

# COVID-19 and Employee Mental Health: The reality behind the rhetoric

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## Introduction

Life with COVID-19 and subsequent lockdown measures has changed everything familiar about 21st-century living and we find our inner world disrupted and our emotions in turmoil.

Coronavirus disease 2019 (COVID-19), an infectious disease caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), was first identified in December 2019 in Wuhan, China. On the 30<sup>th</sup> of January 2020 the WHO declared the outbreak a Public Health Emergency of International Concern, and a pandemic on 11 March. On 5 March 2020, Minister of Health, Dr Zweli Mkhize, confirmed that the virus spread to South Africa, with the first known patient being a citizen who tested positive upon his return from Italy.

On 13 May 2020, Antonio Guterres, Secretary-General of the United Nations (UN), urged all governments, civil society, health authorities, and other role players (including employers), to address mental health as an essential part of their responses to the COVID-19 pandemic. The UN published a Policy Brief regarding the need for mental health action stating that *"Although the COVID-19 crisis is, in the first instance, a physical health crisis, it has the seeds of a major mental health crisis as well if action is not taken"*. The UN predicts a long-term *upsurge in the number and severity of mental health problems globally because of the impact of the COVID-19 pandemic on people*. Also, the International Labour Organisation (ILO) and Institution of Occupational Safety and Health (IOSH) position mental health promotion during the return to work process as being an essential part of the OSH response to the COVID-19 pandemic. A mental illness crisis is looming as millions of people worldwide are surrounded by death and disease and forced into isolation, poverty and anxiety by the pandemic of COVID-19 according to UN health experts.

Early in June 2020, more than 6 million cases of COVID-19 have been reported in more than 188 countries, resulting in more than 380 000 deaths. In South Africa, by the 23<sup>rd</sup> of June, over 100 000 positive cases had been identified, 53 444 people had recovered, and 1991 people had died.

## Psychological impact of COVID-19

In public mental health terms, the primary psychological impact is elevated levels and rates of stress or anxiety. As social distancing measures were introduced to flatten the curve and contain the spread of the virus, many people's usual activities, routines or livelihoods were significantly impacted which lead to a rise in levels of loneliness, depression, harmful substance use, and suicidal behaviour. From the outset, there was particular concern about the impact the pandemic will have on the mental health of frontline health care workers in particular

"The impact of the pandemic on people's mental health is already extremely concerning," according to Dr Tedros Ghebreyesus, Director-General of the World Health Organization. "Social isolation, fear of contagion, and loss of family members is compounded by the distress caused by loss of income and

often employment.” Dr Dévora Kestel, Director of the Department of Mental Health and Substance Use at the World Health Organization, recommends the scaling-up and reorganisation of mental health services on a global scale to build a mental health system that is fit for the future. She suggests developing and funding national plans that shift care away from institutions to community services, ensuring coverage for mental health conditions in health insurance packages and building the human resource capacity to deliver quality mental health and social care in the community.

Prof Soraya Seedat, Head of the Department of Psychiatry at the University of Stellenbosch Medical School, suggests that it “may be prudent to over-estimate the mental health sequelae and the resources that will be required” in a News24 article on 27 May 2020. She quoted research that suggested, thirty months after the SARS outbreak in 2003, a third of survivors met criteria for any psychiatric disorder; a quarter met criteria for post-traumatic stress disorder (PTSD); and approximately 16% had depressive disorders.

Authors Horesh and Brown argue that, like other mass traumatic events, the Covid-19 pandemic is expected to result in PTSD, with typical features of hypervigilance (centered on protective measures to avoid infection), intrusive thoughts (related to infection, health, fears of dying), avoidance, and negative mood and cognitions (around fears of the world-changing and the future being bleak) that will be subjectively distressing and persistently impact on day-to-day functioning over time. They aptly liken COVID-19 to an ongoing “cardiac stress test” on the world’s infrastructures and systems, magnifying their functional and structural vulnerability, including that of the field of traumatic stress.

The South African Depression and Anxiety Group (SADAG, 2020) reported that calls to their help-line doubled since the beginning of the lockdown on 27 March. In an online survey in April 2020 they found 59% of respondents stating that they felt “stressed/very stressed” before lockdown, rising to 65% during the lockdown. The survey found the main challenges during lockdown to be:

- 55% - anxiety and depression
- 46% - financial stress and pressure
- 40% - depression
- 30% - poor family relations
- 12% - feelings of suicide

## Mental Health in the Context of the COVID-19 Disruption

In addition to the expected mental health issues as described above and reports of psychological distress since the onset of the COVID-19 pandemic, the concept of pre-traumatic stress disorder, albeit not considered mainstream psychiatry yet, at least warrants some attention at this time.

In 2013, American psychiatrist and climate change activist Dr Lise Van Susteren coined the term ‘pre-traumatic stress disorder’ (though the honour should properly go to satire website *The Onion*, which in 2006 featured an article on a condition with the same name) to describe stress reactions related to possible rather than past events. According to Van Susteren, the two conditions are phenomenologically alike, but in pre-traumatic stress disorder ‘we have in our minds images of the future that reflect what scientists are telling us’.

The most prominent study so far of pre-traumatic stress disorder was done in 2014 by Dorthe Berntsen and David C Rubin. They defined the condition as ‘disturbing future-oriented cognition and images as measured in terms of a direct temporal reversal of the conceptualisations of past-directed cognition in the PTSD diagnosis’. Looking at a group of Danish soldiers before, during and after their deployment to Afghanistan, Berntsen and Rubin found that pre-traumatic responses – involuntary intrusive images

and thoughts, high levels of arousal and attempts at avoidance – were experienced at the same level as post-traumatic responses. Their second finding was that pre-traumatic stress reactions are a strong predictor for the development of post-traumatic symptoms.

To measure the pre-traumatic responses of the soldiers, Bernstein and Rubin created the 'pre-traumatic stress reactions checklist (PreCL)', adapting the first eight items of the PTSD checklist contained in the DSM-IV – the then-current Diagnostic and Statistical Manual of Mental Disorders, published by the American Psychiatric Association – while leaving the remaining nine items unchanged.

In reconceptualising the temporality of trauma, Bernstein and Rubin are not so much laying the groundwork for a new pathology (anticipatory or pre-traumatic stress disorder is not found in the Diagnostic and Statistical Manual of Mental Disorders) in as much as they are attempting to expand our current understanding of PTSD.

'Future research', they write, 'should examine whether [the PreCL] also may be used as a screening instrument in relation to non-military traumatic events as well as other subjectively stressful events, such as exams, medical procedures, or childbirth.'

***Although everyone is experiencing crisis at some level, it can be argued, people are not experiencing it in the same way.*** Furthermore, some groups are more vulnerable to developing mental health issues during the COVID-19 pandemic, for example, those with existing mental illness, lower socioeconomic status, and individuals who experienced previous trauma (Burgess *et al*, 2019; Gray *et al*, 2003; Martin-Soelch & Schnyder, 2019)

Enter the concept of *Pre-Traumatic Stress Disorder (Pre-TSD)* which the authors postulate may contribute to the discourse around the psychological impact of the COVID-19 pandemic; a syndrome involving *involuntary, intrusive images, and flash-forwards of haunting events that could be experienced because of a major disruption* (Berntsen & Rubin, 2015; Bomyea, Risbrough, & Lang, 2012)

The result of Pre-TSD, as described above, is fear of the future and loss of control (feelings of constant uncertainty and insecurity). If these factors are not addressed proactively, the mental wellbeing of people is affected, possibly predisposing the individual to the development of anxiety, depression or PTSD (Wild *et al.*, 2016).

The symptoms of continuous pre-traumatic stress experiences are postulated to be (Heinrichs *et al.*, 2005; Elwood *et al.*, 2007; Wild *et al.*, 2016).

- Racing thoughts and constant worrying
- Constant feelings of uncertainty and insecurity
- Loss of objectivity and fearful anticipation
- Short-temperedness, irritability, impatience, and mood swings
- Indecisiveness
- Inability to focus and concentrate
- Forgetful- and absent-mindedness ("automatic mode" - doing without thinking)
- Poor judgment and risky decision-making

The characteristic COVID-19 related concerns that could predispose to pre-traumatic stress are (United Nations, 2020; ILO, 2020; IOL. 2020(b)):

- Job-related concerns:
  - Lay-offs, pay cuts, future employment possibilities, commuting and travelling, social interaction at work.
- Personal concerns:
  - Ability to provide for the family, family health and wellbeing, personal health and wellbeing, childcare and schooling, and social interaction with family and friends.
- Country concerns:
  - Food security, the country's economy and its ability to recover from the disruption.

*However, in human behaviour, the presence of the negative, i.e., pre-traumatic stress symptoms, does not mean the absence of the positive, i.e., experiences of hope* (Demerouti, Mostert, & Bakker, 2010). Hope and a sense of "taking action" combined with excellent social support, at work and in life, are mitigating factors for stress experiences. These positive factors should be promoted to buffer the impact of pre-traumatic stress experiences on individual functioning.

## Research Background

### Assessment Instrument

Afriforte (the commercial arm of the WorkWell Research Unit, Faculty Economic and Management Sciences, NWU, Potchefstroom), developed an instrument to objectively assess the COVID-19 experiences of employees: *MyCovid19Experiences*®. The instrument was developed following a validation research project conducted during April 2020 ([www.lifewithcovid19.co.za/dashboard](http://www.lifewithcovid19.co.za/dashboard)). The *MyCovid19Experiences* instrument measures the following dimensions:

- Hope levels
- Concern levels
- A self-rating of Covid-19-specific concerns:
  - Job loss, Pay cuts, Ability to provide for family, Family health and wellbeing, Own health and wellbeing, Country's Economy, Food security, Commuting and travelling, Future Personal finances, Future Social interaction, Future Employment, and Childcare and Schooling
- The *norm-based* incidence of stress-related psychological (Pre-TSD risk) and stress-related physical ill-health symptoms

### Reliability and validity of the stress measurement

The stress-related psychological (Pre-TSD) and physical ill-health measurements consist of eight and seven items, respectively. Regarding the reliability of the constructs, statistical analysis indicated much higher alpha and omega reliability coefficients for both constructs in terms of the acceptable guideline in the social sciences of  $\alpha$  and  $\omega > 0.70$  (Sijtsma, 2009). In terms of validity, confirmatory factor analysis was conducted to model the factors. The factor loadings for the latent variables of both constructs were acceptable in terms of statistical cut-off points, i.e. loadings  $> 0.50$ ; small standard errors for all loadings indicating the accuracy of estimation, and also acceptable communalities in terms of variance explained (Kline, 2011). Therefore, the measurement properties of stress-related ill-health symptoms are acceptable according to the most stringent standards of statistical modelling today.

## Sample

A sample of 1656 South African employees who completed the *Mycovid19experiences* assessment between 15 May - 15 June 2020 were selected from the Afriforte database (South Africa in Lockdown 4 and 3). Although the sample is a non-probability convenient sample, it would provide a good indication of the experiences of South African employees over the 30-day timeframe. The characteristics of the sample are displayed in Table 3.

Table 3: *Characteristics of the Sample*

	#	% of sample
<b>Gender</b>		
Male	835	50.4%
Female	821	49.6%
<b>Age Group</b>		
20-29 (career enterers)	245	14.8%
30-39 (career builders)	549	33.1%
40-49 (mid-career)	472	28.5%
50-59 (mature career)	306	18.5%
> 59 (pre-retirement)	84	5.1%
<b>Children</b>		
Yes	1297	78.3%
No	359	21.7%
<b>Relationship Status</b>		
Divorced	91	5.5%
Engaged	77	4.6%
In a relationship: Seeing someone informally	68	4.1%
Life-partner	79	4.8%
Married	962	58.1%
Other	13	0.8%
Single	336	20.3%
Widowed	30	1.8%
<b>*Worker Type</b>		
No Data	1243	75%
Working On-site	37	2.2%
Working Remotely	376	22.7%

\* This breakdown was only available for selection by participants since 5 June 2020. The results of the “early” remote worker sample are discussed in the article.

## Results

### Concerns about the future

Participants were asked to rate how much more concerned they are about the future since the outbreak of the COVID-19 pandemic. The results are provided in Table 4.

Table 4: Concerns about the future

	<i>Not at all Concerned</i>	<i>A little bit Concerned</i>	<i>Quite Concerned</i>	<i>Very Concerned</i>	<i>Extremely Concerned</i>
<b>Overall sample (n=1656)</b>	<b>2%</b>	<b>17%</b>	<b>32%</b>	<b>30%</b>	<b>19%</b>
<b>Gender</b>					
<i>Male (n=835)</i>	2%	17%	32%	30%	19%
<i>Female (n=821)</i>	2%	17%	32%	30%	19%
<b>Age Groups</b>					
<i>20-29 (n=245)</i>	2%	15%	25%	<b>37%</b>	<b>21%</b>
<i>30-39 (n=549)</i>	2%	18%	31%	<b>30%</b>	<b>20%</b>
<i>40-49 (n=472)</i>	1%	19%	34%	27%	18%
<i>50-59 (n=306)</i>	3%	16%	34%	30%	17%
<i>&gt; 59 (n=84)</i>	4%	18%	40%	24%	14%
<b>Children</b>					
<i>Yes (n=1297)</i>	2%	16%	32%	<b>31%</b>	<b>20%</b>
<i>No (n=359)</i>	3%	21%	34%	27%	15%
<b>Worker Type</b>					
<i>Remote workers (n=376)</i>	3%	22%	32%	27%	16%

From the total sample, 49% of employees indicated high concern levels while only 2% reported not to be concerned about the future following the COVID-19 outbreak. There is no difference between males and females, however, concern levels appear to be higher for younger age groups (between 20-39 years) and employees with children.

### Hope about the future

Participants were asked to rate how hopeful they feel about the future given our current situation. The results are provided in Table 5.

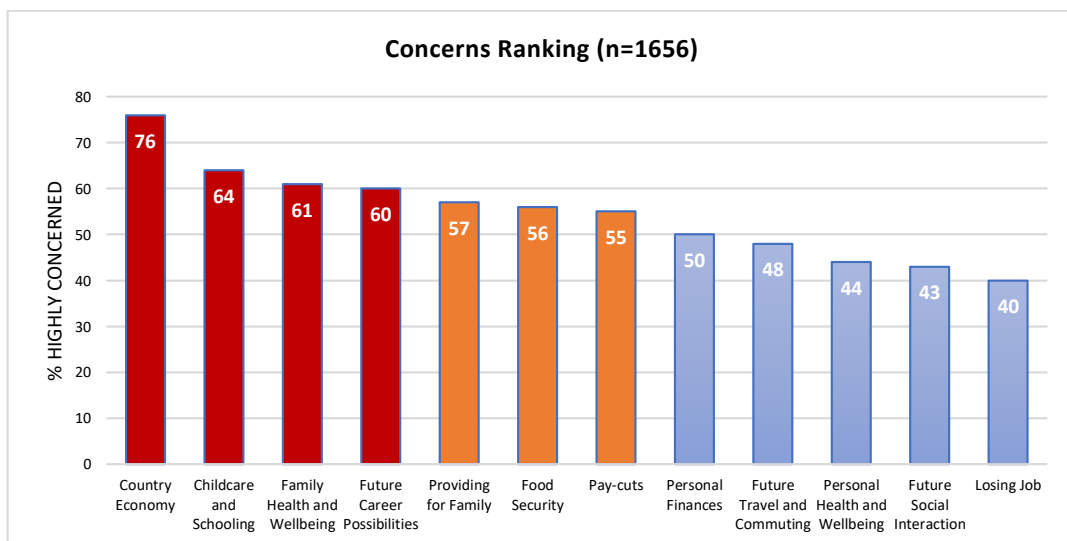
Table 5: *Hope about the future*

	<i>Extremely Hopeful</i>	<i>Very Hopeful</i>	<i>Quite Hopeful</i>	<i>A little bit Hopeful</i>	<i>Not at all Hopeful</i>
<b>Overall sample (n=1656)</b>	<b>11%</b>	<b>31%</b>	<b>35%</b>	<b>19%</b>	<b>4%</b>
<b>Gender</b>					
Male (n=835)	<b>13%</b>	33%	32%	18%	4%
Female (n=821)	9%	30%	38%	19%	4%
<b>Age Groups</b>					
20-29 (n=245)	11%	<b>37%</b>	29%	19%	4%
30-39 (n=549)	11%	31%	34%	21%	3%
40-49 (n=472)	11%	31%	38%	17%	3%
50-59 (n=306)	11%	31%	33%	19%	<b>6%</b>
> 59 (n=84)	7%	31%	36%	18%	<b>8%</b>
<b>Children</b>					
Yes (n=1297)	11%	31%	35%	18%	4%
No (n=359)	10%	33%	34%	20%	3%
<b>Worker Type</b>					
Remote workers (n=376)	10%	<b>34%</b>	<b>40%</b>	14%	2%

From the total sample, only 4% of employees indicated despair about the future (not at all hopeful); 77% of the sample experience decent hope levels. This is a particularly positive result as it indicates that although concern levels are evident the presence of the positive (HOPE) is also evident for a large proportion of the sample of South African employees. Slightly less overall hope is evident for older age groups (50 and older) and a larger portion of this age group experience despair. Also, remote workers appear to be more hopeful.

### Rating of concerns

Participants were asked to rate specific concerns about several aspects of their lives given the current Covid-19 situation. Figure 1 displays the ranked concern ratings.

Figure 1: *Concerns ranking for a sample of South African employees*

The top concerns for the sample of South African employees are the *Country's Economy*, *Childcare and Schooling*, *Family Health and Wellbeing* and *Future Career Possibilities*. *Providing for my Family*, *Food security*, and *Pay-cuts* are also ranked as areas of concern for over 50% of the employee sample. Interesting to note that only 40% of the sample of the sample ranked *Losing their jobs* as a huge concern. The top three concerns per biographical breakdown are provided in Table 6.

Table 6: *Top three concerns per biographical Breakdown*

	<i>Top Concern</i>	<i>2<sup>nd</sup> Concern</i>	<i>3<sup>rd</sup> Concern</i>
<b>Overall Sample (n=1656)</b>	<b>Country's Economy</b>	<b>Childcare and Schooling</b>	<b>Family Health and Wellbeing Future Career Possibilities</b>
<b>Gender</b>			
<i>Male (n=835)</i>	Country's Economy	Childcare and Schooling	Future Career Possibilities
<i>Female (n=821)</i>	Country's Economy	Childcare and Schooling	Family Health and Wellbeing
<b>Age Groups</b>			
<i>20-29 (n=245)</i>	Country's Economy	<b>Family Health and Wellbeing</b>	Future Career Possibilities
<i>30-39 (n=549)</i>	Country's Economy	Childcare and Schooling	Family Health and Wellbeing
<i>40-49 (n=472)</i>	Country's Economy	Childcare and Schooling	Future Career Possibilities
<i>50-59 (n=306)</i>	Country's Economy	<b>Food Security</b>	Future Career Possibilities
<i>&gt; 59 (n=84)</i>	Country's Economy	<b>Personal Finances</b>	<b>Providing for Family</b>
<b>Children</b>			
<i>Yes (n=1297)</i>	Country's Economy	Childcare and Schooling	<b>Providing for Family</b>
<i>No (n=359)</i>	Country's Economy	<b>Family Health and Wellbeing</b>	Future Career Possibilities
<b>Worker Type</b>			
<i>Remote (n=376)</i>	Country's Economy	Childcare and Schooling	Family Health and Wellbeing

The *Country's Economy* is the top concern for all biographical groups. However, for the pre-retirement employee group (>59), *Personal Finances* and *Providing for Family* are more dominant concerns, this might be related to fears that retirement provisions would be inadequate because of the impact of the Covid-19 disruption on the economy.

## Stress Results

### Pre-TSD risks (Psychological Distress)

This section shows the norm-based incidence of Pre-TSD risks, i.e. compared to the norm for psychological distress, an individual is at high risk, moderate risk, or low risk of experiencing Pre-TSD symptoms. The results of the participants are aggregated to a group level to indicate the group incidence of Pre-TSD risks. The typical Pre-TSD symptoms include, *inter alia*, frequent upsetting thoughts, constant feelings of uncertainty, mood swings, irritability, etc. Table 7 displays the incidence of Pre-TSD per biographical group.



Table 7: Pre-TSD per biographical group

<i>Norm-based Incidences</i>	<i>High Pre-TSD risk</i>	<i>Moderate Pre-TSD risk</i>	<i>Low Pre-TSD risk</i>
<b>Overall sample (n=1656)</b>	<b>46%</b>	<b>28%</b>	<b>26%</b>
<b>Gender</b>			
Male (n=835)	40%	27%	34%
Female (n=821)	<b>52%</b>	29%	19%
<b>Age Groups</b>			
20-29 (n=245)	42%	26%	32%
30-39 (n=549)	46%	<b>31%</b>	22%
40-49 (n=472)	45%	27%	28%
50-59 (n=306)	46%	25%	29%
> 59 (n=84)	<b>49%</b>	<b>33%</b>	<b>18%</b>
<b>Children</b>			
Yes (n=1297)	46%	28%	26%
No (n=359)	45%	30%	25%
<b>Worker Type</b>			
Remote workers (n=376)	<b>53%</b>	25%	22%

From the total sample of South African employees, **46%** are at high risk Pre-TSD and associated symptoms; only 26% are at low risk. Females (52%), Remote workers (53%), and the pre-retirement group (49%) are at higher risk. Further analysis indicated that widowed (n=30) and divorced (n=91) employees are also at higher risk of experiencing PTSD. High levels of psychological distress can result in risk behaviour, and the development of anxiety syndromes and depressive disorders in the long run. Pre-TSD experiences have a negative impact on the functioning of employees at work, i.e., lower productivity, increase in mistakes and errors, poorer customer service, and higher risks for accidents and injuries at work.

#### Stress-related Physical Distress

Experiences of chronic psychological distress result in people experiencing stress-related physical ill health symptoms such as, frequent headaches, nausea, heartburn, eating problems, palpitations, sleep problems, and muscle pains and aches. Chronic psychological and physical distress can cause changes in blood pressure, blood glucose and cholesterol levels, and cause impaired immune responses, to mention a few. This section displays the incidence of stress-related physical ill-health symptoms in terms of norm percentile categories, i.e. compared to the norm an individual is at high risk, moderate risk, or low risk of experiencing stress-related physical ill-health symptoms. Table 8 displays the incidence of Stress-related Physical Distress per biographical group.

Table 8: Stress-related physical distress per biographical group

<i>Norm-based Incidences</i>	<i>High Stress-related Physical Symptoms</i>	<i>Moderate stress-related Physical Symptoms</i>	<i>Low Stress-related Physical Symptoms</i>
<b>Overall sample (n=1656)</b>	<b>35%</b>	<b>30%</b>	<b>35%</b>
<b>Gender</b>			
Male (n=835)	24%	30%	46%
Female (n=821)	<b>47%</b>	30%	23%
<b>Age Groups</b>			
20-29 (n=245)	28%	33%	39%
30-39 (n=549)	35%	30%	35%
40-49 (n=472)	<b>38%</b>	31%	32%
50-59 (n=306)	<b>38%</b>	26%	36%
> 59 (n=84)	36%	29%	<b>25%</b>
<b>Children</b>			
Yes (n=1297)	36%	29%	34%
No (n=359)	32%	33%	35%
<b>Worker Type</b>			
Remote workers (n=376)	<b>49%</b>	30%	21%

From the total sample of South African employees, **35%** are experiencing a high incidence of stress-related physical ill health symptoms. Females (47%), Remote workers (49%), and mid- and mature-career employees show higher risks for experiencing stress-related physical symptoms. The latter result is a concern in terms of the overall physical health impact of the Covid-19 disruption on this older group of employees who might be more vulnerable for developing metabolic syndrome risks in future.

### Hope versus Psychological Stress

From a theoretical perspective, Hope (the presence of the positive) is a mitigating factor for the development of Pre-TSD. Figure 2 shows the relationship between Hope and the experience of Psychological Distress (Pre-TSD) for the sample of South African employees.

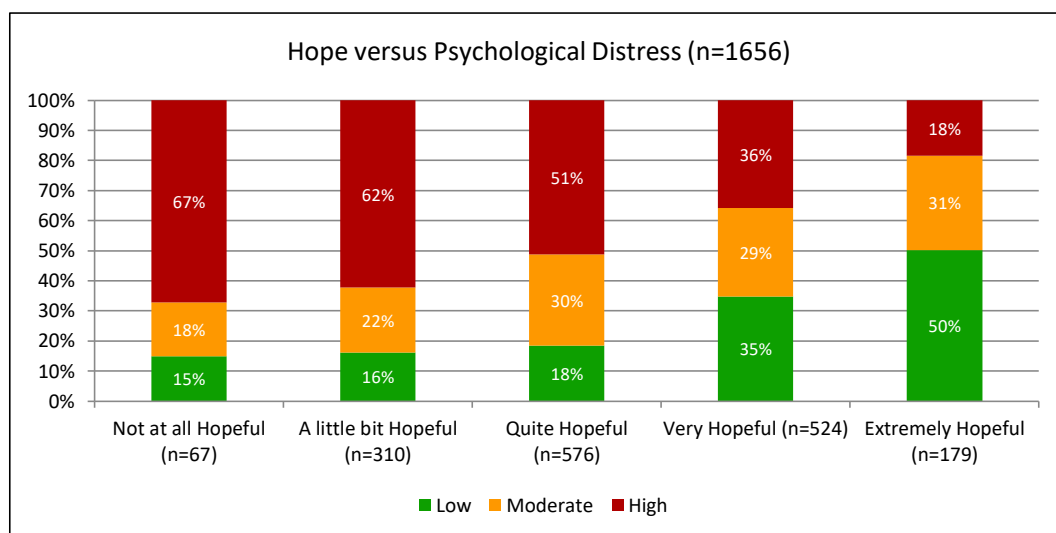


Figure 2: Hope versus Psychological Distress

The results for a sample of South African employees confirm the mitigating effect of Hope on the development of Pre-TSD. As Hope levels increase, the experience of Pre-TSD symptoms decrease for the sample of South African employees. Proactively, promoting Hope would have a positive impact on employee functioning. This is an important result for employers to take note of.

## Summary of Results

- High concerns levels about the future is evident for **49%** of employees following the COVID-19 outbreak. Concern levels are higher for career enterers and career builders (age group 20-39 years) and employees with children. There is no significant difference between male and female employees.
- Most employees are hopeful; decent hope levels are evident for **77%** of employees despite concerns about the future. Slightly less overall hope is evident for older age groups (50 and older) and a larger portion of this age group experiences *despair*. Remote workers appear to be more hopeful.
- The top concerns for the sample of South African employees are the *Country's Economy, Childcare and Schooling, Family Health and Wellbeing and Future Career Possibilities*. *Providing for Family, Food security, and Pay-cuts* are also ranked as areas of concern for over 50% of the employee sample. Only 40% of the sample ranked *Losing their jobs* as a huge concern.
- **46%** of employees are at high risk of Pre-TSD and associated symptoms. Females, Remote workers, the pre-retirement age group, and widowed and divorced employees are at higher risk of Pre-TSD in the sample. Risk behaviour, anxiety syndromes, and depressive disorders are future risks for 46% of employees.
- **35%** of employees are experiencing a high incidence of stress-related physical ill health symptoms. Females, Remote workers, and mid- and mature-career employees show higher risks for experiencing stress-related physical symptoms. The overall physical health impact of the Covid-19 disruption on this older group of employees is a concern – might contribute to metabolic syndrome risks in future.
- The results for the sample of South African employees support the mitigating effect of Hope on the development of Pre-TSD. As Hope levels increase, the experience of Pre-TSD symptoms decrease. Promoting Hope could have a positive impact on employee functioning. This is an important result for employers to take note of.

## Recommendations

Mental health service providers, the Medical insurance industry, and Employers should take note of these results.

*Mental health service providers* can expect an increase in patient volume. An objective assessment of an individual's experiences with a reliable instrument such as the *MyCovid19experiences@* could assist service providers to ascertain the level of mental health impairment for customised intervention purposes, e.g., an individual with high concern levels, low hope levels, and high levels of Pre-TSD and stress-related physical symptoms requires urgent assistance and mental health evaluation, including evaluating behavioural risks at a personal level, such as suicide ideation, substance abuse, and other possible dysfunctional risks.

The *medical insurance industry* should prepare for an increase in mental health expenses over the next two years. Medical insurers could consider making use of COVID-19 related mental health risk instruments for example the *Mycovid19experiences@* diagnostic instrument, as an insured benefit to members as part of their underwriting risk management and disease management strategies.

To proactively address the mental health risks of employees due to COVID-19 related concerns, collaboration between medical insurers and corporate employer groups is required.

## Conclusion

Employers are best positioned to proactively mitigate the mental health impact of the COVID-19 disruption on a large number of citizens. Mental health promotion should be part of the COVID-19 business recovery strategy. The COVID-19 disruption significantly increased the stress levels of employees and moreover, our work (and life) environments have changed drastically. Employees, in addition, need to adapt to these changes, adding to increased stress experiences.

Furthermore, it is well-known that high stress levels affect employee functioning at work and contribute to lower productivity and higher risks for mistakes and accidents in the workplace. Employers should ensure that they stay connected with staff by assessing the stress experiences and mental health of their staff objectively (understand where staff are) and facilitating an objective “touch base session” with teams. The purpose of a touch base session would be to normalise fears (we are all in the same boat), promote hope, create a sense of control by showing how being at work, working safely, and staying healthy mitigate COVID-19 fears and concerns.

Social support at work (team support) should also be promoted.

A fit-for-purpose “Employee Touch Base COVID-19 platform”, based on the results of this research, is available to employers to proactively address mental health risks in the workplace and set employees up for success during the business recovery process.

## References

Antonio Guterres Interview (13 May 2020): <https://www.un.org/en/coronavirus/mental-health-services-are-essential-part-all-government-responses-covid-19>

Berntsen, D. & Rubin, D.C. 2015. Pre-traumatic Stress Reactions in Soldiers Deployed to Afghanistan. *Clin Psychol Sci*, 3(5): 663–674. doi:10.1177/2167702614551766

Burgess, R., Jain, S., Petersen, I. & Lund, C. 2019. Social interventions: a new era for global mental health?. *The Lancet Psychiatry*. 7. 10.1016/S2215-0366(19)30397-9

Bomyea, J., Risbrough, V. & Lang, A.J. 2012. A consideration of select pre-trauma factors as key vulnerabilities in PTSD. *Clin Psychol Rev*. 32(7): 630–641. doi:10.1016/j.cpr.2012.06.008.

Demerouti, E; Mostert, K, & Bakker, A.B. 2010. Burnout and Work Engagement: A Thorough Investigation of the Independence of Both Constructs. *Journal of occupational health psychology*, 15(3), 209. DOI: 10.1037/a0019408

Elwood, L.S., Williams, N.L., Olatunji, B.O., & Lohr, J.M. 2007. Interpretation biases in victims and non-victims of interpersonal trauma and their relation to symptom development. *Journal of Anxiety Disorders*; 21(4):554–567. doi:10.1016/j.janxdis.2006.08.006. [PubMed: 16963221]

Gray, M.J., Pumphrey, J.E., & Lombardo, T.W. 2003. The relationship between dispositional pessimistic attributional style versus trauma-specific attributions and PTSD symptoms. *Journal of Anxiety Disorders*; 17(3):289–303. doi:10.1016/S0887-6185(02)00205-0. [PubMed: 12727123]

Heinrichs, M., Wagner, D., Schoch, W., Soravia, L.M., Hellhammer, D.H., & Ehler, U. 2005. Predicting post-traumatic stress symptoms from pre-traumatic risk factors: A 2-year prospective follow-up study in firefighters. *The American Journal of Psychiatry* 162(12):2276–2286. doi:10.1176/appi.ajp. 162.12.2276. [PubMed: 16330591]

ILO. 2020. OSH Professionals and Workplaces during COVID-19

IOL. 2020 (b). COVID-19 and the world of work: Impact and policy responses.

IOSH. 2020. IOSH Covid-19 policy position. <https://iosh.com/more/our-influence/our-policy-positions/iosh-covid-19-policy-position/>

Kline, R. B. (2011). *Principles and practice of structural equation modeling*. Guilford press.

Martin-Soelch, C. & Schnyder, U. 2019. Resilience and Vulnerability Factors in Response to Stress. *Frontiers in Psychiatry*, (10). DOI=10.3389/fpsy.2019.00732

McNally, N.J., Bryant, R.A., & Ehlers, A. 2003. Does early psychological intervention promote recovery from post-traumatic stress? *Psychological Science in the Public Interest*. 4:45–79.

WHO. 2011. *Psychological first aid: Guide for field workers*

Sijtsma, K. (2009). Reliability beyond theory and into practice. *Psychometrika*, 74(1), 169-173.

SADAG. 2020. <https://www.news24.com/news24/southafrica/news/lockdown-calls-to-mental-health-and-suicide-helplines-have-more-than-doubled-20200516>

United Nations. 2020. Policy Brief: COVID-19 and the Need for Action on Mental Health, UN 13 May 2020

Wild, J., Smith, K.V., Thompson, E., Bear, F., Lommen, M. & Ehlers, A. (2016). A prospective study of pre-trauma risk factors for post-traumatic stress disorder and depression. *Psychological Medicine*. -1. 10.1017/S0033291716000532.