

**AUTHORS:**Aaqil de Vries<sup>a,b</sup><https://orcid.org/0000-0001-8382-5697>Thuli Godfrey Mthembu<sup>c</sup><https://orcid.org/0000-0002-1140-7725>Lisa Wegner<sup>c</sup><https://orcid.org/0000-0001-9415-119X>**AFFILIATIONS:**<sup>a</sup>Occupational Therapist, Red Cross War Memorial Children's Hospital, Cape Town, South Africa<sup>b</sup>Research Assistant, Department of Occupational Therapy, Faculty of Community and Health Sciences, University of the Western Cape, South Africa<sup>c</sup>Professor, Department of Occupational Therapy, Faculty of Community and Health Sciences, University of the Western Cape, South Africa**CORRESPONDING AUTHOR:**

Lisa Wegner

[lwegner@uwc.ac.za](mailto:lwegner@uwc.ac.za)**KEYWORDS:**

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## Older adults' adaptiveness to disruptions during South Africa's COVID-19 lockdown: Keep your head up and continue breathing

**ABSTRACT**

**Introduction:** Adaptiveness fosters resilience through increasing capacity to transcend barriers in individuals, their environment and occupational engagement. The COVID-19 pandemic and lockdown may have decreased adaptiveness in older adults by disrupting occupational engagement, thus negatively influencing health and well-being.

**Methods:** A qualitative, meta-analytic design was used to explore the adaptiveness of older adults to disruptions experienced during South Africa's COVID-19 lockdown. Four student researchers' primary studies were reviewed and findings synthesised for this paper. Individual, semi-structured interviews were conducted with 16 participants during April and May 2020. The transcripts were analysed thematically and reported in the primary studies. The authors conducted thematic analysis across all four primary studies to develop themes for this paper.

**Findings:** Three dominant themes emerged: (1) COVID-19 as an illness, (2) occupational disruptions experienced by older adults, and (3) developing a state of adaptiveness. Older adults developed adaptiveness through changing perspective, adapting to new environments, learning to use technology, expanding roles and routines, and strengthening the spiritual self through engagement in eudemonic occupations.

**Conclusions:** The study provides insights into challenges and adaptiveness of older adults during the COVID-19 lockdown. Findings inform interventions with older adults presenting with reduced adaptiveness.

**Implications for practice**

This study is valuable as it provides occupational therapists with a deeper understanding of older adults' experiences and challenges during the COVID-19 lockdown, thus, laying the potential for strengthening client-therapist interpersonal relationships. Although the sample observed in this study was older adults, the findings can be considered among other vulnerable clients such as individuals with disease, illness and/or disability. Additionally, these findings may provide occupational therapists with insights that can assist in framing intervention strategies for clients with a decreased state of adaptiveness. This is significant as adaptation requires reasonable social, emotional, and cognitive processes. Lastly, this study aimed to contribute to a wealth of research exploring adaptiveness, rooted in the reality that change is inexorable; however, how we respond to change can be transformative for individual and population well-being.

## INTRODUCTION

At the core of the human experience is an overwhelming desire to be engaged in meaningful and purposeful occupations, and this is integrated with the process of striving for, and achieving, mastery in said occupations. Schultz and Schkade<sup>1</sup> described this internal primitive process as occupational adaptation. Adaptiveness is a life-long dynamic process that fosters resilience through an individual's capacity to transcend barriers presenting in personal factors pertaining to the person, their environment and occupational engagement<sup>2,3,4</sup>. An increased state of adaptiveness empowers persons to engage in diverse and meaningful occupations, which in turn has the potential to promote a holistic state of well-being<sup>2,3,5,6</sup>. The advent of the COVID-19 pandemic and consequent restrictions resulting in lockdowns in South Africa may have decreased levels of adaptiveness in more vulnerable populations, such as older adults, who were identified as a higher risk population for the development of moderate-severe COVID-19 complications with a higher mortality incidence. O'Leary<sup>7</sup> and Cloete<sup>8</sup> have noted significant disruptions in roles and routines due to COVID-19 restrictions. The top-down implementation of the lockdown restrictions may have furthered a decreased state of adaptiveness through the removal of individual autonomy, free-will, occupational choice and power, thus, highlighting a potential social justice crisis on top of a health crisis.

Previous studies such as those by Blacker<sup>4</sup>, Lexell<sup>5</sup>, Cahill<sup>6</sup> and Johansson<sup>9</sup> have examined adaptiveness in the context of population vulnerability, illness, and disability. However, limited research has explored the adaptiveness of persons within the context of a pandemic or lockdown. Moreover, research is further restricted when investigating one of the most vulnerable populations to the causation of the pandemic, such as older adults, in South Africa. This is noteworthy when considering that South Africa is a developing country with a complex set of challenges suspended in a precarious narrative of inequality. The question that arises is how did older adults adapt to the disruptions of the COVID-19 lockdown in South Africa during 2020?

### Literature review

#### COVID-19 in South Africa

In December 2019, a novel, acute respiratory syndrome SARS-CoV-2 appeared in Wuhan, China<sup>10</sup>. SARS-CoV-2 or COVID-19 presents with myriad flu-like symptomology including fever, malaise, dry cough and dyspnea<sup>11</sup>. This presentation is characteristic of numerous viral conditions such as pneumonia, the common flu/cold and seasonal allergies. This made it challenging initially to distinguish COVID-19 from other viral conditions, causing the virus to spread rapidly on a global scale. On 30 January 2020, COVID-19 was flagged as a public health emergency of international concern by the World Health Organisation<sup>12</sup>. On 5 March 2020, South Africa's former minister of Health, Dr Zweli Mkhize confirmed the arrival and spread of COVID-19 in the country. The South African population met the news with great

concern, angst, hysteria, fear and frustration<sup>13</sup>. This response was not unfounded when considering that COVID-19 was a novel virus with limited evidence surrounding transmission and clinical management. Moreover, South Africa is a developing country with a weakened healthcare system and a significant immunocompromised population owing to a high prevalence of HIV/AIDS, tuberculosis, malnutrition, and lifestyle diseases<sup>14</sup>. As findings related to COVID-19 emerged, it was established that the risk for COVID-related severe illness and death increases with age due to possible changes in lung anatomy and muscular atrophy which results in physiological dysfunction, reduction of lung reserve, reduction of airway clearance, and reduction of the defence barrier function<sup>14,15</sup>. Older adults' risk was exponentially increased through the prevalence of comorbidities such as hypertension, diabetes mellitus, obesity, chronic obstructive pulmonary disease or any other respiratory illness<sup>16,17</sup>. The Centers for Disease Control and Prevention<sup>18</sup> further stated that persons from racial or ethnic minorities are at risk of developing moderate-severe COVID-19 complications, or even dying, because of where they work and/or live as well as poor health service accessibility.

#### *The implications of the COVID-19 lockdown on South Africans*

To safeguard vulnerable populations such as older adults, the South African government followed international trends and declared a National State of Disaster. South Africa was placed on lockdown alert level 5 effective from 26 March 2020 in an attempt to flatten the first wave of COVID-19 infections. The lockdown highlighted disparities amongst South Africans when considering the argument of equality versus equity as a determinant of privilege<sup>19</sup>. Amongst individuals in a higher-middle socioeconomic bracket, lockdown restrictions were well adhered to<sup>20</sup>. People were able to isolate comfortably in their homes, transitioned to working remotely with access to electronic devices and the internet, dedicated time to home school their children and families reported being happier during the lockdown<sup>20</sup>. The situation in disadvantaged communities, particularly in informal dwellings, stood in stark contrast to this image<sup>21</sup>. Challenges in disadvantaged communities were overcrowding, poor sanitation, lack of access to personal protective equipment such as masks<sup>22</sup>, and most notably, a dire lack of food and basic supplies. This contributed to hunger riots<sup>23</sup>, shop looting<sup>24</sup> and confrontation with the South African National Defence Force (SANDF) and the South African Police Service (SAPS)<sup>25</sup>. The SANDF and SAPS militantly surveyed communities, utilised intimidation tactics and brutality and incarcerated those in violation of lockdown restrictions<sup>26</sup>. To mitigate economic challenges many organisations lobbied donations to collect and distribute food parcels whilst the South African government allocated ten percent of the COVID-19 stimulus package toward social assistance including an increase in the amount of all existing grants and the addition of a new COVID-19 social relief or distress grant<sup>27</sup>.

These efforts, however, were minimal in addressing the grave inequalities rooted in disadvantaged communities.

### **Occupational justice perspective**

Durocher describes occupational justice as the promotion of fairness, equity, and empowerment that enables opportunities for participation in occupations for the purposes of health and well-being<sup>28</sup>. According to Townsend and Wilcock<sup>29</sup> and Wilcock<sup>30</sup>, an occupational justice perspective observes individuals as occupational beings with idiosyncratic occupational needs, wishes and habits dependent on their circumstances and capacities, with each individual requiring different occupational opportunities to realise their talents and flourish. The occupational justice perspective observes participation through a socio-political lens by examining the degree of individual and population right to meaningful, purposeful and varied occupations that aim to improve quality of life, meet basic needs and realise potential<sup>29,30</sup>. The South African lockdown highlighted numerous occupational injustices more rampant in lower-middle class individuals. These injustices stem from the residual remnants of occupational apartheid that saw the unequal distribution of occupational opportunities in accordance with a system of racial classification<sup>31</sup>. Restrictions on social participation, community mobility and gathering for connectedness resulted in occupational deprivation<sup>32</sup> and marginalization<sup>33</sup>. Restrictions to participate in occupations for work for financial gain furthered the pre-existing challenges of lower-middle class individuals to meet basic needs such as food, water, medical care and personal protective equipment. This was compounded by the fear and anxiety around the uncertainty of when or if the lockdown would end and if individuals would have a job to return to. Imposed home isolation for prolonged periods of time has resulted in occupational imbalances such as being unoccupied and under-occupied as not everyone was afforded the same set of privileges<sup>29,30</sup>. Transcending the barriers of class and privilege, the lockdown resulted in widespread occupational alienation<sup>32</sup> when examining participation in occupations linked to religious observance and culture through the closure of sacred religious and cultural institutions. An argument can be made that efforts have been made to adapt through the use of technological platforms, however, it can be proposed that this adaptation was insufficient and lacking in meaning through unfamiliarity. Most notably, the lockdown has resulted in the grave removal of individual occupational choice and autonomy thus leading to powerlessness. This state of powerlessness was more debilitating to those subjected to multiple occupational injustices and with a lesser degree of privilege. This resulted in occupational disruptions<sup>34</sup>.

### **Occupational disruptions**

Nizzero describes occupational disruption as a temporary disturbance in an individual's typical pattern of participation<sup>34</sup>. Emotional responses such as uncertainty, anxiety, and vulnerability are common when experiencing occupational disruption due to the loss of occupations and/or social connections, as well as feeling a lack of control. This is sup-

ported by Klinger who stated that occupational disruptions could have a negative influence on health, well-being, and quality of life<sup>35</sup>. O'Leary<sup>7</sup> and Cloete<sup>8</sup> noted that significant disruptions in roles and routines have been observed amid the COVID-19 pandemic. Routine is significant as it allows individuals to shape the manner in which they spend their time, whilst roles form the essence of who we are and can reflect priorities and values in life<sup>7</sup>. When roles and routines are negatively influenced it can affect mental well-being as well as the individual's perspective of their world<sup>36</sup>. Nizzero posited three adaptive strategies to overcome occupational disruption including: (a) modifying previous occupations; (b) maintaining order or routine; and (c) adopting new occupations or routines<sup>34</sup>. These strategies align with Doroud, Fossey and Fortune's conception of gradual re-engagement in occupations that promote health recovery by establishing structure, routine, hope, empowerment, sense of self and connectedness<sup>37</sup>. These strategies are guided by the overarching theory of occupational adaptation<sup>1,3</sup>.

### **Occupational adaptation**

Occupational adaptation is described by Schkade and Schultz<sup>1</sup> as an internal normative process wherein the overwhelming desire to be engaged in meaningful occupations is integrated with the process of striving for, and achieving mastery, in occupations. Adaptation is an interdependent relationship between the person, environment, and the interaction between the person and the environment<sup>1</sup>. Nelson<sup>38</sup> positioned adaptation as a process wherein the person has the internal capacity to alter their sensorimotor, cognitive and psychosocial reserves by engaging in meaningful occupations. Nelson and Jepson-Thomas<sup>39</sup> defined adaptation as the effect of occupational performance on the individual's developmental structure and further stated that occupational adaptation does not always yield a satisfactory or optimal resolve. Frequent and reoccurring errors in occupational performance may result in a sense of learned helplessness or maladaptation when confronted with future occupational challenges. Kielhofner<sup>3</sup> described occupational adaptation as the process of constructing an occupational identity and achieving competence over time in the context of one's environment. Research centred on occupational adaptation emphasises the significance of the interaction between the person and the environment. The lockdown has underscored the improved adaptive responses of South Africans to occupational challenges resulting from novel environmental barriers. Throughout this, we have observed increased desires and efforts to socialise and connect to others on walks to communal taps or toilets in townships, neighbours sitting in front of their closely positioned homes talking, strangers waving or nodding in passing or whilst queuing in grocery store lines to collect supplies, and mothers neglecting their own occupational needs to assume the role of caretaker, nurse, counsellor, teacher and more, to meet her children's occupational demands. Although occupational adaptation cannot be measured instrumentally, we can observe a strengthened adaptive response through the emergence of three predictive outcomes namely; (1) an improved self-initiation, (2) generalisation, and (3) improved

relative mastery<sup>1</sup>. Eudemonic occupations have long been attributed to the instillation of adaptiveness during challenging times<sup>40,41</sup>.

### **Eudemonic occupations**

Eudaimonia infers a state or condition of existing in good spirits which can commonly be translated to one's state of happiness or well-being<sup>40,41</sup>. Eudemonic occupations can be observed as those going beyond the mere utility of survival and, instead, nurture the essence of who we are as beings whilst reflecting our hearts, dreams and purpose. Fulfilment of eudemonic occupations fosters eudemonic well-being described by Ryan<sup>42</sup> as when an individual's life activities are the most congruent or interconnected with deeply held values or beliefs and they are holistically or fully engaged. Waterman<sup>43</sup> further posits that eudemonic well-being is enriched by doing what is worth doing. Spirituality is observed as a significant dimension in the attainment of eudemonic well-being through the introspection, strengthening and expression of the inner self. Spirituality in alignment with occupational therapy literature is reflected as an inner resource independent of religion or denomination, and rather of occupations that restore and contribute to the self<sup>44</sup>. Thibeault proposed five occupational gifts<sup>45</sup> that were expanded upon by Zafran<sup>46</sup> that reflect resilience through an exploration and development of the spiritual self. Connecting occupations<sup>45,46</sup> are those in which we experience belonging to others and to life through connecting online or in person, giving back to the community and interconnectiveness to pets and nature. Centring occupations<sup>45,46</sup> foster awareness, presence, and calm through meditation, walks in nature, repetitive activities such as knitting or grooming a pet. Creative occupations<sup>45,46</sup> aim to meet the human need to explore, create and play without judgment or the need to develop product or skill mastery. Contemplative occupations<sup>45,46</sup> are those that induce awe of life by focusing on the bigger picture through prayer, journaling, or reflective walks in nature. Contributing occupations<sup>45,46</sup> allow us to give back within the communities that support and nurture us. Engagement in eudemonic occupations has the potential to provide predictability, structure and routine; belonging and connectedness; and a sense of hope for the future<sup>45</sup>.

In summary, the review of literature revealed some evidence that the COVID-19 lockdown affected the occupational engagement of individuals through disruptions experienced in meaningful occupations. Disruptions further highlighted grave societal inequalities through the widespread incidence of occupational injustice. These occupational injustices simmered back down to the persisting argument of equality versus equity as rooted in South Africa's complex history regarding racial classification. Not all participants were provided with equitable opportunities for holistic engagement during the lockdown, thus, laying the potential for a decreased state of health and well-being. To foster occupational engagement for improved health and well-being, literature suggests a need to develop resilience to disruptions through an increased state of adaptiveness. It is possible that engagement in eudemonic occupations has the potential to facilitate resilience in individuals and enable

them to adapt to challenging situations. However, there is limited research exploring the adaptiveness of older adults in South Africa within the context of a pandemic or lockdown.

### **METHOD**

This study aimed to explore the adaptiveness of older adults to disruptions experienced during South Africa's COVID-19 lockdown. The research design for this study was qualitative meta-analysis, which is a method for reviewing qualitative studies that entails a rigorous secondary qualitative analysis of primary qualitative findings<sup>47</sup>. Qualitative meta-analysis provides a more comprehensive description of a phenomenon researched by a group of studies<sup>47</sup>.

#### **Primary qualitative studies**

Four primary qualitative studies conducted by student occupational therapy researchers under the supervision of two of the authors were reviewed for this paper. This allowed researchers to gain an in-depth and contextually rich understanding of the process by which older adults have developed adaptiveness to disruptions experienced during the South African lockdown<sup>48,49</sup>. The student researchers voluntarily consented for their studies to form part of the meta-analysis. According to the method outlined by Timulak<sup>47</sup>, two of the authors critically appraised the four primary studies to ensure data quality and trustworthiness. The studies were screened and included in the meta-analysis based on similarity in focus, key research question, aim and objectives, context, and the theoretical and methodological frameworks. All four studies employed a qualitative, exploratory-descriptive design and semi-structured interviews to explore and describe the influence of COVID-19 on the roles and routines of adults aged 55 years and older during the hard lockdown period in April and May 2020. The findings of the primary studies became the data for the meta-analysis<sup>47</sup>.

#### **Study selection and participant selection**

All four primary studies utilised purposive<sup>50</sup> and snowball sampling<sup>51</sup> to recruit a total of 16 participants. These sampling methods allowed researchers to gather participants whose lived experiences were central to the studied phenomenon whilst strictly adhering to the COVID-19 restrictions on travel and person-to-person contact. Researchers primarily used strategic word of mouth directed to key friends, family and/or community populations to identify potential participants meeting the inclusion criteria: aged 55 years or older, male or female, and resident in South Africa during the COVID-19 lockdown. Participants were then recruited through the use of technological platforms including: telephone calls, WhatsApp Messenger, Short Message Service and email. In contexts where potential participants were not technologically proficient or did not have access to technological devices, researchers recruited them in person. Most participants were from lower-middle socioeconomic backgrounds in two provinces – the Western Cape and Mpumalanga (Table I, page 58).

#### **Data collection**

Data for the four primary studies were collected in May 2020 through face-to-face contact or using technological

**Table I: Participant demographic information**

Pseudonym	Gender	Age	Ethnicity	Socioeconomic background	Location (Province)
P1	Male	72	Coloured	Low-middle	Western Cape
P2	Female	70	Coloured	Low-middle	Western Cape
P3	Male	64	White	Low-middle	Western Cape
P4	Male	63	Unspecified	Unspecified	Western Cape
P5	Female	64	Black	Low-middle	Mpumalanga
P6	Female	75	Unspecified	Unspecified	Western Cape
P7	Female	88	White	Low-middle	Western Cape
P8	Female	73	Coloured	Low-middle	Western Cape
P9	Male	55	Black	Low-middle	Mpumalanga
P10	Male	66	Coloured	Low-middle	Western Cape
P11	Female	54	Black	Low-middle	Mpumalanga
P12	Female	77	White	Low-middle	Western Cape
P13	Female	71	Coloured	Low-middle	Western Cape
P14	Female	69	Coloured	Low-middle	Western Cape
P15	Female	58	Black	Low-middle	Mpumalanga
P16	Female	60	Unspecified	High	Western Cape

platforms such as: telephone calls, WhatsApp Messenger, and email. Researchers utilised individual interviews guided by semi-structured and open-ended questions to facilitate discussions. The key questions focused on older adults' experiences of the influence of COVID-19 and the South African lockdown, how this influenced their occupational engagement, and how they adapted. Telephone calls were recorded and voice notes were saved and transcribed verbatim, whilst written responses were saved. These transcripts were then analysed separately for each primary study and the findings were written up as chapters of the four research reports. The four research reports, with a focus on the findings chapters, comprised the data sources for the qualitative meta-analysis presented in this paper.

### Data analysis

Relevant information from the primary studies was mapped onto a data extraction spreadsheet, and included title, research question, study aim and objectives, theoretical framework, methodology, research setting, findings, discussion, and recommendations. Subsequently, all data extraction spreadsheets (transcripts) were imported to generate one master transcript, and organised using a coding framework to be analysed thematically<sup>52</sup>.

The first author utilised Braun and Clarke's six steps of thematic analysis to guide data analysis through the process of familiarisations and noticing similarities and patterns<sup>53</sup>. This process is marked by the review of the transcripts numerous times with the intention of making sense of the data. Secondly, initial codes were identified and grouped together based on a similar narrative and were organised using a data extraction sheet. Thirdly, codes were further grouped together and organised to create sub-themes that aligned more closely with the research topic. Themes were then loosely created in representation of the data housed in each sub-theme. Fourthly, themes were reviewed based on the coded extracts and full data set and some of the themes

were collapsed. In the fifth step, themes were named by providing a brief description of the narrative represented by the grouping of the sub-themes and supportive data extracts. The final step involved the written reporting of the findings, which was done through analytic narrative and data extracts. Two of the authors closely monitored the process of data analysis to ensure neutrality in the representation of the data as well as a consensus of the article's overriding narrative.

### Trustworthiness

Trustworthiness was ensured by means of the above-mentioned critical appraisal of the primary studies<sup>47</sup>, and ensuring credibility, transferability, dependability and confirmability<sup>54</sup>. Credibility was ensured through the process of triangulation<sup>55</sup> of data sources (multiple participants from two provinces in South Africa and four primary research reports) and multiple researchers. One researcher acted as auditor, monitoring procedures in the meta-analysis and maintaining distance from the analysis process in order to check bias in the analysis<sup>47</sup>. Transferability was ensured by sourcing a diverse sample across the primary studies<sup>56</sup> to produce a robust and well-developed narrative. Dependability and confirmability were ensured through the provision of an audit trail and dense descriptions of the context, the sampling method and characteristics of participants, data collection and analysis.

### Ethics

Ethics approval was obtained from the University's Biomedical Research Ethics Committee (BM20/9/3). All participants in the four primary studies and the meta-analysis study took part voluntarily, provided informed consent and were aware of their right to withdraw from the study at any stage without concern of repercussions. All health and safety protocols to prevent the transmission of COVID-19 were strictly adhered to throughout the study. Participant confidentiality and privacy was maintained throughout. Participants

were assigned pseudonyms and all data were stored on password-protected devices only accessible to persons directly involved in the study.

## FINDINGS

Data analysis yielded three dominant themes: (1) Insight into COVID-19 as an illness, (2) occupational disruptions experienced by older adults, and (3) developing a state of adaptiveness. These themes comprised twelve sub-themes and are supported by data extracts (Table II adjacent).

### Theme One: Insight into COVID-19 as an illness

The first theme deals with the older adults' insight into COVID-19 as an illness, which highlights their understanding of the pandemic. This theme further captures the awareness about the vulnerability of older adults in developing moderate-severe health outcomes.

#### What is COVID-19

Participants perceived COVID-19 as a novel virus similar to the common cold or flu in its presentation of a dry cough, fever, tiredness and fatigue, however, emphasised its severity in likening it to a terrible virus grave enough to cause death.

"My understanding is that it is a terrible virus and people have died from it." (P1)

"Somebody that I knew died, she was a nurse." (P2)

#### Older adults are vulnerable.

It was determined that the risk of developing moderate-to-severe COVID-19 health outcomes was more prevalent in older adults due to their progressing age. This risk was exponentially increased by the prevalence of comorbidities such as diabetes mellitus and other immunocompromising conditions such as HIV/AIDS. Participants positioned older adults living with comorbidities as the most vulnerable South African population.

"COVID-19 affects us in old age because we have a lot of underlying medical problems. I have diabetes and I take ARV [antiretroviral] pills, so this puts you at risk. We are vulnerable." (P3)

### Theme Two: Occupational disruptions experienced by older adults.

The second theme focuses on the occupational disruptions experienced by the older adults that influenced their occupational engagement during South Africa's COVID-19 lockdown.

#### Roles and routines

Participants reported that the abrupt enforcement of the South African COVID-19 lockdown during the COVID-19 pandemic caused significant disruptions in occupational engagement through the immediate suspension of previously held roles and routines. Previously engaged in roles and routines that provided participants with structure, predictability, autonomy through decision-making abilities,

**Table II: Themes and sub-themes**

Themes	Sub-themes
Insight into COVID-19 as an illness	What is COVID-19? Older adults are vulnerable
Occupational disruptions experienced by older adults	Roles and routines Social participation Travel/community mobility Work participation Religious observance Deteriorating mental well-being
Developing a state of adaptiveness	A change in perspective Adapting to new environments Adapting by using technology Strengthening the spiritual self

and the power to select meaningful or purposeful tasks or activities that filled up the day, were no longer possible during the lockdown.

"The lockdown has caused so much change and without warning. It really has a big impact on my ability to fulfil my daily routines. I don't know what to do anymore." (P4)

The lack of engagement in meaningful roles and routines caused confusion, frustration, uncertainty and led to participants questioning who they were and what they were doing with their time.

"My roles have changed overnight. Sometimes I don't know what to do because who I was, I can't be anymore." (P5)

#### Social participation

COVID-19 can largely be considered a social spreader in that the virus spreads more rapidly through social contact with infected persons or contaminated surfaces. The South African government, thus, more stringently regulated occupational engagement in social activities. Participants reported how vastly these restrictions negatively influenced their social and family roles resulting in loneliness, isolation, and disconnectedness.

"I used to visit friends and have them visit me three or four times a week and now we cannot do that. I feel alone." (P6)

"I used to see my family a lot. Now I only get to see my family once a week when they drop off my shopping, but they always say, 'Ma I'm staying in the car.' I wish they stayed longer." (P7)

#### Travel/community mobility

Participants highlighted restrictions on travel and community mobility as being instrumental in hindering their social participation and the fulfilment of family roles. This significantly affected participants as travel and community mobility was fundamental in aiding their connections to others.

"My children can't visit even though I live close-by. People are not allowed to travel." (P6)

"I used to visit my family but now I can't drive anywhere so I don't see them." (P8)

Travel, community mobility and social activities were closely monitored by the South African Police Service and National Defence Force through constant community surveillance and the implementation of a national curfew. Participants reported feeling anxious and fearful when leaving their homes out of concern that they could be arrested.

"I like being able to walk around my area but now I am worried I will get arrested." (P7)

### **Work participation**

The South African COVID-19 lockdown called for the immediate closure of all business sectors, which fundamentally impacted upon participants' ability to engage in work. This is significant, as participants reported that the fulfilment of their worker role provided structure, predictability, meaningfulness, purpose and financial means. Without some form of income, participants feared that they or their families would struggle to meet basic needs such as food.

"Lockdown prohibits me from doing my work." (P4)

"It [lockdown] has a great impact on my ability to fulfil my role as breadwinner. My ability to provide has been reduced to almost zero and it's concerning because my family will go hungry." (P8)

One participant reported drawing money from his unemployment fund to cover basic expenses however, that this was insufficient and that the amount became less each time.

"I am getting money from the UIF [Unemployment Fund], but it's not the same. It's not enough to cover all my expenses and it gets less every month." (P15)

Another participant highlighted that community soup kitchens were closed under the lockdown restrictions which further reduced opportunities for hunger relief for persons with financial challenges.

"I am involved in a church community soup kitchen, but it's closed, and the people don't have food around here." (P1)

As findings from the medical and science communities emerged and the lockdown alert levels were eased to facilitate the increased but still regulated movement of individuals, participants highlighted still being unable to work due to their age and the presence of chronic illnesses.

"I am not able to work because I am 55 and have a chronic sickness." (P9)

### **Religious observance**

The South African COVID-19 lockdown caused the immediate closure of places of worship, resulting in disruptions in religious observance. Participants reported being unable to attend church and elucidated a longing for connectedness through a shared religious experience. Participants further positioned the social self as being interlinked with the religious self.

"I can't go to church. The fact that you can't see your friends by the services in church is something I miss a lot." (P6)

Several worship facilities adjusted their approach to religious observance as the lockdown alert levels eased through the use of technology and implementation of government recommended precautionary measures. Participants, however, reported still being unable to participate due to their progressed age and lack of technological proficiency.

"The staff and I collect for the church charity project; I can't get it to the people anymore because of my age and that's frustrating for me." (P2)

"I am an esteemed member of my congregation and not being there for meetings is affecting me. Other members continue with meetings on their phones, I don't know how to do that and I am an old man, I don't want to be a burden to anyone." (P3)

### **Deteriorating mental well-being**

Disruptions in the occupational engagement of participants caused deterioration in mental well-being. Participants reported feeling sad, miserable, empty, helpless, burdensome, neglected and forgotten.

"I have been feeling miserable. I feel as if something has been taken away from me. Like the rug has been pulled from under me." (P10)

"I have to sit at home and feel helpless." (P8)

"I feel empty inside." (P1)

Disruptions exacerbated symptomology in participants diagnosed with depression.

"I have a history of depression. My daily routine helps me get my mind off things. Now I feel trapped in the house." (P11)

### **Theme Three: Developing a state of adaptiveness.**

The third theme highlights how participants developed a state of adaptiveness to disruptions experienced in their occupational engagement. This was achieved through (a) a change in perspective, (b) adapting to new environments, (c) adapting by using technology, and (d) strengthening the

spiritual self.

### ***A change in perspective***

Participants believed that the first stage to developing adaptiveness is through a change in perspective of oneself in relation to the various environments. With time, introspection and critical reflection, participants were able to accept the unpredictability of their environment, develop hope that COVID-19 and the lockdown were temporary and were optimistic that the opportunity to reintegrate, re-engage and reconnect would come soon.

"I know that this lockdown isn't going to last forever, and I know that I will be with my family and friends again. I just need to stay positive." (P7)

"I have learnt that I would rather miss my family for a little bit now and know that they are safe, than miss them forever if they died." (P12)

### ***Adapting to new environments***

Participants adapted to their new environments by establishing a state of peace with external circumstances and by implementing changes that fostered re-engagement. Participants reported readying their homes for re-engagement in social participation through the implementation of a designated area for visitors to practice good hand hygiene through hand-washing and/or sanitizing.

"I have sanitiser at the door and a bucket of water if you want to wash your hands." (P13)

Participants further reported overcoming barriers in their environment by designating a relative to fulfil high risk occupations such as shopping. Additionally, participants reported adjusting their times of engagement. This allowed participants to regulate their contact with others, thus reducing risk of potential COVID-19 infection.

"My daughter does my shopping for me now." (P8)

"I can only go early in the morning to the shop because then it's empty and nobody is gonna [sic] bump into me". (P12)

### ***Adapting by using technology***

Technological tools such as a cell phone, laptop, tablet, and radio have been instrumental in facilitating re-engagement. One of the most noteworthy applications utilised by participants was WhatsApp messenger as it allowed participants to connect with family and friends through instant messaging, voice notes, sharing multimedia and voice and video calling.

"WhatsApp and social media help a lot because you still have access to others." (P2)

"I can talk to all of my friends at the same time now, not just one at a time. Yesterday I video-called with 4 friends

on WhatsApp." (P8)

"I use WhatsApp to talk to my church friends and Father sends his sermon as a voice-note to us now. I listen to that every Sunday." (P12)

### ***Strengthening the spiritual self***

The South African COVID-19 lockdown was perceived as an enabler that facilitated participants to engage in occupations that strengthened the spiritual self. Participants reported that families now had the time to come together, pray and perform acts of worship. This allowed participants to focus on life's bigger picture.

"Families are spending lots of time together performing these acts of worship together. In this way this lockdown has been a blessing." (P14)

Participants used their abilities to engage in crafts such as knitting that occupied their time and calmed their mind through repetitive work activities. The knitted products motivated the participants to engage in occupations that fulfilled the purpose of giving back and being supportive to the communities.

"I knit bed socks and beanies [caps] for my family and the people in the road." (P7)

Participants experienced a sense of belongingness because they were able to engage in occupations that facilitated caring for others as part of intergenerational relations and occupational legacy. It was noted that the participants achieved a sense of meaning and purpose because they gave back to their families in need of care.

"Just before the lockdown my grandson was detoxing from his drugs at my house. This was difficult for him, and he needed me to look after him. I like that I am able to be here for him all the time and we are always together, so he doesn't feel alone during this difficult time." (P12)

"My mother has been very sick for some time, and I was only able to visit her at most once in a month. I can at least take care of her now since I am not going to work during this time. She will now definitely get better, I'm sure of that." (P15)

Participants engaged in occupations that encouraged a strengthened connection to the self, nature, and pets.

"I spend more time working in the garden and with my pets." (P4)

Participants engaged in occupations that fostered improved awareness, presence and calm through exercise, yoga, meditation, mindfulness and rest.

"I used to go to the gym before all of this started, that used to relax and help me. Now I do things like home

exercises and yoga to help me.” (P15)

“I have started meditating and reading the bible more.” (P11)

“I feel like my mind is resting. I can connect with myself.” (P11)

## DISCUSSION

This study provided an insight into older adults' adaptive-ness through the occupational disruptions that emanated from the eruption of the COVID-19 pandemic. Overall, the findings accentuated that there were vulnerabilities for older adults, as highlighted in the first theme (*Insight into COVID-19 as an illness*). The findings are congruent with Kas-eje<sup>14</sup>, Adhikari<sup>15</sup> and Chen<sup>57</sup> who indicated that older adults had the highest risk regarding exposure to COVID-19 and had the potential to develop moderate-severe COVID-19 related complications that can potentially result in death. This risk is exponentially compounded by the prevalence of comorbidities such as hypertension, diabetes mellitus, obesity, chronic obstructive pulmonary disease or any other respiratory illness<sup>16,17</sup>. In the findings, participants reflected on themselves as the vulnerable population due to their progressed age. Participants 3, 9 and 11 further identified their vulnerability by indicating that they were living with comorbidities. This vulnerability was compounded when considering that South Africa has a weakened healthcare system that's efforts have been prioritised to mitigate a high population incidence of HIV/AIDS, tuberculosis, mal-nutrition, and lifestyle diseases<sup>14</sup> and when considering that COVID-19 was a novel virus with limited research around transmission and management. This caused significant stress, anxiety and apprehension in the study sample. These findings corroborate Chen's study<sup>57</sup>, which indicates that older adults' lives were disrupted because they experienced tremendous stress and psychological burden.

The findings in the second theme *Occupational disruptions experienced by older adults* underscored that the measures implemented to mitigate the influence of the pandemic and consequent lockdown, such as confinement, community restrictions, stay-at-home and social distancing, resulted in social isolation and loneliness among older adults. These findings indicated that the older adults were occupationally alienated because they experienced prolonged disruption, which is resonant with Townsend and Wilcock<sup>29,30</sup>. It can be argued that all populations experienced a degree of occupational alienation during the COVID-19 lockdown as marked by social isolation and loneliness; however, the findings indicate a clear discourse in terms of reduced freedom of opportunity owing to age. Additionally, the disruptions of the older adults' routines made them experience emptiness and a sense of meaninglessness, which affected their sense of identity. The results of the synthesis revealed that older adults' rights to exert individual autonomy and benefit from fair privileges seemed to have been infringed because they were occupationally marginalised and imbalanced<sup>29,30</sup>. This is supported by the extracts in the subtheme *Roles and routines*, which indi-

cated that older adults experienced a sense of idleness, as they did not know what to do anymore.

In the subtheme *Social participation*, it was evident that the older adults experienced a sense of disconnectedness as they were unable to spend meaningful time with relatives, friends, and families. Furthermore, in the subtheme *Travel/ community mobility*, the findings reinforced Maldonado-Torres' assertion that the structures of coloniality of power have emerged during South Africa's COVID-19 lockdown and restrictions, as the government-controlled people's movements<sup>58</sup>. This is further indicated that the coloniality of power was evident in the findings that reported that older adults feared being arrested if they were found driving or traveling around their community. Therefore, these findings indicated that government restrictions resulted in coloniality of being, because older adults' meaning of humanity was violated and led them to experience dehumanisation<sup>58</sup>. Older adults' right to exert individual autonomy through choice in occupations was violated because lockdown regulations prohibited them from continuing with economic occupations as highlighted in the subtheme *Work participation*. This is resonant with Manahan<sup>59</sup> who shared that social distancing and stay at home orders can also negatively impact older adults' jobs and economic stability. Most notably, the lack of opportunity to participate in economic occupations highlighted disparities amongst societal classes. Within this narrative, it was observed that the lockdown restrictions were easier to adhere to by more privileged individuals that perceived the stay-at-home order as an opportunity of respite, family reconnection and transition to a new opportunity to work from home whilst less privileged individuals struggled to meet their basic needs such as food. The South African government implemented social relief strategies in the form of increasing existing social grant amounts and created a COVID-19 relief or distress grant whilst many organisations lobbied for food donations to distribute food parcels. This was furthered by encouraging businesses and employees to draw from the unemployment fund. These efforts however, were minimal in resolving the hunger and food insecurities crisis that plagued so many disadvantaged communities. The lockdown restrictions coupled with South Africa's complexed socio-political history resulted in widespread experiences of disconnection from society, hopelessness, helplessness, isolation and desperation all whilst fearing illness and death.

The findings emerging from the third theme *Developing a state of adaptiveness* indicated that the South African COVID-19 lockdown-related occupational disruptions were powerful events that facilitated the process of occupational adaptation among older adults. These findings reverberated Grajo's explanations of occupational adaptations as a product of engagement in occupations; process that emerges during transaction with the environment; manner of responding to change and life transitions; and process to form a desired sense of self<sup>60</sup>. In one subtheme, *A change in perspective*, the findings indicated that the South African COVID-19 lockdown provided many older adults with the opportunity to engage in a gratitude exercise, as a flourishing activity that facilitated critical reflection and positivity<sup>61</sup>. This

is consistent with Grajo who indicated that participation in occupation enables people to regenerate their visions of possibility to ameliorate the occupational challenges, as a transaction with the environment<sup>60</sup>. However, not all older adults were afforded the same opportunity when considering their interaction with their environment. This is largely due to South Africa's complex history owed to the Apartheid regime that has kept many South Africans, including older adults, suspended in a state of lesser privilege. Not all older adults underwent a changed perspective within similar contexts and with the same opportunities.

In responding to change and life transitions, the findings from the present meta-synthesis indicated that older adults experienced occupational adaptation because they altered the situation by reclaiming their roles and participating in alternate occupations to address the occupational challenge. This kind of adaptive gestalt response supported the older adults to configure their sensorimotor, cognitive, and psychosocial involvement in dealing with the occupational disruptions. It was evident that the older adults' occupational responses reflected a relative mastery, as they adapted their environment to achieve role expectations. This corroborates Schkade and Schultz's assumption that relative mastery is achieved when the person experiences the occupational response as efficient (use of time and energy), effective (production of desired result) and satisfying to self and society<sup>1</sup>.

The older adults' state of occupational functioning was changed due to the South African COVID-19 lockdown restrictions and subsequent disruptions in occupational engagement. However, the findings indicated that the older adults strived for normality as far as possible, such as using technology to compensate for the loss of connection with others, which reinforced occupational adaptation. The findings are in agreement with recent studies that supported the use of technology to enhance the relatedness, mental and psychological needs of well-being<sup>62</sup>. It was evident the use of technology facilitated occupational adaptation, as older adults were able to connect with others using a variety of social media platforms such as WhatsApp to video call church friends and receive sermons. In accordance with occupational adaptation, the findings of the meta-synthesis indicated that the older adults developed a sense of competence, self-efficacy, and identity, which corroborate other studies<sup>60,63,64,65</sup>. This process of dynamic occupational adaptation by the older adults speaks to a higher degree of resilience to environmental barriers.

It was evident in the sub-theme, *Strengthening the spiritual self* that the older adults strived to address the occupational disruptions, and occupational injustices emanating from the South African COVID-19 lockdown related restrictions that resulted in coloniality of being. Therefore, the findings validated that engagement in eudemonic occupations appeared as adaptive strategies that sustained older adults' adaptiveness so that they may pursue their purpose in life as valuable contributors to society<sup>59</sup>.

Engagement in centering<sup>45,46</sup> occupations such as meditation, attending online church and reading bible appeared as religious and spiritual activities that enabled the older adults

to experience occupational adaptation, which supported their occupational identity. It is noted that the centring occupations<sup>45,46</sup> was related to human flourishing including happiness and life satisfaction, mental and physical health, meaning and purpose, and close social relationships<sup>61</sup>.

## CONCLUSION

This study explored the adaptiveness of older adults to disruptions experienced during the South African COVID-19 lockdown. Evidence illustrated that older adults experienced disruptions in roles, routines, social participation, travel and community mobility, work participation and occupations linked to religious observance. These disruptions arose secondary to the South African government's top-down approach in the implementation of lockdown restrictions that, most significantly, stripped citizens of autonomy and resulted in the experience of powerlessness. The disruptions led to the deterioration of individual and population well-being as indicated by sadness, emptiness, helplessness, powerlessness, feeling neglected, forgotten, and burdensome. To surmount their deteriorating mental well-being consequent to disruptions in occupational engagement, older adults improved their state of adaptiveness through (a) a change in perspective; (b) adapting to new environments; (c) adapting by using technology; (d) expanding roles and routines; and (e) strengthening the spiritual self. Most noteworthy, participants reflected on strengthening the spiritual self through engagement in eudemonic occupations, which included the occupational gifts; contemplative, contributing, connecting, and centring occupations. This promoted a reconnection to the self, the community, and a greater life purpose, thus, encouraging and improving resilience to negotiate barriers.

The COVID-19 lockdown was monumental in highlighting the degree of socio-political change that is needed to transform many of the persisting fragments pertaining to society when considering privilege. The South African population should be commended for their increased resilience to transcend many complex barriers and adapt. This continual state of adaptation against environmental barriers however, should not become customary as it has the potential for individuals to neglect their own occupational desire, needs and wants thus laying the potential for a disconnection from one's occupational identity. Future research can look at this relationship or could explore health outcomes of persons unable to develop a state of adaptiveness to overcome disruptions in occupational engagement.

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## Declaration of Conflicts of Interest

The authors declare no conflicts of interest.

## Author contributions

Aaqil de Vries was involved in the literature review and data analysis and took the lead in writing the manuscript.

Thuli Godfrey Mthembu supervised some of the student research projects which were part of the meta-analysis; and contributed to the conceptualisation of the study, development of the research proposal, literature review, data analysis and writing the manuscript. Lisa Wegner supervised some of the student research projects which were part of the meta-analysis; lead the conceptualisation of the study, development of the research proposal and data analysis; and contributed to writing the manuscript.

## REFERENCES

- Schultz S, Schkade J. Occupational adaptation: Toward a holistic approach for contemporary practice, Part 2. *The American Journal of Occupational Therapy*. 1992;46(10):917-925. <https://doi.org/10.5014/ajot.46.10.917>
- Law M, Cooper B, Strong S, Stewart D, Rigby P, Letts L. The person-environment-occupation model: A transactive approach to occupational performance. *Canadian Journal of Occupational Therapy*. 1996;63(1):9-23. <https://doi.org/10.1177%2F000841749606300103>
- Kielhofner G, Forsyth K, Barrett L. The model of human occupation. In Crepeau EB, Cohn ES, Schell BAB, Willard & Spackman's occupational therapy, editors. 10th ed. Lippincott Williams & Wilkins; 2003. p. 212-219.
- Blacker D, Broadhurst L, Teixeira L. The role of occupational therapy in leisure adaptation with complex neurological disability: A discussion using two case study examples. *NeuroRehabilitation*. 2008;23(4):313-319. <https://doi.org/10.3233/NRE-2008-23404>
- Lexell E, Iwarsson S, Lund M. Occupational adaptation in people with multiple sclerosis. *OTJR: Occupation, Participation and Health*. 2010;31(3):127-134. <https://doi.org/10.3928/15394492-20101025-01>
- Cahill M, Connolly D, Stapleton T. Exploring occupational adaptation through the lives of women with multiple sclerosis. *British Journal of Occupational Therapy*. 2010;73(3):106-115. <https://doi.org/10.4276/030802210X12682330090415>
- O'Leary L. Minding our mental health as our routines adjust to the coronavirus outbreak [Internet]. St Patrick's Mental Health Services. 2020 [cited 8 July 2021]. Available from: <https://www.stpatricks.ie/media-centre/blogs-articles/2020/march/new-routine>
- Cloete L, Mthembu T, Christopher C, Gretschel P. Beating COVID-19 by going back to the basics at home. *Parliamentary Newsletter*. 2020;2(4), 7.
- Johansson A, Mishina E, Ivanov A, Björklund A. Activities of daily living among St Petersburg women after mild stroke. *Occupational Therapy International*. 2007;14(3):170-182. <https://doi.org/10.1002/oti.232>
- Du Toit A. Outbreak of a novel coronavirus. *Nature Reviews Microbiology*. 2020;18(3):123-123. <https://doi.org/10.1038/s41579-020-0332-0>
- Zhu N, Zhang D, Wang W, Li X, Yang B, Song J et al. A novel coronavirus from patients with pneumonia in China, 2019. *New England Journal of Medicine*. 2020;382(8):727-733. <https://doi.org/10.1056/NEJMoa2001017>
- Sohrabi C, Alsafi Z, O'Neill N, Khan M, Kerwan A, Al-Jabir A et al. World Health Organization declares global emergency: A review of the 2019 novel coronavirus (COVID-19). *International Journal of Surgery*. 2020; 76:71-76. <https://doi.org/10.1016/j.ijsu.2020.02.034>
- Kim A, Nyengerai T, Mendenhall E. Evaluating the mental health impacts of the COVID-19 pandemic: perceived risk of COVID-19 infection and childhood trauma predict adult depressive symptoms in urban South Africa. *Psychological Medicine*. 2020;1-13. <https://doi.org/10.1017/S0033291720003414>
- Kaseje N. Why Sub-Saharan Africa needs a unique response to COVID-19 [Internet]. World Economic Forum. 2020 [cited 22 June 2021]. Available from: <https://www.weforum.org/agenda/2020/03/why-sub-saharan-africa-needs-a-unique-response-to-COVID-19/>
- Adhikari S, Meng S, Wu Y, Mao Y, Ye R, Wang Q et al. Epidemiology, causes, clinical manifestation and diagnosis, prevention, and control of coronavirus disease (COVID-19) during the early outbreak period: a scoping review. *Infectious Diseases of Poverty*. 2020;9(1):29. <https://doi.org/10.1186/s40249-020-00646-x>
- Ostchega Y, Hughes J, Zhang G, Nwankwo T, Graber J, Nguyen D. Differences in hypertension prevalence and hypertension control by urbanization among adults in the United States, 2013-2018. *American Journal of Hypertension*. 2021; 35(1): 31-41. <https://doi.org/10.1093/ajh/hpab067>
- Shahid Z, Kalayanamitra R, McClafferty B, Kepko D, Ramgobin D, Patel R et al. COVID-19 and older adults: What we know. *Journal of the American Geriatrics Society*. 2020;68(5):926-929. <https://doi.org/10.1111/jgs.16472>
- Centers for Disease Control and Prevention. Covid-19. 2022 [cited 24 July 2022]. Available from: <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-with-medical-conditions.html>
- Nwosu C, Oyenubi A. Income-related health inequalities associated with the coronavirus pandemic in South Africa: A decomposition analysis. *International Journal for Equity in Health*. 2021;20(1). <https://doi.org/10.1186/s12939-020-01361-7>
- Stiegler N, Bouchard J. South Africa: Challenges and successes of the COVID-19 lockdown. *Annales Médico-Psychologiques, Revue Psychiatrique*. 2020;178(7):695-698. <https://doi.org/10.1016/j.amp.2020.05.006>
- Niehaus I. From AIDS to Covid-19 in South Africa: Thoughts from an Uxbridge Apartment. *African Arguments*. 2020 [cited 24 July 2022]. Available from: <https://africanarguments.org/2020/04/from-aids-to-covid-19-in-south-africa-thoughts-from-an-uxbridge-apartment/>
- Hara M, Ncube B, Sibanda D. Water and sanitation in the face of COVID-19 in Cape Town's townships and informal settlements. *PLAAS*. 2020 [cited 24 July 2022]. Available from: [https://www.researchgate.net/publication/343588510\\_Water\\_and\\_sanitation\\_in\\_the\\_face\\_of\\_Covid-19\\_in\\_Cape\\_Town's\\_townships\\_and\\_informal\\_settlements](https://www.researchgate.net/publication/343588510_Water_and_sanitation_in_the_face_of_Covid-19_in_Cape_Town's_townships_and_informal_settlements)
- Gumede W. Latest - SA faces food riots and breakouts from the lockdown - Wits University. The University of the Witwatersrand, Johannesburg. 2020 [cited 24 July 2022]. Available from: <https://www.wits.ac.za/covid19/covid19-news/latest/sa-faces-food-riots-and-breakouts-from-the-lockdown.html>
- Evans J. 'The gun was directly in my face' - multiple shops looted in Manenberg. *News24*. 2022 [cited 24 July 2022]. Available from: <https://www.news24.com/news24/SouthAfri->

- ca/News/the-gun-was-directly-in-my-face-multiple-shops-looted-in-manenberg-20200414
25. Hungry South Africans clash with police amid Covid-19 lockdown. *New Straits Times*. 2020 [cited 24 July 2022]. Available from: <https://www.nst.com.my/world/world/2020/04/584442/hungry-south-africans-clash-police-amid-covid-19-lockdown>
  26. Chabalala J. Police brutality under lockdown: Public has 'no faith' in cops. *News24*. 2020 [cited 24 July 2022]. Available from: <https://www.news24.com/news24/southafrica/news/police-brutality-under-lockdown-members-of-public-have-no-faith-in-cops-20200812>
  27. Borat H, Köhler T. Lockdown economics in South Africa: Social assistance and the Ramaphosa stimulus package. *Brookings*. 2020 [cited 24 July 2022]. Available from: <https://www.brookings.edu/blog/africa-in-focus/2020/11/20/lockdown-economics-in-south-africa-social-assistance-and-the-ramaphosa-stimulus-package/>
  28. Durocher E, Gibson B, Rappolt S. Occupational justice: A conceptual review. *Journal of Occupational Science*. 2013;21(4):418-430. <https://doi.org/10.1080/14427591.2013.775692>
  29. Townsend E, Wilcock A. Occupational justice and client-centred practice: A dialogue in progress. *Canadian Journal of Occupational Therapy*. 2004;71(2):75-87. <https://doi.org/10.1177/000841740407100203>
  30. Wilcock A. An occupational perspective of health. *Slack Incorporated*; 2006.
  31. Kronenberg F, Pollard N. Overcoming occupational apartheid: A preliminary exploration of the political nature of occupational therapy. *Occupational therapy without borders: Learning from the spirit of survivors*. 2005;1:58-86.
  32. Whiteford G. Occupational deprivation: Global challenge in the new millennium. *British Journal of Occupational Therapy*. 2000;63(5):200-204. <https://doi.org/10.1177/2F030802260006300503>
  33. Galvaan R. The contextually situated nature of occupational choice: Marginalised young adolescents' experiences in South Africa. *Journal of Occupational Science*. 2014;22(1):39-53. <https://doi.org/10.1080/14427591.2014.912124>
  34. Nizzero A, Cote P, Cramm H. Occupational disruption: A scoping review. *Journal of Occupational Science*. 2017;24(2):114-127. <https://doi.org/10.1080/14427591.2017.1306791>
  35. Klinger L. Occupational adaptation: Perspectives of people with traumatic brain injury. *Journal of Occupational Science*. 2005;12(1):9-16. <https://doi.org/10.1080/14427591.2005.9686543>
  36. Eklund M, Orban K, Argentzell E, Bejerholm U, Tjörnstrand C, Erlandsson L et al. The linkage between patterns of daily occupations and occupational balance: Applications within occupational science and occupational therapy practice. *Scandinavian Journal of Occupational Therapy*. 2016;24(1):41-56. <https://doi.org/10.1080/11038128.2016.1224271>
  37. Doroud N, Fossey E, Fortune T. Recovery as an occupational journey: A scoping review exploring the links between occupational engagement and recovery for people with enduring mental health issues. *Australian Occupational Therapy Journal*. 2015;62(6):378-392. <https://doi.org/10.1111/1440-1630.12238>
  38. Nelson D. Why the profession of occupational therapy will flourish in the 21st Century. *The American Journal of Occupational Therapy*. 1997;51(1):11-24. <https://doi.org/10.5014/ajot.51.1.11>
  39. Nelson DL, Jepson-Thomas J. Occupational form, occupational performance, and a conceptual framework for therapeutic occupation. *Perspectives in human occupation: Participation in life*. 2003:87-155.
  40. Deci E, Ryan R. Hedonia, eudaimonia, and well-being: an introduction. *Journal of Happiness Studies*. 2006;9(1):1-11. <https://dx.doi.org/10.1007/s10902-006-9018-1>
  41. Huta V, Waterman A. Eudaimonia, and its distinction from hedonia: Developing a classification and terminology for understanding conceptual and operational definitions. *Journal of Happiness Studies*. 2013;15(6):1425-1456. <https://doi.org/10.1007/s10902-013-9485-0>
  42. Ryan R, Deci E. On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*. 2001;52(1):141-166. <https://doi.org/10.1146/annurev.psych.52.1.141>
  43. Waterman A, Schwartz S, Conti R. The implications of two conceptions of happiness (Hedonic Enjoyment and Eudaimonia) for the understanding of intrinsic motivation. *Journal of Happiness Studies*. 2006;9(1):41-79. <https://doi.org/10.1007/s10902-006-9020-7>
  44. Hayward C, Taylor J. Eudaimonic Well-being: Its Importance and Relevance to Occupational Therapy for Humanity. *Occupational Therapy International*. 2011;18(3):133-141. <https://doi.org/10.1002/oti.316>
  45. Thibeault R. Occupational gifts. In McColl M, editor. *Spirituality and occupational therapy*. 2nd ed. CAOT-ACE; 2011. p.111-120.
  46. Zafran H. Occupational Gifts in the Time of a Pandemic. 2020. Available from: <https://www.mcgill.ca/spot/article/occupational-gifts-time-pandemic>
  47. Timulak L. Meta-analysis of qualitative studies: A tool for reviewing qualitative research findings in psychotherapy. *Psychotherapy Research*. 2009;19(4-5):591-600. <https://doi.org/10.1080/10503300802477989>
  48. Hall HR, Roussel LA. *Evidence-Based Practice: An integrative approach to research, administration, and practice*. Burlington, MA: Jones & Barlett Learning; 2014.
  49. Allmark P. Should research samples reflect the diversity of the population? *Journal of Medical Ethics*. 2004;30(2):185-189. <https://doi.org/10.1136/jme.2003.004374>
  50. Patton MQ. *Qualitative research and evaluation methods*. 3rd ed. Thousand Oaks, CA: Sage Publications; 2002.
  51. Goodman L. Comment: On respondent-driven sampling and snowball sampling in hard-to-reach populations and snowball sampling not in hard-to-reach populations. *Sociological Methodology*. 2011;41(1):347-353. <https://doi.org/10.1111/j.1467-9531.2011.01242.x>
  52. Braun V, Clarke V. Using thematic analysis in psychology. *Qualitative Research in Psychology*. 2006; 3(2): 77-101. <https://doi.org/10.1191/1478088706qp0630a>
  53. Krefting L. Rigor in qualitative research: The assessment of trustworthiness. *American Journal of Occupational Therapy*. 1991; 45(3): 214-222. <https://doi.org/10.5014/ajot.45.3.214>
  54. Guba E, Lincoln Y. *Competing paradigms in qualitative research*. Thousand Oaks, Ca: Sage; 1994.
  55. Carter N, Bryant-Lukosius D, DiCenso A, Blythe J, Neville A. The Use of Triangulation in Qualitative Research. *Oncology Nursing Forum*. 2014;41(5):545-547.

- <https://doi.org/10.1188/14.ONF.545-547>
56. Korstjens I, Moser A. Series: Practical guidance to qualitative research. Part 4: Trustworthiness and publishing. *European Journal of General Practice*. 2017;24(1):120-124.  
<https://doi.org/10.1080/13814788.2017.1375092>
  57. Chen J. Daily social life of older adults and vulnerabilities during the covid-19 pandemic. *Frontiers in Public Health*. 2021;9:637008. <https://doi.org/10.3389/fpubh.2021.637008>
  58. Maldonado-Torres N. ON THE COLONIALITY OF BEING. *Cultural Studies*. 2007;21(2-3):240-270.  
<https://doi.org/10.1080/09502380601162548>.
  59. Monahan C, Macdonald J, Lytle A, Apriceno M, Levy S. COVID-19 and ageism: How positive and negative responses impact older adults and society. *American Psychologist*. 2020;75(7):887-896. <https://doi.org/10.1037/amp0000699>
  60. Grajo L, Boisselle A, DaLomba E. Occupational adaptation as a construct: A scoping review of literature. *The Open Journal of Occupational Therapy*. 2018;6(1):6.  
<https://doi.org/10.15453/2168-6408.1400>
  61. van der Weele T. Religious communities and human flourishing. *Current Directions in Psychological Science*. 2017;26(5):476-481. <https://doi.org/10.1177/2F0963721417721526>
  62. Goldschmidt K. The COVID-19 Pandemic: Technology use to Support the Wellbeing of Children. *Journal of Pediatric Nursing*. 2020;53:88-90. <https://doi.org/10.1016/j.pedn.2020.04.013>
  63. Palma Candía O, HuesoMontoro C, Martí-García C, Fernández-Alcántara M, Campos-Calderón C, Montoya Juárez R. Understanding the occupational adaptation process and well-being of older adults in Magallanes (Chile): A Qualitative Study. *International Journal of Environmental Research and Public Health*. 2019; 16(19):3640.  
<https://doi.org/10.3390/ijerph16193640>
  64. Mthembu TG, Wegner L, Roman N V. Spirituality in the occupational therapy community fieldwork process: A qualitative study in the South African context. *South Africa Journal of Occupational Therapy*. 2017; 47(1):16-23.  
<http://dx.doi.org/10.17159/2310-3833/2016/v46n3a4>.
  65. Firfirey N, Hess-April L. A study to explore the occupational adaptation of adults with MDR-TB who undergo long-term hospitalisation. *South African Journal of Occupational Therapy*. 2014; 44(3):18-24. Available from:  
[http://www.scielo.org.za/scielo.php?script=sci\\_arttext&pid=S2310-38332014000300006&lng=en](http://www.scielo.org.za/scielo.php?script=sci_arttext&pid=S2310-38332014000300006&lng=en).