

# Anger and psychological well-being: A correlational study among working adults in Uttarakhand, India

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## ABSTRACT

**Background:** Anger is a completely normal, usually healthy, human emotion. However, when it gets out of control, it can become destructive. Uncontrollable anger can lead to serious problems at work and in personal relationships. A correlational study was conducted on anger and psychological well-being of working adults in a selected institute of Dehradun. **Objective:** The main aim was to identify the risk population and explore the relationship between anger and psychological well-being of working adults. **Materials and Methods:** Quantitative Survey Approach correlational design was used in the study. Quota sampling technique was used to select the study subjects. Data were collected from 210 working adults using socio-demographic performa, clinical anger assessment scale, and General Health Questionnaire (GHQ). **Result:** The result showed that the mean anger score was  $9.02 \pm 6.64$  and the range was 0-32. More than one-fourth of the study participants (76%) reported minimal clinical anger. The mean GHQ score was  $56.6 \pm 9.6$  and the range was 34–83. The lowest level of general health quality was found in the area of social dysfunction ( $21.6 \pm 3.8$ ). The result shows that anger was negatively correlated with psychological well-being ( $r = 0.4$ ,  $P \leq 0.01$ ). Domain-wise analysis showed that the anger was correlated with somatic symptoms, anxiety, insomnia, and depression. **Conclusion:** Anger and psychological well-being is negatively correlated. As anger increases, the probability of somatic symptoms, depression, and anxiety increases.


**KEY WORDS:** Anger; Psychological Well-being; Working Adults; Occupational Health

## INTRODUCTION

Human emotions are essential to our continued existence, but they can also do us a damage. Emotional trouble contributes immensely to the burden of human distress. Anger is one of the most essential emotions. Anger is usual though sometimes unwanted or unreasonable emotion that everybody experiences time to time.<sup>[1]</sup>

Stories, myths, and spiritual beliefs reveal the significant and influential role that anger has played in human life since the beginning of recorded history. Various philosophies of human personality, ethical conduct, and the search for insight in human behavior have struggled to conclude the essentials of anger. It is primarily linked to our depiction of personal and societal order and disorder. Everyone experience varying level of anger from mild annoyance and irritation to rage. It is a rejoinder to a perceived risk to self, dearest, and nearest one, property, our self-image, or some part of our individuality. Anger is an alarm that tells us that something is wrong.<sup>[2]</sup>

According to Dr. Howard Kassinove, professor of psychology at Hofstra University, when we become angry, the autonomic nervous system is aroused and allied hormonal

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and neurochemical changes.<sup>[3]</sup> These physiological reactions usually lead to increase in cardiovascular reaction, respiration and perspiration, flow of blood to active muscles, and in strength. As the anger persists, it affects many of the body systems, such as the cardiovascular, digestive, immune, and central nervous systems. Again, this may lead to increased risks of hypertension, stroke, heart disease, gastric ulcers, and bowel diseases as well as slower wound healing and a possible increased risk of some types of cancers.<sup>[4]</sup>

According to the British Association of Anger Management, nearly one-third of people (32%) said that they have a close friend or family associate who has difficulty in controlling his/her anger. More than one in ten (12%) said that they have trouble in controlling their own anger. Around one in four people (28%) said that they are bothered about how angry they feel sometimes. One in five of people (20%) said that they have broken a relationship or friendship with someone because of inappropriate behavior at the time of excessive anger. Around two-third (64%) were either strongly agree or agree that people, in general, are getting angrier. Fewer than one in seven (13%) of those people who said that they feel difficulty in controlling their anger and sought help for their anger problems. More than half (58%) of people do not know where to seek help if they needed regarding uncontrolled anger. Around eight in every ten (84%) strongly agree or agree that people should be encouraged to seek help if they are facing problems because of the anger.<sup>[5]</sup>

According to The Sunday Times Magazine, 45% of us regularly lose our temper at work, 38% of men are unhappy at work, and 27% of nurses have been attacked at work. One in twenty of us has had a fight with the person living next door, and one in five workers are subjected to violence at work.<sup>[6]</sup>

It is not possible to ignore the effects of anger on the brain. There are enough evidences which indicate that chronic stress can alter brain functioning at the cellular level. At Hotchkiss Brain Institute in Calgary, researchers have discovered that one of the effects of anger on the brain is neurons in the hypothalamus. The command center for stress responses in the brain can be compromised. In general, these neurons receive signals of different chemical that prompts them to switch on or off. Stress and anger compromise these functions and create risk to brain's ability to slow down.<sup>[7]</sup>

The problem of anger outburst is an increasing problem in the society. Robert D. Ramsey writes an article which was published in the magazine *Supervision* about the seemingly epidemic levels to which anger in our society has grown in recent years in. He stated that "It's a modern day epidemic, rage rules on the road, in the airways, at sports events and at work place as well"<sup>[8]</sup> A survey done by the U.S. Department of Justice reveals that 709 homicides incidences occurred at workplace, across America, and that around 2 million violent incidents occurred

in U.S. businesses including 1 million simple assaults and 400,000 serious assaults.<sup>[9]</sup> As per the Bureau of Labor Statistics data in 2011, from the year 1992 to 2010, there were 13,827 reported workplace homicide victims with an average of over 700 victims per year, in the United States.<sup>[10]</sup>

Researcher is a working adult. In daily life, she experienced a lot of complications which leads to distress and anger. After experiencing anger, many consequences are seen. Working people face extra pressure extra provocation in their day-to-day life. Due to the heavy workload, incidences of workplace arguments and anger are very common. As the frequency of these incidence increases, it starts affecting the attention and concentration, job performance, and relationship among the employees or we can say that it leads to some psychological and physical consequences. The researcher found it necessary to explore the level of anger and its relationship with psychological well-being.

### Aims and Objectives

The aims and objectives of the study were to identify the risk population and explore the relationship between anger and psychological well-being of working adults.

### MATERIALS AND METHODS

The study was conducted in a selected Institute of Dehradun. Population was divided into two groups: Health workers and non-health workers. Health workers were divided into three quotas: Medical, nursing, and paramedical. Non-health workers were divided in four quotas: Account staff, clerical staff, engineering staff, and other staff. 30 samples from each quota were selected using simple random sampling. The correlational study design was adopted for the study. The sample size was 210. Self-reported questionnaire technique was considered to be an appropriate technique for collecting data from the participants. The Standardized Clinical Anger Assessment Scale developed by Dr. William E. Snell, Jr. was used.<sup>[11]</sup> Clinical Anger Scale (CAS) was designed to measure the syndrome of clinical anger. The questionnaire has 21 items. The author of the tool categorized the anger score as follows minimal clinical anger (0–13), mild clinical anger (14–19), moderate clinical anger (20–28), and severe clinical anger (29–63). The test-retest reliability was 0.9 and internal consistency Cronbach alpha was 0.8. General Health Questionnaire-28 (GHQ-28) was used to assess psychological well-being, and it is a standardized tool developed by Goldberg (1960s and 1970s).<sup>[12]</sup> The GHQ 28 is frequently used as an indicator of psychological well-being. It has 28 items and Likert scoring pattern. The score is interpreted as higher the score, the poorer the psychological well-being. The test-retest reliability was 0.9, and Cronbach alpha was 0.8. After explaining the purpose of the study, written informed consent from participants was obtained.

**RESULT**

Both descriptive and inferential statistics were used. The analysis of the data was done based on the objectives and hypothesis of the study. Section 1 of the study deals with description of sociodemographic characteristics of subjects. Table 1 illustrates the frequency and percentage distribution of sociodemographic characteristics of study participants. Mean age of the study participants was 35 years with a standard deviation of 8.2 years and varied between 20 and 56 years. Around two-third (67%) of the study participants were male, the majority (57.6 %) of participants lives in joint family, and around three-fourth (78%) were married. Majority (57%) of the participants were non-health workers.

The mean of a number of family members was 5 with a standard deviation of 2.4 and ranged from 2 to 20. The mean of a number of children was 2 with a standard deviation of 1.2 and ranged between 0 and 6.

Section two deals with the interpretations of findings as per the study objectives. On analysis, it was found that around three-fourth (76%) of the study participants had minimal clinical anger, whereas only 1% ( $n = 2$ ) of subjects assessed to have severe clinical anger. The mean anger score was 9.02 with a standard deviation of 6.64 and the range was 0–32. Most of the participants in all the departments reported to have minimal clinical anger. Very few participants in nursing and other (miscellaneous) showed severe clinical anger.

The mean GHQ score was 56.6 with a standard deviation of 9.6 and the range was 34–83. The lowest level of general health quality was found in the area of social dysfunction ( $21.6 \pm 3.8$ ) followed by somatic symptom ( $14.2 \pm 3.4$ ), and general health quality related to depressive symptoms ( $9.4 \pm 3.1$ ) was better than other three areas.

Since anger score was not normally distributed, the non-parametric Spearman’s correlation was used to find correlation between anger and psychological well-being. Figure 1 shows that there was a positive correlation ( $r = 0.4$ ,  $P \leq 0.01$ ) between anger score and psychological well-being score which was statistically significant at the level of 0.01. Hence, it can be concluded that if anger score increases, the GHQ score also increases. As the GHQ score interpreted as higher the score poor the psychological well-being, the positive correlation shows negative relationship, and hence, if the anger increases, psychological well-being decreases.

Table 2 shows the correlation between anger score and GHQ score of specific domains of subjects. It reveals that anger score was positively correlated with somatic symptoms, insomnia/anxiety, and severe depression. Hence, if the anger increases, the psychological well-being related to somatic symptoms, insomnia/anxiety, and severe depression decreases. There was no significant correlation found between anger and social dysfunction.

**Table 1:** Socio-demographic characteristic of population

Demographic variable	Frequency (%)	
Sex		
Male	141 (67)	
Female	69 (33)	
Type of family		
Joint	121 (58)	
Nuclear	89 (42)	
Marital status		
Married	164 (78)	
Unmarried	46 (22)	
Occupation		
Health worker	90 (43)	
Non-health worker	120 (57)	
Education		
High school	12 (6)	
Intermediate	16 (8)	
Graduate	53 (25)	
PG or professional education	129 (61)	
	<b>Mean±SD</b>	<b>Range</b>
Age	35±8.2	20–56
Number of family members	5±2.4	2–20
Number of children	2±1.2	0–6

SD: Standard deviation

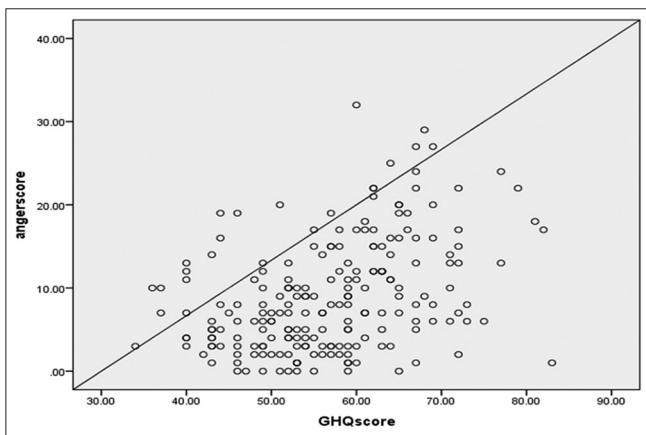
**Table 2:** Correlation of anger with specific domains of GHQ

Areas of GHQ correlated with anger	Correlation (r)	P value
Somatic symptoms	0.298	<0.001
Insomnia/anxiety	0.485	<0.001
Social dysfunction	-0.125	0.07
Severe depression	0.507	<0.001

GHQ: General health questionnaire

While assessing the association of anger with various demographic variable, it was found that anger was associated with gender ( $P = 0.001$ ) and anger score of women was significantly higher than that of men. Anger was associated with occupation ( $P = 0.04$ ), and health workers were assessed to have more anger score than that of non-health workers. Anger was associated with the department of subjects. It was interpreted that miscellaneous group of working adults assessed to have the highest level of anger ( $11.8 \pm 8.4$ ) followed by nurses ( $11.6 \pm 7.1$ ) and doctors ( $9.5 \pm 6.1$ ).

While assessing the association of psychological well-being with various demographic variable, it was found that psychological well-being was associated with the department they work. Comparatively clerical and paramedical workers assessed to have poor psychological well-being than others.



**Figure 1:** Correlation between anger score and psychological well-being  $r = 0.4$ ,  $P \leq 0.001$

## DISCUSSION

The findings of the study had been discussed as per the objectives and hypothesis of the present study with the reference other studies conducted in the same area. The results of the present study had shown that anger was negatively correlated to psychological well-being. As the level of anger increases, psychological well-being becomes poor. The present study found that as anger increases, the probability of somatic symptoms increases. The study also showed that as anger increases, depression and anxiety also increase.

Barrett and Mills<sup>[13]</sup> conducted a study to examine the mental health correlates of anger in the general population at Australia. The result showed that a range of mood, anxiety, and substance use disorders were found to be independently associated with symptoms of anger. Painuly *et al.*<sup>[14]</sup> conducted a study to explore anger attacks in depressive and anxiety disorders. The result showed that anger attacks were associated with more anxiety and irritability and poorer quality of life. The frequency of anger attacks had a positive correlation with depression, irritability, and aggression.

### Strength

- Standardized tools were used to collect them in the study.
- Psychological well-being was assessed in various domains and correlation was done with anger.

### Limitations of the Study

- Anger was assessed on a self-reported questionnaire.
- As all the participants were from the same institute where researcher was studying, so some participants were hesitant in expressing their response to questionnaire.

## CONCLUSION

Anger has many health consequences, and decreasing psychological well-being is one of the harmful consequences. The present study found that anger and psychological well-being was negatively correlated. As anger increases, the probability of somatic symptoms, depression, and anxiety increases.

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