



## Research Article

# Levels of Stress, Anxiety, and Depression in Tourism Workers in the Bali Province During the COVID-19 Pandemic

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## ABSTRACT

Stress, anxiety, and depression in tourism workers have increased during the COVID-19 pandemic, which are mental health problems that need to be watched out for. Mental health has become one of the most significant problems in the world, including Indonesia, especially during the COVID-19 pandemic. Seeing the significant role of mental health disorders in tourism workers accompanied by stress, anxiety, and depression can have an impact on the health of human resources in the tourism sector. The purpose of this study was to determine the level of stress, anxiety, and depression in tourism workers in the province of Bali during the COVID-19 pandemic. The sample of this study was 103 people aged 18-60 years who are active tourism workers in the Province of Bali, which was selected by convenience sampling using Google Forms. The research method was cross-sectional and analyzed using SPSS version 27. The study results showed that most of the research samples experienced severe stress, as many as 38 (36.9%). The majority of the study sample experienced very severe anxiety with 74 people (71.8%). Most of the research samples experienced very severe depression, with 65 respondents (63.1%). In conclusion, tourism sector workers suffer severe stress, anxiety, and depression during the COVID-19 pandemic.



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### INTRODUCTION

At the beginning of January 2020, corona, or what is known as COVID-19, began to become a hot topic. COVID-19 not only causes physical health concerns but also results in a number of psychological disorders. The new coronavirus's spread can impact people's mental health in different communities. Thus, it is essential to preserve the mental health of individuals and to develop psychological interventions that can improve the mental health of vulnerable groups during the COVID-19 pandemic (Salari et al., 2020). The COVID-19 virus has claimed many victims around the world. There is a fact that the Indonesian Hotel and Restaurant Association (PHRI) predicts that the hotel and restaurant industry will be hit hard and even almost collapse due to the impact of the majority of regions imposing large-scale social restrictions (*Pembatasan Sosial Berskala Besar* or PSBB) (Sujadi et al., 2023). Many hotels in the Bali area experienced the impact. Temporary solutions that hotels or tourism operators usually carry out require their employees to take leave, reduce working hours, reduce the salary received, and even force some employees to lay off to follow the WFH policy. Based on the facts above, each employee's status is affected by the guidelines set by the hotel and raised issues of mental health illness. Instead, job stress emerged as a significant mediator between these stressors and psychological well-being (Yoo, 2023).

Stress is a condition of tension that creates a physical and psychological imbalance where employees' emotions and thought processes become disrupted. High and low stress affects a person's dealing with the environment (Kang et al., 2021). According to the World Health Organization (WHO), the prevalence of stress events is relatively high where nearly 350 million people in the world

experience stress from a stress prevalence study conducted by the Health and Safety Executive in England involving a population of 487.000 in England (Irfan et al., 2018). According to the Indonesian Central Bureau of Statistics (BPS), cumulatively, there are 11,53 million people of working age who have been affected by the pandemic and are therefore unemployed out of a total of 208,54 million people of working age in Indonesia and recorded 704.000 people experiencing mental disorders, 608.000 of whom experience stress (Barzilay et al., 2020).

Anxiety and stress disorders are the most common psychiatric conditions worldwide. Worker who lose their job easily suffer from this mental illness, and it impairs the motivation to work and the quality of productivity. The decreasing number of tourists visiting travel destinations also worsens the effect of stress on employees, especially in the tourism field. Significant numbers of healthcare providers suffered from anxiety, depression, and stress during the COVID-19 outbreak (Gebreyesus et al., 2021).

Seeing the prominent role of mental health disorders in tourism workers, which are accompanied by stress, anxiety, and depression and can have an impact on the health of human resources in the tourism sector, researchers are moved to research the levels of stress, anxiety, and depression in tourism workers in the Bali.

### METHODS

This research was approved by the Ethical Committee of Health Research of the Faculty of Medicine and Health Sciences Warmadewa University by ethical number 355/Unwar/FKIK/EC-KEPK/VII/2023, dated 22 July 2023. This descriptive study was conducted by cross-sectional approach. The variables were only measured once to find out the level of stress, anxiety, and depression in tourism workers



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in the Province of Bali during the COVID-19 pandemic. Patient data is primary data obtained using the Depression Anxiety Stress Scales (DASS) questionnaire. The DASS is a 42-item self-report instrument designed to measure the three related negative emotional states of depression, anxiety, and tension/stress. The research was conducted in the Province of Bali. This research was conducted for three months, from October 2022 to December 2022. The sampling technique in this study was convenient sampling, which was done by randomly distributing *Google Forms* to tourism workers and selecting all tourism workers in

Bali Province as research samples. The sample of this research was 103 respondents. This study uses univariate analysis to describe an overview of the distribution of frequencies and percentages of any depression scale, anxiety scale, and stress scale. The data will be presented in the form of narrative and descriptive tables.

### RESULTS

The characteristics of the respondents based on age, gender, occupation, and address in this research are presented in Table 1.

**Table 1. Characteristics of Research Subject**

Variable	Frequency (n=103)	Percentage (%)
<b>Age</b>		
18-60 years	103	100
<b>Gender</b>		
Man	26	25,2
Woman	77	74,8
<b>Occupation</b>		
Tourism consultant	20	19,4
Hotel workers	26	25,2
Other workers in tourism	24	23,3
Businessman	16	15,5
Tour Guide	17	16,5
<b>Address</b>		
Badung	35	34,0
Bangli	3	2,9
Buleleng	2	1,9
Denpasar	30	29,1
Gianyar	8	7,8
Jembrana	2	1,9
Karangasem	3	2,9
Klungkung	3	2,9
Tabanan	17	16,5



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Table 1 above shows the subject's age in the range of 18-60 years old. Most of the research sample was female, with 77 people (74.8%) and 26 (25.2%) being male. The study results showed that most of the research sample worked as hotel workers as many as 26 (25.2%). At least 16 (15.5%) respondents worked as entrepreneurs. The majority of the research sample came from the Badung district, namely 35 (34.0%) respondents. A total of 30 research samples (29.1%) came from Denpasar. There were 17 (16.5%) respondents from Tabanan, 7.8% from Gianyar, and there were three respondents (3.9%) respondents from Bangli, Karangasem, and Klungkung. And there were 2 (1.9) respondents from Buleleng and Jembrana.

### Stress Level Measurement Results

There were 17,5% of workers presented without stress. However, more than 30% of tourism workers had severe stress or very severe stress, with a percentage of 32% and 36,9%, respectively. Table 2 describes the stress levels of the tourism workers.

### Anxiety Level Measurement Results

The majority of the study sample experienced very severe anxiety, with 74 people (71.8%), as many as 9 (8.7%) did not experience anxiety, as shown in Table 3.

### Depression Level Measurement Results

The majority of the study sample experienced very severe depression, with 65 (63.1%), as many as 14 (13.6%) did not experience depression, as shown in Table 4.

**Table 2.** Stress levels for tourism workers during the COVID-19 pandemic

Category	Frequency (n=103)	Percentage (%)
Normal	18	17.5
Light Stress	7	6,8
Moderate Stress	7	6,8
Severe Stress	33	32.0
Very Severe Stress	38	36,9

**Table 3.** Anxiety levels for tourism workers during the COVID-19 pandemic

Category	Frequency (n=103)	Percentage (%)
Normal	9	8,7
Mild Anxiety	5	4,9
Moderate Anxiety	8	7,8
Severe Anxiety	7	6,8
Very Severe Anxiety	74	71.8



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**Table 4.** Level of depression in tourism workers during the COVID-19 pandemic

Category	Frequency (n=85)	Percentage (%)
Normal	14	13,6
Mild Depression	7	6,8
Moderate Depression	9	8,7
Severe Depression	8	7,8
Very Severe Depression	65	63,1

## DISCUSSION

### Stress

The results of the study in Table 2 show that most of the research samples experienced very severe stress, as many as 38 (36.9%) with the highest questionnaire statement results often getting angry because of small/trivial things. This study's results align with previous research that acute stress can begin with workload and overtime work, and continue to become chronic stress among workers. Students also experienced high levels of stress and anxiety during the ongoing COVID-19 pandemic. (Verma et al., 2021). However, this is not in line with research that was conducted by Elvira in 2022, which stated that stress levels were in the moderate category. There is a significant positive correlation between the stress, depression, and anxiety levels of women and their death anxiety (Koç & Başgöl, 2022). This shows that each individual has a different strategy for dealing with stress. Strategies to deal with stress are recognizing stress, prevention, management, and rehabilitation (Karpenko et al., 2020). Stress experienced by tourism workers must be caused by the decrease in guests and salaries that is implicated by the number of decreased international and domestic guests during the COVID-19 pandemic. More than 40% of the subjects presented some degree of anxiety and 41.3% depression; the proportion of stress was < 30%. Of the subjects who experienced anxiety, 18.6% also had moderate to very severe depression or stress, limitation of jobs,

and increased household consumptive funds (Pérez-Cano et al., 2020; Thu Pham et al., 2023).

Recognizing the existence of stress in individuals can be done by identifying the causes/triggers of the changes that are felt. Stress can be prevented by exercising regularly. Examining depression in the hospitality and tourism industry becomes even more critical as mental health issues are increasing in the workplace (Kalargyrou et al., 2023). Exercise not only makes the body healthy but also improves mood. A good strategy for dealing with stress can reduce stress levels in individuals (Wu et al., n.d.).

### Anxiety

The majority of the study sample experienced very severe anxiety, with 74 people (71.8%), with the most significant number of respondents answering the questionnaire experiencing excessive anxiety in a situation but could be relieved if the thing/situation ended. The results of this study are in line with research that found that respondents experienced anxiety in the very severe category (Chela-Alvarez et al., 2022). This feeling of anxiety can appear due to a trigger that is caused by a feeling about bad things that can happen (Puspita Oktavioala & Rusydi, 2022). Anxiety can occur due to subjective feelings related to mental tension, which is disturbing as a general reaction from the inability to overcome a problem or the feeling of insecurity. Poor sleep quality, trouble



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focusing at work, being female, workplace loneliness, low levels of control over working hours, and low levels of physical activity were predictors of depression. Poor sleep quality, increased workload, and being female were predictors of anxiety. Poor sleep quality, trouble focusing at work, being female, financial concerns, and workplace loneliness were predictors of stress (Şentürk et al., 2021). In general, anxiety is subjective, which is characterized by feelings of tension, worry, and fear, and is accompanied by physiological changes, such as an increase in pulse rate. Job insecurity had a significant influence on depression, anxiety, and stress among tourism employees, and family financial pressure worsened the negative consequences of job insecurity on mental health (Elshaer & Azazz, 2023).

### Depression

The majority of the study sample had very severe depression (63.1%). During the pandemic, many people have experienced severe depression and fear of getting sick, leading to a range of mental health symptoms, including lack of motivation, anhedonia, fatigue, irritability, and sleep disturbances (Kupcova et al., 2023). The depressive triad consists of depressed feelings, difficulty thinking, and psychomotor sluggishness. Isolated people and the general population have experienced mental health problems due to social distancing policies, mandatory lockdown, and other psychosocial factors, and the prevalence of depression and anxiety significantly increased during the pandemic (Zhu et al., 2023). Depression of a person's feelings can be seen in a sad facial expression, crying easily, and even loss of appetite (Rey Acob et al., n.d.). Thinking difficulties develop from indifference and difficulty concentrating. Psychomotor slowness can be seen through activities that are not passionate. Anxiety and

depression during the COVID-19 pandemic and economic precarity were associated with high anxiety and depression among younger adults (Collier Villaume et al., 2023).

Depression can occur due to the interaction of neurotransmitters and biopsychosocial disturbances, which affect the pathophysiology of depression in a complex way (Porter et al., 2021). The neurotransmitter that has a significant role in depression is monoaminergic, which consists of dopamine (DA), serotonin (5-HT), and norepinephrine (NE). In the context of COVID-19, the work of tourism practitioners has been severely affected, causing depression and anxiety. Under the individual public crisis ability, the effect of psychological flexibility on tourism practitioners will improve the psychological condition. (Cong, n.d.). Other neurotransmitters that are considered to have a role in the occurrence of depression are gamma-aminobutyric acid (GABA), glutamate (GLUT), and brain-derived neurotrophic factor (BDNF) (Christasani et al., 2021). In people with depression, there will be an increase in the amount of the hormone cortisol (Yan et al., 2021). Prolonged hypercortisolemia can cause hippocampal atrophy, which also has the potential to cause depression. The COVID-19 pandemic stressors are more specific to the context of the health crisis, such as the intolerance of uncertainty, isolation, social distancing, the risk of contamination, and job security (Ayari, 2023).

### CONCLUSION

The results of this study showed that most of the subjects in this term, tourism workers, experienced very severe stress, very severe anxiety, and very severe depression. Further research must be conducted to analyze what factors influenced these phenomena, and in-depth interviews of each subject to explore the leading causes of stress, anxiety, and depression.



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