across generations (Mannheim, 1952; Seland & Hyggen, 2021; Tajfel & Turner, 1986; van Dijk, 2013) during the pandemic. Therefore:

Hypothesis 5: *The negative relationship between alienation and OCB is not invariant across Generations X, Y and Z.*

Methods

Sample

A-priori sample size calculator for structural equation models (Soper, 2020) was used to determine the sample size. Using 0.95 as a power level, 0.30 as effect size, six as the number of latent variables, and 24 as the number of observed variables, therefore, our data collection was driven by a target sample size of 236. This study received ethics approval from Crandall University. Our research investigation was conducted in Middle Eastern Arab nations between March and August 2021. In practical terms, we recruited 647 participants from randomly selected LinkedIn members in customer service jobs in organisations located in the Middle East through a personalised invitation message. We located the participants on LinkedIn by configuring the filters to retrieve results based on their country of residence in addition to their position title (i.e. customer service). LinkedIn's sample population was about 136,000 users.

We picked one participant for every three counts after filtering the search results. In our message, we informed the participants that the procedure would require participation in two separate instances to complete the survey. They were made aware that those who would complete the two phases of the survey would receive USD 10 cash or gift cards in compensation for their time and participation. Email addresses and/or WhatsApp numbers were obtained from the participants to whom the surveys would be sent. Moreover, the participants were made aware that they would get an automatically generated five-digit identification number upon completing the first stage, such that they would need that number to log into the survey in the second phase. At Time 1, the participants responded to the measures of COVID-19 perception, anxiety and alienation.

Four weeks after completing Stage 1, the survey's second wave was conducted. We chose a four-week time lag because a too-short time lag can falsely inflate the correlations between distinct variables, whereas a too-long time lag does the opposite (cf. Ployhart & Vandenberg, 2009). Previous research has taken a similar method (e.g. Yam et al., 2016). The automatically generated IDs at Time 1 were used to match Time 1's responses to the corresponding ones at Time 2, thus ensuring the pairing was correctly performed. The participants responded to the measures of job insecurity, job satisfaction, OCB, and demographics at Time 2. Each of the two waves procedures included an explanation of the research's purpose and methodology to all participants. They were advised that they could contact the researchers at any time to ask questions, voice concerns about the survey, or withdraw from the study. Consent to participate in this study was included in the survey distributed to participants, and since the survey was conducted online in both phases, participants' signatures were not obtained. The questionnaire was completed anonymously. We guaranteed all participants that their responses would remain confidential. At Time 1, we circulated 647 surveys, and received 420 completed ones. At Time 2, we solely distributed the

second wave questionnaires to those who completed Time 1 surveys. As a result, we received 219 completed surveys whose data informed our analyses to test the hypotheses and draw the study conclusions. The majority of our sample was millennial (55%), male (53%), educated to a university degree level (41%), and single (58%). Appendix 1 summarises descriptive statistics for the latent variables categorised by generation.

Measures

The previously validated measures that we used in this study are listed in Appendix 2. We used the measures cited in the work of Mahmoud, Reisel, Fuxman and Hack-Polay (2022) to measure COVID-19 perception, Hamilton (1959) to measure anxiety, Banai and Reisel (2007) and Lang (1985) to measure alienation, Francis and Barling (2005) to measure job insecurity Judge et al. (2006) to measure job satisfaction and Van Dyne et al. (1994) to measure OCB. All measures were graded on a Likert scale of five points.

We examined the validity and reliability of the measures employed in this research using a range of indicators. First, we applied the Fornell-Larcker Criterion (Appendix 3) to assess the discriminant validity using the Average Variance Extracted values (herein AVEs) square rooted (Fornell & Larcker, 1981). Also, the square root of each construct's AVE was greater than its correlations with the remaining variables hence establishing the discriminant validity for all of the measures employed. All of the constructs had AVEs higher than 0.5 (Fornell & Larcker, 1981), Composite Reliability values (herein CRs) above .7 (Hair et al., 2022), and Variance Inflation Factor values less than five (James et al., 2013) hence establishing the discriminant validity, construct reliability, and convergent validity for all of the measures employed in this study (see Appendix 4). We ran Common-Method Bias (herein CMB) tests before conducting path and multigroup analyses with a Partial Least Squares Structural Equation Modelling (herein PLS-SEM) using SmartPLS 3 (Ringle et al., 2015). The

inner Variance Inflation Factor (herein VIF) values were all less than 3.3 (see Appendix 5). Hence, no CMB issues were detected.

Results

The main statistical technique we utilised for assessing research hypotheses is structural equation modelling using the variance-based approach or partial least squares (PLS-SEM). Our decision to use the PLS-SEM method is based on earlier studies suggesting it for analysing predictive models and the growing popularity of its use in work psychology studies (e.g. Hair et al., 2022; Mahmoud, Reisel, Fuxman, et al., 2021). Furthermore, the literature (Mahmoud, Hack-polay, et al., 2020) shows that most data are likely to fail to meet the multivariate normality criterion such that an expanding body of literature (Hair et al., 2022) has substantiated PLS-SEM for empirical research studies containing data sensitive to non-normality consternation.

Two techniques are used to test our hypotheses: path analysis and multigroup analysis (MGA). They cover the deployment of standardised betas (β: for direct effects), unstandardised betas (B: for indirect effects), and the accompanying t-values in bootstrapping mode. The standardised root mean square residual (SRMR) is used to evaluate the model's fit to our data. In addition, we employ f^2 to evaluate effect sizes and PLSpredict to test the out-of-sample prediction.

Conducting analysis through Bootstrapping set at 5,000 sub-samples, we find that (see Table 1) COVID-19 perception positively predicts anxiety ($\beta = .261$, $P < .01$, $f^2 > .02$), anxiety positively predicts alienation ($\beta = .594$, $P < .01$, $f^2 > .35$), alienation positively predicts job insecurity ($\beta = .614$, $P < .01$, $f^2 > .35$), and negatively predicts job satisfaction ($\beta = -.513$, $P < .01$, $f^2 > .35$), and OCB ($\beta = -.282$, $P < .01$, $f^2 > .02$). Moreover, using the Gaussian Copula

approach (see Table 1), we find all copulas returned non-significant scores, implying no critical endogeneity problems existing in the model that are corrected by the Gaussian copula terms (Park & Gupta, 2012).

Table 1: Direct effects

Path	β	*t*	f^2
COVID-19 Perception -> Anxiety	0.261**	3.741**	>.02
Anxiety -> Alienation	0.594**	12.627**	>.35
Alienation -> Job Insecurity	0.614**	13.778**	>.35
Alienation -> Job Satisfaction	-0.513**	7.835**	>.35
Alienation -> OCB	-0.282**	3.579**	>.02
GC (COVID-19 Perception) -> Anxiety	-0.21	1.838	<.02
GC (Anxiety) -> Alienation	-0.107	1.029	<.02
GC (Alienation) -> Job Insecurity	0.189	1.06	<.02
GC (Alienation) -> Job Satisfaction	-0.125	0.58	<.02
GC (Alienation) -> OCB	0.133	0.553	<.02

** $P < .01$

Additionally, Table 2 reveals that all unstandardised betas are significant at a probability value less than either .01 or .05. Based on that, we conclude that both anxiety and alienation serve as transmitters through which COVID-19 perception surges job insecurity (B = .095, SD = .027, P < .01) and diminishes job satisfaction (B = -.079, SD = .022, P < .01) and OCB (B = -.043, SD = .016, P < .05).

Table 2: Indirect effects (Specific)

Path	B	SD	*t*
COVID-19 Perception -> Anxiety -> Alienation -> Job Insecurity	0.095**	0.027	3.275**
COVID-19 Perception -> Anxiety -> Alienation -> Job Satisfaction	-0.079**	0.022	3.338**
Anxiety -> Alienation -> OCB	-0.167**	0.047	3.436**
Anxiety -> Alienation -> Job Insecurity	0.365**	0.04	8.927**
COVID-19 Perception -> Anxiety -> Alienation	0.155**	0.041	3.479**
Anxiety -> Alienation -> Job Satisfaction	-0.305**	0.047	6.381**
COVID-19 Perception -> Anxiety -> Alienation -> OCB	-0.043*	0.016	2.487*

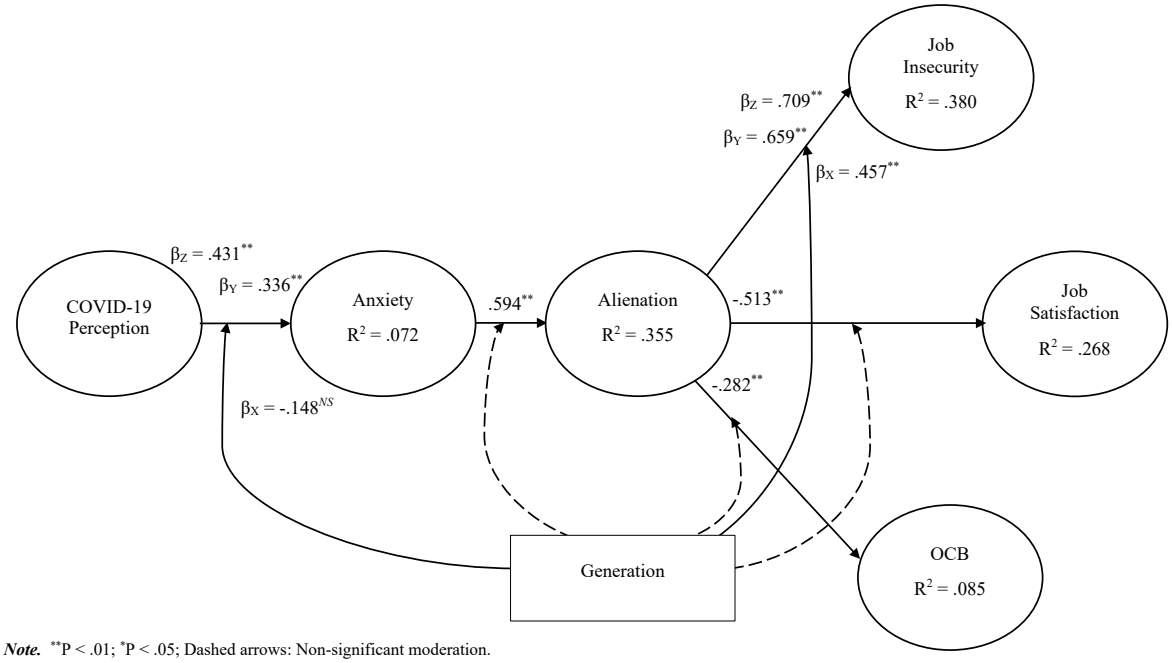
** $P < .01$; * $P < .05$

The SRMR value is found to equal .062, less than .08, indicating that our hypothetical model fits our data well. Finally, when compared to the naive LM benchmark (Appendix 6), nearly all of the observed variables in the PLS-SEM evaluation possess lower root mean square error (RMSE) scores, suggesting that the model has a medium to a strong level of predictive power.

Before performing any multigroup comparisons, both configural invariance and compositional invariance should be validated and established (in this case, with no data pooling). Since we adopt a PLS-SEM technique, the measurement configural invariance is, by default, achieved. As a result, we continue to see whether the second condition, compositional invariance, is established. In this case, we do a permutation check. All of the variables have Permutation P-values greater than 0.05 (Appendix 7). As a result, we consider the null hypothesis to be supported, meaning that the initial correlations of the constructs are not considerably different from 1, proving compositional invariance.

We perform a multigroup analysis (MGA) to examine whether generational differences can moderate the hypothesised path. We use t-values associated with the comparisons indicated in the parametric analyses. The findings (see Table 3) demonstrate that the paths representing the direct effects of COVID-19 perception on anxiety and the direct effects of alienation on job insecurity are non-equivalent across the three generational groups. Certainly (see Figure 1), Generation Y (β_Y = .336, P< .01, f^2 > .15) and Generation Z (β_Z = .431, P< .01, f^2 > .15) are substantially more likely to develop anxiety due to intense COVID-19 perception than Generation X (β_X = -.148, P = .710, f^2 > .02). And similarly both Generation Y (β_Y = .659, P< .01, f^2 > .35) and Generation Z (β_Z = .709, P< .01, f^2 > .35) are significantly more likely to experience job insecurity than Generation X (β_X = .457, P< .01, f^2 > .15) in pandemic time. Therefore, we judge H1 and H3 as supported while H2, H4, and H5 as unsupported, meaning that younger generations are more likely to have higher anxiety as a result of COVID-19 perception and, therefore, higher job insecurity due to alienation than Generation X do in pandemic time.

Figure 1: Hypotheses testing



Note. **P < .01; *P < .05; Dashed arrows: Non-significant moderation.

Table 3: Multigroup Analysis

Path	Path Coefficients-diff (Gen Z - Gen Y)	Path Coefficients-diff (Gen Z - Gen X)	Path Coefficients-diff (Gen Y - Gen X)	t-Value(|Gen Z vs Gen Y|)	t-Value(|Gen Z vs Gen X|)	t-Value(|Gen Y vs Gen X|)
COVID-19 Perception -> Anxiety	0.09 NS	0.527*	0.437*	0.532 NS	2.066*	2.104*
Anxiety -> Alienation	-0.098 NS	-0.175 NS	-0.076 NS	0.827 NS	1.061 NS	0.726 NS
Alienation -> OCB	0.047 NS	0.269*	0.222*	0.532 NS	2.121*	2.051*
Alienation -> Job Satisfaction	-0.045 NS	0.038 NS	0.083 NS	0.264 NS	0.194NS	0.455 NS
Alienation -> Job Insecurity	-0.071 NS	0.13 NS	0.201 NS	0.174 NS	0.551NS	0.423 NS

* *P* < .05; *NS* = Non-significant

Discussion

In this study, we investigate the influence of the ongoing COVID-19 pandemic on employees' anxiety, alienation, job insecurity, job satisfaction, and OCB. We further evaluate how related associations vary across generational cohorts, focusing on distinct attributes of generations X, Y, and Z. Our findings show that anxiety and alienation function as transmitting channels through which COVID-19 perception influences job insecurity, job satisfaction, and the OCB.

The results further indicate that some of these processes vary across generations, with younger employees being significantly more susceptible to anxiety and job insecurity as a consequence of their differentiated COVID-19 perception. The notion of *digital nativity* has also been deployed to explain the generational differences in technology or the digital divide (Dobson & Willinsky, 2009; Mahmoud, Ball, et al., 2022).

We make several notable contributions to the literature. First, our findings provide valuable insights regarding the consequences of the COVID-19 perception on employees' cognitive, psychological, and behavioural matters. Second, we extend the existing literature regarding the relevance of anxiety and alienation to job insecurity, job satisfaction, and the OCB, with an emphasis on service-oriented operations and businesses. This perspective is particularly pertinent given the unprecedented effects of the COVID-19 pandemic on the service-tailored industrial sectors. Third, our study provides novel insights regarding the relevance of generational differences to the association among COVID-19 perception, anxiety, and job insecurity. These findings exemplify the need to customise COVID-19 responses to reflect distinct generational attributes of employees. This perspective has broad and far-reaching implications to the matters of both policy and practice, with direct relevance to the development of effective policies, organisational strategies, and operating models and protocols, including remote work transformation. We also clarify further the theory of the digital divide to apprehend its generational ramifications, thus, contributing to asserting it as an equally generational theory within the workplace generational differences debate. The digital divide is often a source of generational differences, primarily due to varying levels of technology use and comfort among different generations. We found that younger generations, often labelled as 'digital natives' for their inherent familiarity with digital technologies, have a unique way of perceiving and adapting to the challenges presented by the COVID-19 pandemic. This suggests that the experience of extreme contexts like a pandemic is not only

shaped by the event itself but also by an individual's ability to navigate digital platforms and technologies.

Practical implications

We argued that examining generational differences in the circumstances of remote work and other work arrangements during pandemic times is an intriguing topic for international HRM. With the rise of flexible and telecommuting work arrangements and their popularity, Gen Xers, Millennials and Gen Zers are expected to approach work differently. These generational differences can impact how they view and adapt to remote work. In fact, the notion that firms can have practices, policies, and procedures that are invariant across generational cohorts while transforming the workplace is a question of importance and the focus of the current research. We are now emersed in a grand experiment during a period of incalculable strain on individuals, families, firms, and nations. COVID-19 has introduced changes to daily personal, social, and economic domains, and we are learning the complex effects as people from around the globe grapple to make do and adapt to the enormous challenges. This calls for greater sensitivity concerning flexibility in working patterns not only in the workplace but also in technology training packages for different generations. For example, Baby Boomers and earlier generations still have much to contribute in terms of their experience and should not be isolated due to technology anxiety. The generational technology divide ought to be swiftly decreased for greater equality in the workplace (Seland & Hyggen, 2021). In this paper, we sought to advance our understanding of the climate of employee responses to COVID-19, considering the need for firms to continue delivering performance to their customers while drawing on their most valuable asset, the employees who perform the work, whether remotely or in the office. Our focus in this paper has been on the nuanced question of how COVID-19 perception, ignited by the pandemic measures and conditions like working remotely, influences employee emotions such as anxiety and attitudes such as alienation and, moreover, how these

subsequently influence job insecurity, job satisfaction, and organisational citizenship behaviours. Our approach sought to refine research that has formulated global models of effects and guidance and has looked at differences in outcomes related to generational cohorts. The idea we wished to examine is whether firms are best positioned to pursue policies and processes that regard all employees similarly or, conversely, account for generational differences. What we learned paints a picture of partial generational differences and, therefore, highlights the need for firms to construct flexible policies and processes in their efforts to transform the workplace, making them generationally intelligent.

Previous research (e.g. Sakthi Nagaraj & Jeyapaul, 2021) has emphasised that lean performance is positively linked to physical, emotional, and organisational factors. With the human element symbolising the backbone of services organisations, psychosocial factors are crucial for management when it comes to managing the most valuable resource to their organisations and keeping their production process running, notably during crisis times like wars or pandemics. As COVID-19 spreads throughout the globe, operations directors and executives are concentrating their efforts on maintaining supply chains that have seldom confronted such complicated and shifting situations. They encounter numerous aggravating issues in doing so (McKinsey & Company, 2020): demand surges in certain sectors (e.g. health) and historic reductions in others (e.g. tourism); disparities in manufacturing capacity across cities and nations, with unpredictable timelines for resuming regular operations; and capacity and cost shifts across all modes of logistics. Our findings suggest that employees from younger generations can be considerably more prone to the psychological outcomes of COVID-19 perception in the workplace. Therefore, implementing agile and generationally-non-sectarian management would be essential to keep a generationally-diverse workforce functioning effectively either remotely or in the office, hence seamless processes and effective organisations thriving in such an unprecedently challenging time. Our argument that younger

employees represent the future for many organisations (given their distance from retirement) means that firms act flexibly with these employees while striving not to alienate previous generations. Managing anxiety and alienation (cf. Chiaburu et al., 2014) will be key for attracting and retaining productive and long-term employees amidst the workplace transformation.

Research limitations and implications

Several limitations exist in the current research. First, the setting and context of this study restrict the generalisability of the findings to other cultures or situational patterns, and that has been highlighted in previous research (Yi et al., 2015). It should also be noted that the Middle Eastern region, where our sample was drawn from, has a long history of political unrest and conflicts. This unique context might have affected our findings, as individuals in this region could potentially exhibit higher resilience to extreme-context experiences compared to individuals in other regions. This might have influenced their perceptions and responses to the COVID-19 pandemic as an extreme-context situation. Future research should take this aspect into account, exploring the impact of such contextual differences on the generalisability of the findings. Therefore, because different populations may have different cultural, social, and historical backgrounds that can influence their members' behaviours, beliefs, and values, recognising that generational differences in a given context may not necessarily be generalisable to other populations is crucial. Thus it could motivate further cross-cultural research in this arena. For instance, based on the cultural metrics offered by Hofstede Insights (2021a), different countries in the Middle East score differently on the *uncertainty avoidance* scale. For example, with Egypt and Israel scoring 80 and 81, respectively, compared to Lebanon's 50, it is apparent that people in Egypt or Israel tend to have a higher degree to which

individuals of a culture see themselves endangered by ambiguous or uncertain events and have developed beliefs and institutions to protect them from these events. Furthermore, nations outside the Middle East are estimated to show more variance in this regard. For instance, with a score of 35, the UK rates substantially low on uncertainty avoidance (Hofstede Insights, 2021b). Such variations in prevalent cultural patterns motivate future research to address this limitation by replicating our study in culturally different contexts within or outside the Middle East, thus addressing the cross-cultural effects on the invariance of the model presented by this study. In that case, each context would require considerable representation in the ultimate sample.

Second, the study results were limited in that they were produced using COVID-19 perception as an endogenous variable conceptualising extreme context perception. This can limit the generalisability of our findings to other extreme contexts like war zones. Moreover, individuals with personal experiences of political unrest or conflict might have different responses to extreme-context situations. An analysis of such individual differences could provide additional insights into the moderating effect of generational differences in extreme-context perception. Whilst both contexts trigger similar insecurities (e.g. both require a coordinated response from governments and aid organisations to mitigate the impact on vulnerable populations), however, future research looking into validating our findings in warzones, as extreme contexts, is warranted.

Finally, a larger sample size for subsequent research would be more advantageous for identifying variances across the generational cohorts. Thus, using larger samples could help detect additional occurrences of non-invariance. Employing forced answering (FA) to limit the quantity of missing data might cause bias in the forced responses (Mahmoud, Hack-Polay, Grigoriou, et al., 2021). As a result, we encourage future research to utilise methods other than FA. For example, utilising "soft reminders" in conjunction with an additional choice of "Prefer

not to answer" or "Not wish to disclose" when responding to questionnaire questions might help reduce missing data without increasing the threat of FA bias.

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Appendix 1: Descriptive statistics

Construct	Whole sample *N* = 219		Generation Z *N* = 59		Generation Y *N* = 120		Generation X *N* = 40	
	Mean	**SD**	**Mean**	**SD**	**Mean**	**SD**	**Mean**	**SD**
Anxiety	3.55	1.12	3.75	1.03	3.50	1.16	3.41	1.13
COVID-19 Perception	3.53	1.12	3.63	1.09	3.38	1.10	3.82	1.17
Alienation	3.37	1.07	3.58	1.00	3.39	1.06	3.01	1.16
Job Insecurity	2.91	1.18	3.09	1.27	2.86	1.11	2.80	1.27
OCB	3.84	0.91	3.70	0.99	3.86	0.86	4.00	0.96
Job Satisfaction	2.96	1.27	2.77	1.29	2.95	1.25	3.27	1.30

Appendix 2: Measures employed in the study

Variable	Code	Item	Scoring	Source
Alienation	ALIEN01	Often wish I were doing something else	5-point Likert scale. 1 = 'strongly disagree,' 5 = 'strongly agree'	(LANG, 1985; Banai and Reisel, 2007)
	ALIEN02	Facing daily tasks is painful and boring		
	ALIEN03	Time is often spent aimlessly		
	ALIEN04	Feel estranged from my 'real self'		
	ALIEN05	Would give a good deal to live a different life		
	ALIEN06	Feel all alone in the world		
	ALIEN07	People are out for themselves and don't care for anyone else		
Job Satisfaction	JS01	I am enthusiastic about my work	5-point Likert scale. 1 = 'strongly disagree,' 5 = 'strongly agree'	(Judge et al., 2006)
	JS02	At this moment, I am finding real enjoyment in my work		
	JS03	overall, I like my job		
Job Insecurity	JSEC02	No matter how hard I work there is no guarantee that I am going to keep my job.	5-point Likert scale. 1 = 'strongly disagree,' 5 = 'strongly agree'	(Francis and Barling, 2005)
	JSEC03	I am certain of losing my job.		
	JSEC04	I'm not sure of how long my job will last.		
Anxiety	ANX01	Apprehension (fearful anticipation)	1 = 'none' 2 = 'mild' 3 = 'moderate' 4 = 'severe' 5 = 'very severe, grossly disabling'	(Hamilton, 1959)
	ANX02	Worries		
	ANX03	Anticipation of the worst		
	ANX04	Feelings of restlessness		
COVID-19 Perception	COV01	I believe that the effect the coronavirus pandemic has had on people is	5-point Likert scale. 1 = positive, 5 = negative	(Mahmoud et al., 2021)
	COV02	The coronavirus pandemic is making me feel discomfort	5-point Likert scale. 1 = 'strongly	
	COV03	I feel worried about what could happen if any of my family or friends caught the virus		

Variable	Code	Item	Scoring	Source
			disagree,' 5 = 'strongly agree'	
OCB	OCB01	I do not tell outsiders this is a good place to work	5-point Likert scale. 1 = 'strongly disagree,' 5 = 'strongly agree'	(van Dyne, et al., 1994)
	OCB02	I produce as much as capable of at all times		
	OCB03	I follow work rules and instructions with extreme care		

Appendix 3: Fornell-Lacker Criterion

	Alienation	Anxiety	COVID-19 Perception	Job Insecurity	Job Satisfaction	OCB
Alienation	**0.727**					
Anxiety	0.586	**0.818**				
COVID-19 Perception	0.19	0.245	**0.776**			
Job Insecurity	0.611	0.462	0.188	**0.844**		
Job Satisfaction	-0.513	-0.326	-0.078	-0.312	**0.926**	
OCB	-0.275	-0.145	-0.043	-0.14	0.569	**0.777**

Note. The diagonal represents the square root of each construct's AVE

Appendix 4: Outer loadings, VIFs and construct reliability & validity

	Alienation	Anxiety	COVID-19 Perception	Job Insecurity	Job Satisfaction	OCB	VIF
ALIEN01	0.757						1.936
ALIEN02	0.794						2.346
ALIEN03	0.836						2.405
ALIEN04	0.813						2.257
ALIEN05	0.625						1.496
ALIEN06	0.658						1.569
ALIEN07	0.559						1.482
JS01					0.918		3.219
JS02					0.928		3.215
JS03					0.932		3.326
JSEC01				0.826			1.633
JSEC02				0.88			2.076
JSEC03				0.826			1.667
ANX01		0.788					1.954
ANX02		0.895					2.579
ANX03		0.824					1.929
ANX04		0.759					1.547
COV01			0.709				1.352
COV02			0.714				1.561
COV03			0.892				1.347
OCB01						0.898	1.299
OCB02						0.662	1.438
OCB03						0.751	1.497
α	0.849	0.834	0.707	0.798	0.917	0.711	
rho_A	0.87	0.843	0.856	0.798	0.922	0.904	
CR	0.885	0.89	0.818	0.881	0.947	0.818	
AVE	0.529	0.67	0.603	0.713	0.857	0.603	

Appendix 5: Inner VIFs values

	Alienation	Anxiety	COVID-19 Perception	Job Insecurity	Job Satisfaction	OCB
Alienation			2.003			
Anxiety			1.569			
Job Insecurity			1.568			
Job Satisfaction			1.511			
OCB			1.237			
Alienation		1.836				
COVID-19 Perception		1.053				
Job Insecurity		1.586				
Job Satisfaction		1.795				
OCB		1.502				
Anxiety	1.379					
COVID-19 Perception	1.07					
Job Insecurity	1.332					
Job Satisfaction	1.683					
OCB	1.488					
Alienation				1.835		
Anxiety				1.551		
COVID-19 Perception				1.053		
Job Satisfaction				1.86		
OCB				1.483		
Alienation						2.187
Anxiety						1.532
COVID-19 Perception						1.035
Job Insecurity						1.549
Job Satisfaction						1.476
Alienation					2.003	
Anxiety					1.594	
COVID-19 Perception					1.081	
Job Insecurity					1.64	
OCB					1.094	

Appendix 6: Predictive performance of the PLS model vs Benchmark LM

Indicator	RMSE	
	PLS	LM
ALIEN01	1.489	1.495
ALIEN02	1.518	1.531
ALIEN03	1.183	1.183
ALIEN04	1.508	1.521
ALIEN05	1.43	1.441
ALIEN06	1.22	1.229
ALIEN07	1.56	1.564
ANX01	1.366	1.365
ANX02	1.299	1.3
ANX03	1.227	1.229
ANX04	1.314	1.311
JSEC01	1.321	1.326
JSEC02	1.209	1.217
JSEC03	1.441	1.453
JS01	1.324	1.331
JS02	1.325	1.332
JS03	1.328	1.333
OCB01	1.07	1.059
OCB02	1.274	1.276
OCB03	1.034	1.034

Appendix 7: Compositional invariance assessment

Generation X vs Generation Y				
Construct	**Original Correlation**	**Correlation Permutation Mean**	**5.00 %**	**Permutation p-Values**
Alienation	0.999	0.998	0.994	0.807
Anxiety	0.995	0.998	0.992	0.14
COVID-19 Perception	0.971	0.758	0.078	0.797
Job Insecurity	1	0.997	0.989	0.844
Job Satisfaction	1	1	0.999	0.78
OCB	0.968	0.94	0.787	0.317
Generation X vs Generation Z				
Construct	**Original Correlation**	**Correlation Permutation Mean**	**5.00 %**	**Permutation p-Values**
Alienation	0.997	0.996	0.99	0.423
Anxiety	0.995	0.994	0.985	0.463
COVID-19 Perception	0.743	0.402	-0.335	0.798
Job Insecurity	0.998	0.997	0.992	0.39
Job Satisfaction	1	0.999	0.998	0.867
OCB	0.993	0.976	0.929	0.702
Generation Y vs Generation Z				
Construct	**Original Correlation**	**Correlation Permutation Mean**	**5.00 %**	**Permutation p-Values**
Alienation	0.999	0.998	0.994	0.729
Anxiety	0.999	0.998	0.993	0.685
COVID-19 Perception	0.826	0.776	0.155	0.391
Job Insecurity	0.997	0.998	0.993	0.281
Job Satisfaction	1	1	0.999	0.506
OCB	0.985	0.963	0.889	0.45