



## The Effect of Laughter Yoga Program to Reduce Stress and Increase Psychological Happiness among College Students

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### Abstract

Current research aims to achieve research Objective and hypothesis through identify the significancy and non-significant difference between pre-test, post-test and follow-up post-test for both scales (stress, psychological happiness) before applying the laughter yoga program on (15) participants of the experimental group, and after the program applied. Laughter yoga program has been prepared by the researchers depended on literature. For the stress scale (Cohen et al; 2004-13 items), and for the psychological happiness scale (Hills & Argyle ,2002- 28 items) has been used. For sure the validity and reliability of scales were verified. Then, the two scales as pre-test were applied on the participants of the experimental group, and the program was applied, then post-test was achieved, then the data processing by using (Spss). the results showed: The laughter yoga program is effectiveness to decreases stress and increased the psychological happiness. The study has presented some recommendations and suggestions.



### About the Journal

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### **1.1 Research problem:**

Let's begin the study with this question, what is the power of laughter for health and happiness? Laughter is a universal language that transcends cultural barriers and brings people together. It is also a natural response to humor and joy, and it has been proven to have numerous physical, mental, and emotional benefits. Positive emotions and a sense of well-being is often associated with happiness, while nature is complex and involved. Therefore, stress has become an inevitable part of our lives, especially in today's demanding world. Whether it is due to work pressures, communication and relationship problems, health worries, or financial concerns, stress affects people all at same point. While, for being motivated to perform better in life, people do need a certain level of stress, but chronic stress can have negative effects on individual's physical, mental, and emotional well-being.

People have to find the effective strategies to decrease stress and increase emotional well-being in today's stressful life. Chronic stress has been linked to a wide range of physical health problems, such us cardiovascular disease, weakened immune system, high blood pressure, diabetes, asthma, sleep disturbances, and digestive disorders (Mariotti, 2015). Furthermore, unhealthy behavior like smoking, overeating, substance abuse, aggressive behavior, and extreme drinking, also have been contributed to stress, which increase the risk of developing chronic diseases (Kaplan et al; 2012). Furthermore, stress also related to mental and emotional health, it can lead to depression, mood swings, anxiety, and irritability. It can also, impair cognitive function such as difficulty concentrating, remembering information, learning new information, and problems with decision-making (Schwartz et al; 2015).

Numerous scientific studies have been conducted to investigate the effects of laughter on general health. These studies have commonly illustrated that laughter has a positive impact on both physical and mental health. it has been found to lower stress hormones, reduce blood pressure, increase the immune system, and improve cardiovascular health. Importantly, studies representing that the physical act of laughing, is related to chemical changes in the body like increasing the production of endorphins, which are the body's natural painkillers, that potentially reduce stress and anxiety, improve mood and quality of life (Louie et al; 2016).

Psychological happiness, also known as emotional well-being, refers to an individual's overall evaluation of their life and the extent to which they experience positive emotions and satisfaction. Happiness influenced by a various of factors, such as personality traits, genetics and life environment, which makes differences between person to person in emotional experiences (Roysamb et al; 2018). According to positive psychology, there are some key factors that contribute to psychological happiness, like positive emotion which considered as the most important factors. Thus, when individual experience positive emotion, such as joy and contentment, it will enhance well-being and increase long-term benefits for overall happiness (Celestine, 2017).

In conclusion, stress known as a silent killer especially in today's world, which affects individuals in diverse ways. Although, it may not be possible to abolish stress completely from individual lives, but people can learn to manage stress or use some practice to reduce its impact. Fortunately, laughter yoga is a powerful and accessible practice that offers a wide range of advantages for both individuals and communities. Also, it can be enjoyable practice for people of all ages and abilities. The benefits of laughter yoga are overwhelming, it promotes physical health by improving the immune system and reducing stress by combines laughter exercises with deep breathing techniques to promote overall well-being.

### **1.2 Research importance:**

In today's world, laughter yoga, stress management, and psychological happiness play a huge and importance role due to their various benefits for people well-being and their quality of life. Obviously, stress has become a common problem among people, hence an effective stress management is essential for maintaining physical and mental health.

According to Kataria (2013), laughter yoga has gained popularity worldwide because of its positive effect on mental and physical health. It also mentioned some importance reasons regarding laughter yoga such as: first, laughter yoga produces natural stress-relieving hormones like endorphins, which can help reduce stress levels and promote relaxation. Second, in order to maintain a good health, strengthening the immune system is essential specially in today's life, which laughter help to increase the production of antibodies and activates immune cells.

Third, laughter yoga brings people together. Means, it offers an opportunity for people to connect, build social support and bond with each other through sessions, that are essential for mental and emotional well-being. finally, and importantly laughter yoga enhances mental well-being, it encourages a positive mindset and helps people cope with challenges more successfully. It reduces negative emotions and stress, which leading to improved psychological well-being (Kataria & Madam, 2013). On the other hand, managing stress is essential as if stress become chronic, it can lead to various health problems such as, high blood pressure, heart disease and weakened immune system. Also, high level of stress can negatively impact productivity and performance. So, managing stress helps decrease the risk of these health problems and people can improve their concentration, focus and problem-solving abilities. In total, reducing stress helps to increase productivity and promotes overall well-being (Cohen et al., 2007).

Additionally, a better quality of life can gain through healthy emotion, reducing stress promotes emotional well-being and improves mood, which all lead to a better quality of life among individuals. Besides, people cannot have better relationship if they are not emotionally stable, so learning stress management techniques helps people communicate effectively and maintain healthy relationships (Cohen et al., 2007).

Thus, how people can reduce stress? Certainly, the key is being happy. Psychological happiness refers to a state of well-being and satisfaction with life. it is closely linked to mental health and reducing some risk of mental health disorders like anxiety and depression. In overall, the fundamental aspect of well-being is being happy, which lead to a higher quality of life and being free from stress (Lyubomirsky et al., 2005).

Undoubtedly, college students often experience feelings of loneliness, isolation and overwhelmed due to some reasons like high academic expectations and the pressure to maintain good grades, which lead to high level of stress and anxiety (American Psychological Association, 2020). Also, financial stress can be another subject among students as they face financial challenges, including tuition, fees, living expenses and student loans (Eisenberg et al., 2013). Fortunately, laughter yoga is often practiced in groups, which can promote social connection between students and a sense of belongings, it provides opportunity to connect with each other and talk about stressful moments during their college life and build supportive relationships (Kataria & Madan, 2014). On the other hand, laughter stimulates the brain and improves cognitive function like focus, problem-solving skill and creativity, that can be beneficial for college students in their academic activities (Bennett & Lengacher 2009) (Kim & Kim 2016).

### 1.3. Research Objective and hypothesis:

*First:* Preparing Laughter Yoga program.

*Second:* There is no significant relationship between stress and psychological happiness at the level of (0.05) among students.

*Third:* There are no significant differences on the mean scores of the experimental group in the pre-test and post-test of the stress scale at the level (0.05).

*Fourthly:* There are no significant differences on the mean scores of the experimental group in the pre-test and post-test of the psychological happiness scale at the level (0.05).

*Fifth:* There is no significant differences on the mean scores of the experimental group in the post-test and follow-up post-test for the stress and psychological happiness scales at the level (0.05).

### 1.4. Limitation:

The study focuses on college students from the Educational College of Salaheddin University (2023-2024).

### 1.5. Term Definition:

#### First: Laughter Yoga

According to Berk et al., (2001) laughter yoga is a mind-body practice that combines laughter exercises with yogic breathing to stimulate the release of endorphins, reduce stress hormones, and improve overall well-being.

Bennett and Lengacher (2009) also defined laughter yoga as a non-humor-based laughter therapy that involves intentional laughter exercises and deep breathing techniques to induce laughter and promote relaxation and stress reduction.

On the other hand, Kataria (2014) stated that laughter yoga is a unique form of exercise that combines voluntary laughter with yogic breathing techniques to promote physical, mental, and emotional well-being.

Another important explanation of laughter yoga is referred to Kataria (2014) who mentioned that, laughter yoga is a holistic approach to wellness that combines laughter exercises, deep breathing, and mindfulness techniques to reduce stress, enhance immune function, and improve overall quality of life.

Lastly, Kim and Kim (2016) stated that it is a group activity that utilizes laughter as a form of exercise to promote social connection, enhance mood, and improve overall mental health and well-being. Depending to the entire above explanations and definitions current study used the (Kataria, 2014) definition and theory for laughter yoga. And for Practical definition the study mentions the final results of this study.

#### Second: Stress

According to American Psychological Association (APA), stress is a physiological and psychological response to a perceived threat or challenges. It involves the activation of the body's stress response system, which release hormones such as cortisol and adrenaline, leading to increased heart rate, elevated blood pressure and heightened alertness.

Selye (1976), also defined stress as a state of psychological and physiological activation that occurs when individuals perceive an imbalance between the demands placed on them and the resources, they have available to cope with those demands.

On the other hand, Lazarus and Folkman (1984), stated that stress is a psychological and physiological response to events that are perceived as threatening or challenging, resulting in a state of heightened arousal and activation of the body's stress response system.

Another important explanation of stress is defined in a study published in the Annual Review

of Psychology by Cohen et al., (1995) as a condition or feeling experienced when a person perceives that demands exceed the personal and social resources the individual is able to mobilize

Also, The National Institute of Mental Health (NIMH), defines stress as the brain's response to any demand or pressure. It can be caused by both positive and negative events and can manifest as physical, emotional, or cognitive symptoms. Chronic stress can have detrimental effects on physical and mental health.

Lastly, The World Health Organization (WHO) mentioned that, stress is the body's response to environmental or internal demands that exceed its adaptive capacity. Depending to the entire above explanations and definitions current study used the (Cohen et al., 1995) definition and theory for stress. And for Practical definition the study mentions the final results of this study.

### **Third: Psychological Happiness**

According to Watson et al., (1988), happiness can be conceptualized as the experience of positive affect or emotions, such as joy, contentment, excitement, and pride. Positive affect is an essential component of well-being and is believed to contribute to overall life satisfaction

Also, Ryff and Keyes (1995) mentioned that psychological well-being encompasses various dimensions of positive functioning, including self-acceptance, positive relationships, autonomy, environmental mastery, purpose in life, and personal growth.

In a study published in the journal of happiness studies by Diener et al., (1999-2000), psychological happiness can be defined as a state of subjective well-being characterized by positive emotions, life satisfaction, a sense of fulfillment and purpose and the absence of negative affect.

On the other hand, Ryan and Deci (2001), stated that happiness is a sense of flourishing or personal growth. This perspective emphasizes the pursuit of meaningful goals and engagement in activities that align with personal values. Depending to the entire above explanations and definitions current study used the (Oxford, 2002) definition and theory for psychological happiness. And for Practical definition the study mentions the final results of this study.

## **2.1. Theoretical Background of Research Variables**

### **2.1.1 Laughter yoga**

Gelotology Theory by (Provine, 2000) this theory is the scientific study of laughter and its effects on the mind and body. This theory studies the different aspects of laughter, including its causes, social function and effects. It seeks to know how laughter effects on people's physical and mental well-being. It also explores the advantages of laughter on physical health, social interaction and emotional well-being. Depending on this theory, laughter has many positive effects on the body and mind. It releases endorphins, which are natural painkillers and mood enhancers. Laughing also reduces stress hormones, boosts the immune system, improves cardiovascular health, and enhances social bonding.

Laughter Yoga Theory by Dr. Madan Kataria (2002) this concept is unique and developed by him, which combines laughter exercise with yogic breathing techniques to promote physical and emotional well-being. The important point behind the theory of laughter yoga is that the body cannot differentiate between real laughter and intentional laughter, so even simulated laughter can have the same positive results of real laughter for body and mind.



The Theory of Psychophysiological Effect of Laughter by Bennett & Lengacher (2008) this theory examines the psychological and physiological effects of laughter on the body and mind. It mentions how laughter start the release of natural painkillers and mood enhancers hormones named endorphins and reduce the production of stress hormones like cortisol, which surely have dangerous effects on the body when regularly elevated. Thus, by reducing stress and releasing happy hormones, laughter promotes relaxation, enhance immune function by increasing the production of antibodies and activates immune cells, which help to fight off infections and diseases.

The Theory of Positive Psychology and Laughter by (Seligman, 2011) positive psychology, a field founded by Martin Seligman, focuses on the studying and promoting of human strengths and well-being. This theory investigates that laughter can be a powerful tool for increasing resilience and happiness. According to Seligman, laughter improves social connections, promotes positive emotions, and helps people cope with difficulty.

The Theory of Social Bonding and Laughter by (Provine, 2017) the most important point of this theory is the social sides of laughter, and its role in making connections with others and raising social bonding. It focuses on how laughter improves relationships, helps communication, and promotes a sense of belonging within groups. According to Provine, laughter is mostly a social behavior that helps strengthen social bonds, establish relationship, and promote group unity.

### **2.1.2 Stress:**

The Theory of General Adaptation Syndrome (GAS-1950) the theory proposed by Hans Selye, who mentioned that stress is a physiological reaction to any demand placed on the body. According to this theory, when people experience a stressor, the body goes through three stages of physiological response, which are the alarm stage, the resistance stage, and the exhaustion stage. In the first and early stage of the stress, when a stressor is encountered, the body starts its “fight-or-flight” response, and releasing stress hormones like adrenaline and cortisol. This stage make body prepared for responding stressor by increasing blood pressure, heart rate and alertness. Then, if the stressor persists, the body enters the resistance stage, which body’s adaptation and coping will occur. Yet, the body continues to release stress hormones and physiological changes occur to maintain a state of readiness to deal with the stressor. The body enter to the final stage, when the stressor lasts for prolonged period and unable to adapt.

Biopsychosocial Model of Stress by George Engel (1977) this theory stated that stress is a complex interaction between three fields, which are biological, social and psychological factors, with each influencing and being influenced by the others. It is obvious that biological factors refer to the genetic and physiological processes when individual experiencing a stressful situation. On the other hand, psychological factors involve the cognitive, behavioral and emotional features of a person’s experience, which all include an individual’s personality characters, emotional reactions, thoughts and beliefs, opinions and coping strategies. For instance, people with high level of self-efficacy can manage stress in better way. Lastly, social factors refer to environment frameworks in which people live, which include culture average, family dynamic, social support and socioeconomic position.

The theory of Social-Ecological Model of Stress by Urie Bronfenbrenner (1979), who mentions that stress is not only influenced by individual features but also by various level of the social, culture and physical environments in which people live. This theory contains of several levels such as microsystem, Mesosystem, exosystem and macrosystem. Stressors

within the first level of this theory involves conflicts with family members, friend relationships and workplace difficulties. The second level includes the relations and interactions between different microsystem. Moreover, the stressors at the exosystem level can involve discrimination, financial difficulties and lack of access to healthcare. The stressors at the last level of this theory refers to the social inequalities, political instability and culture standards. As a result, this theory mentions that individuals' experiences of stress are shaped by these wider environments, and it emphasizes the importance of considering environmental and social issues when understanding and addressing stress.

Transactional Model of Stress and Coping Theory by Lazarus & Folkman (1984) this framework proposes that stress is an outcome of an individual's evaluation of a condition and their ability to cope with it. Means that, when people feel a situation as exceeding their resources to cope with it effectively the stress will occur. This theory consists of two key mechanisms, primary and secondary evaluation. The primary involves the early appraisal of a situation to decide its significance. Means whether the situation is irrelevant, kindly-positive, or stressful. If the situation is observed as stressful, further evaluation is conducted to determine the possible threat, harm or challenge it poses. Then, individuals evaluate their coping strategies and available resources to deal with the stressor. This includes measuring their social support, personal strengths and problem-solving abilities. So, coping strategies are seen as adaptive efforts to reduce and manage the impact of stressors.

### **2.1.3 Psychological Happiness:**

Hedonic Adaptation Theory By (Brickman et al., 1978) this framework mentions that after an individual experiencing positive or negative occasions, they have a baseline level of happiness or subject well-being to which they tend to return to it, because it determined by their genetics and personality traits. Means, over the time people tend to adapt to changes in their environments and that long-term happiness is stable. This theory also states that the search of material possessions and external achievements may offer temporary increases in happiness, but these effects are short-lived. And, this is because people can adapt to their new possessions or attainments and the early happiness fades away.

Subjective Well-Being Theory by Ed Diener (1984) this theory emphasizes on individuals' personal evaluation of their own well-being and happiness. It proposes that happiness is determined by a combination of positive emotions, life satisfaction and deficiency of negative emotions. So, life satisfaction refers to an individual's total evaluation of their life and the degree to which they feel happy with it, also positive affect refers to the experience of positive emotions such as, happiness, joy and contentment. However, negative affect refers to the experience of negative emotions such as anger, sadness and anxiety.

Self-Determination Theory by (Deci & Ryan, 2000) this theory emphasizes the importance of competence, independence and relatedness in promoting psychological happiness. The theory recommends that when individuals have a sense of control over their lives, feel capable in their activities, and have meaningful connections with others, they are happiest in their lives. Furthermore, it suggests that people have some psychological needs such as the need to have control over one's actions, the need to feel capable in one's activities, and the need to feel connected or supported by others, so to experience a sense of belonging

Broaden-and-Build Theory by Barbara Fredrickson (2001) this theory suggests that positive emotions broaden individuals' thought-action repertoires and build personal resources, leading to increased psychological happiness. It emphasizes the importance of experiencing a wide range of positive emotions for overall well-being. According to this theory, positive emotion

increases people thought-action repertoires, be more creative, engage in a wider range of behavior and allowing them to think more flexibly. Moreover, attention, cognition and healthy behavior will be broadened by positive emotions.

## 2.2. Previous Studies

### *Studies relate to Laughter yoga, Stress and Psychological Happiness*

On the study conducted by Lee and Ann in (2017) aimed to investigate the effects of laughter therapy on depression, cognition, and sleep among the community-dwelling elderly. The researchers conducted a randomized controlled trial with a total of 60 members aged 65 years and older. In this study the participants were divided into two different groups, which were the control group who did not received any intervention, and laughter therapy group with received 16 sessions of therapy, twice a week for 8 weeks. Before and after intervention, the levels of depression, cognitive function and sleep quality have been measured among participants. In overall, the result of this study showed that the laughter therapy group significantly reduced stress and depression levels, improved mood and enhanced cognitive function compared to the control group.

Also, in another study showed by Bennett and Lengacher in (2008) aimed to explore the relationship between laughter and overall health outcome. The research found that laughter has a lot of positive effects on health outcomes, such as improving immune function by increasing the production of antibodies and activating cells. Besides, laughter has been found to have psychological benefits, like improving mood, enhancing social connections and importantly reducing stress and anxiety level. However, in another systematic analysis conducted by the same researcher in (2009) aimed to examine the effects of laughter yoga on stress and happiness outcomes. They mentioned that, the evidence about the impacts of laughter yoga on stress and happiness was limited and unsatisfying.

Furthermore, a study investigated the effects of laughter therapy, especially laughter yoga, on reducing stress among patients by Kim and Kim in (2016) found that, laughter yoga improved quality of life, reduced stress level, and enhanced overall happiness among patients. In 2002, the book named “laugh for no reason” by the founder of laughter yoga Dr. Madam Kataria, discusses how laughter yoga can help reduce stress and improve overall well-being. Moreover, the study examined the relationship between laughter and stress in daily life in (2019) by Bennett and Zeller, found that lower stress levels and higher positive effect had been associated to laughter yoga.

Additionally, in the book by Marin Seligman, mentions the potential benefits of laughter yoga in promoting positive emotions like happiness and overall well-being. In another study examined by Pressman and Cohen 2005, that aimed to found the relationship between happiness and stress, establish that happiness has a significantly impact on reducing stress. Conversely, in the study published by Martin and Kuiper in 1999 who aimed to found the relationship between laughter, stress and happiness outcome among 400 participants, discovered that the laughter was not significantly related to stress reduction or increased happiness. As, some factors like gender, age and personality types has a stronger influence on stress and happiness outcomes among participants than the occurrence of laughter. This study suggested that laughter alone may not be a reliable predictor of stress reduction or improved positive emotions.

Lastly, the study by Smith (2018) who investigated the impact of laughter therapy on stress levels and stress coping styles in different age especially elderly individuals, found that there were a positive effects of laughter therapy on stress reduction in elderly participants who



engaged laughter therapy sessions. It also mentioned that, there are possible benefits of laughter therapy for elderly people in dealing with stress and improving their overall well-being. Also, the study conducted by Johnson (2016), who aimed to examine whether there are gender differences in how laughter acts as a buffer against stress. The study's findings mentioned that the laughter therapy has a different impact on stress reduction in males and females.

### **3.1. Research procedure:**

In order to achieve the current research objective and hypothesis, it is necessary to identify the research society and select a representative sample. Also provides procedure to measure the prevalence rate of study's variable that is (Laughter Yoga Program, Stress, Psychological Happiness) among students, with one group (experimental group).

### **3.2. Research design:**

The study used the quasi experimental and correlative descriptive approaches to examine and measure the effect of laughter yoga program on students in experimental group to reduce stress and increase psychological happiness. also, to measure a relationship between laughter yoga, stress and psychological happiness.

### **3.3. Research population:**

The study population contains students of education and psychological counseling department in Salahaddin University- Erbil city, their total number are (138) students.

### **3.4. Research sample:**

Another importance step of the study is selecting the sample from the community. So, the study selects a sample of the students that is likely to be representative of that community that are interested in. the sample of this study contains (15) students in third-year as an experimental group, which have higher levels of stress and lower levels of psychological happiness. The study has compared between variables stress and psychological happiness, age, social status, academic achievement of the parents, and economic level.

### **3.5 Scales of measurements:**

**3.5.1 Laughter yoga program:** this program has been prepared by the researchers depended on literature (it is an Exercise program developed by dr. Madam Kataria, where anyone can laugh without relying on humor, Jokes or comedies) and previous studies, especially studies related to Laughter yoga, stress and psychological happiness. After determining the importance and weight of each paragraph by using the weighted mean, table (1), (2). The study used Laughter yoga program as an independent variable to influence the dependent variables (stress and psychological happiness). This program consists of a set of cognitive and behavioral objectives were applied on the experimental group, through four-weeks, two sessions in each week, and one hour each session.

### **Laughter yoga sessions:**

laughter yoga program has been used for (four weeks) on the sample of the study (college students), that it was eight sessions (two session in each week), and each session took about one hour.

Week 1: day 1: session 1

1. introduction (introducing laughter yoga and give a brief history, also its important benefits,10 min)
2. Ice breaker and warm-up exercise, also start with simple laughter and breathing exercises (e.g., clapping and chanting laughter, 5 minutes)

3. use laughter yoga techniques like (Gibberish laughter and Milk shake laughter exercise, 30 min)
4. practice laughter yoga games like (Mirror laughter, 15 min)
5. relaxation and cool-down stage for (5 min)

Week 1: day 2: session 2

1. starting with warm-up (e.g., clapping and chanting laughter, 10 minutes)
2. practice laughter yoga exercises (clean mind laughter, laughter meditation and credit card laughter, 30 min)
3. practice laughter yoga games (Circle to foster connection and create a playful environment, 15 min)
4. relaxation and cool-down stage, 5 min.

Week 2: day 1: session 3

1. warm-up and scratching 10 minutes.
2. Explore different laughter yoga exercises like (Breath with laugh, hand shake laughing and traffic laughter, 30 min)
3. laughter yoga games (laughter Tag and Guess a word laughing, 15 min)
4. cool-down stage, 5 min.

Week 2: day 2: session 4

1. warm-up, 10 minutes
2. laughter yoga exercises (laughter yoga dance, Wi-Fi laughter, and I don't know why I am Laughing exercises, 30 min)
3. laughter yoga games (laughter Freeze game, storytelling and telling jokes, 15 min)
4. cool-down, 5 min

Week 3: day 1: session 5

1. warm-up, 10 minutes
2. laughter yoga exercises (workplace laughter, clean shoulders laughter and fight laughter, 30 min)
3. laughter yoga games (count to 10 tell you make it real game and one min competition laughter between two participants each time, 15 min)
4. cool-down stage, 5 min

Week 3: day 2: session 6

1. warm-up, 10 minutes
2. laughter yoga exercises (start laughter, close eyes laughter and superhero laughter, 30 min)
3. games like (laughter storytelling) also encourage participants to do laughter yoga in daily life at home with family members, 15 min)
4. cool-down, 5 min

Week 4: day 1: session 7

1. warm-up exercises (10 minutes)
2. reviewing previous sessions of laughter yoga and redo the participants' favorite exercises (30 min)
3. reflection and sharing between participants, guide them through a laughter meditation where they focus on the sensation of laughter and its positive effects. for (15 min)
4. cool-down stage for (5 min)

Week 4: day 2: session 8

1. warm-up exercises (10 minutes)
2. slowly bring the energy down by engaging in gentle stretching and relaxation exercises. (30 min)
3. reflect on the overall experience and share any insights or feelings that arose during the laughter yoga sessions (15 min)
4. encourage participants (to add 10 min laughter yoga exercise) in their daily life (5 min)

**3.5.2 Stress:** to measure stress, the study relayed on the scale of (Cohen et al, 2004) which contains 13 items. Regarding the value of participants respondents, five alternatives were identified and determined, which were: (never =0, rarely =1, sometimes =2, mostly = 3, always = 4). The highest degree on the scale shows that the participant has the higher level of stress, and the lowest degree on the scale shows that the participant has a lower level of stress. Appendix number (1).

**3.5.3 Psychological happiness:** to measure this variable, the study depended on the scale of (Hills & Argyle, 2002) which contains 28 items. Regarding the value of participants respondents, four alternatives were identified and determined, which were: (disagree=1, slightly disagree =2, slightly agree = 3, agree = 4). The highest degree on the scale shows that the participant has the high level of psychological happiness, and the lowest degree on the scale shows that the participant has a low level of psychological happiness. Appendix number (1).

### **3.6 The Validity:**

Translate Validity: All the items of the (Laughter Yoga program ) with both scales (Stress and Psychological Happiness) were translated from English language (Original English) to Kurdish language by an expert whose specialist in English and Kurdish language, and then translated back to English language by a specialist in Kurdish & English language , so the final step was comparing both (Original English scale) and (translated English scale) by the professor with the specialty in Educational and Psychology to compare between them and the result came out the same. Appendix number (2).

Face validity: for the purpose of ensuring the validity of the scales, the study presented the scales (Laughter Yoga Program, Stress, Psychological Happiness) in (Kurdish) language to experts and specialists in the field of Education and psychology see appendix (3), which (% 100) of experts agreed on all items of the program and scales.

### **3.7 The Reliability:**

In this regard, the data was taken from the (100) of students. the study used the Spearman-Brown split-half correlation for the purpose of correcting the value of the reliability, so it was (0.84) for the stress scale, and it was (0.87) for the psychological happiness. Which is considered as an acceptable reliability coefficient according to the items number. Additionally, the Cronbach's Alpha is using to measure the internal consistency of the two scales, the result showed that the Cronbach's Alpha reliability value of the stress scale is (0.89), and of the psychological happiness is (0.92). this is a high correlation, which means that the scales have a high degree of stability.

### **3.8 The Final Survey:**

After completing and evaluating the psychometric properties of the program and scales. The pre-test was considered and the program was applied on the experimental group within the previously specified period. Then the post-test and follow-up test was applied on the same group. After collecting data and verifying the study's hypotheses, the study used a statistical instrument that are used in human sciences and called Spss.

**4.1 Preparing Laughter Yoga program:** This aim was achieved in the third chapter of the study.

**4.2** There is no significant relationship between stress and psychological happiness among students at the level (0.05).

Table (3) discovering the relationship between both variables Stress and Psychological Happiness

Scale	N	Mean	Std. deviation	Correlation	Sig.
Stress	100	25.54	5.355	- 0.523	0.01
Psychological Happiness	100	62.41	7.996		

The above table shows that there is a negative relationship between Stress and Psychological Happiness. The result also mentioned that if the level of stress decreases, the level of psychological happiness is increased, and the reverse are also true. Thus, the opposite of the hypothesis was achieved. The result of this hypothesis was verified through the laughter yoga program sessions.

**4.3** There is no significant differences between mean scores of the experimental group on the pre and post-test on the stress scale at the level (0.05).

Table (4) Results of the t-test for paired samples to indicate the difference in the two tests for measuring stress

Group test	N	Mean	Std. Deviation	df	T . Value		Sig 0.05
					Calculated	Table	
Pre - test	15	31.27	2.890	14	9.752	2.145	0.05
Post – test		19.73	3.634				

After processing and applying stress scale on (15) participants of the experimental group as a pre-test “before starting program sessions” and applying the same scale as a post-test on the same participants in the experimental group “after applied the laughter yoga program” on them. The result of t-test for paired samples showed that there is significant main differences between pre-test and post-test at the level of (0.05) with the degree of freedom (14) in favor of post-test, the opposite of the hypothesis was achieved. This means, there is a significant decrease in students’ stress after the impact of the contents of the program sessions on them.

**4.4.** There are no significant differences between the mean scores of the experimental group on the pre and post-test on the psychological happiness scale at the level (0.05).

Table (5) Results of the t-test for paired samples to indicate the difference in the two tests for measuring psychological happiness

Group test	N	Mean	Std. Deviation	df	T . Value		Sig 0.05
					Calculated	Table	
Pre - test	15	61.27	8.884	14	4.517	2.145	0.05
Post – test		71.53	6.278				

After applying the psychological happiness scale on (15) participants of the experimental group as a pre-test “before starting program” sessions and applying the same scale as a post-test on the same participants in the experimental group “after applied the laughter yoga program” on them. The result of t-test for paired samples showed that there are significant

main differences between pre-test and post-test at the level of (0.05) with the degree of freedom (14) in favor of post-test, the opposite of the hypothesis was achieved. This means, there is a significant increase in students' psychological happiness after the impact of the contents of the program sessions on them.

**4.5.** There are no significant differences between the mean scores of the experimental group in the post and follow-up test for the stress and psychological happiness scales at the level (0.05).

#### **4.6.**

Table (6) Results of the t-test for paired samples to indicate the difference in the two tests for measuring follow-up post-test for Stress and Psychological happiness

Group test	N	Mean	Std. Deviation	df	T . Value		Sig 0.05
					Calculated	Table	
Post-test / stress	15	19.73	3.634	14	0.693	2.145	0.500
Follow-up post-test / stress		20.93	4.448				
Post-test / Psy. happiness	15	71.53	6.278	14	0.865	2.145	0.402
Follow-up post- test / Psy. happiness		68.80	8.487				

Table showed that the results of post-test and follow-up post-test of stress and psychological happiness scales after the laughter yoga program applied. It is also presented that the program is also effective after (50) days of implementation in reducing the level of stress and increasing the level of psychological happiness among the students, the opposite of the hypothesis was also achieved in this result.

#### **4.6. Recommendations:**

\* Taking care of students from university to reduces stress and increase psychological happiness, and this done by providing the necessary requirements for academic, applied, social and sporting life.

#### **4.7. Suggestions:**

\* The Effect of Laughter Yoga Program to Reduce Stress and Increase Psychological Happiness among employees.

\* The Effect of Laughter Yoga Program to Reduce Stress and Increase Psychological Happiness among spinster women.

#### **5.References:**

- American Psychological Association. (2020). Stress in America™ 2020: A National Mental Health Crisis. Retrieved from <https://www.apa.org/news/press/releases/stress/2020/report>
- American Psychological Association (APA): [www.apa.org](http://www.apa.org)
- Berk, L. S., Felten, D. L., Tan, S. A., Bittman, B. B., & Westengard, J. (2001). Modulation of neuroimmune parameters during the eustress of humor-associated mirthful laughter. *Alternative Therapies in Health and Medicine*, 7(2), 62-72. <https://pubmed.ncbi.nlm.nih.gov/11253418/>
- Bennett, M. P., & Lengacher, C. (2008). Humor and laughter may influence health: III. Laughter and health outcomes. *Evidence-Based Complementary and Alternative Medicine*, 5(1), 37-40. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2249748/>
- Bennett, M. P., & Lengacher, C. (2009). Humor and laughter may influence health: III. Laughter and health outcomes. *Evidence-Based Complementary and Alternative Medicine*, 6(2), 159-164. doi: 10.1093/ecam/nem149
- Bennett, M. P., & Lengacher, C. (2009). Humor and laughter may not influence stress and happiness outcomes: A systematic review. *Journal of Psychosocial Oncology*, 27(2), 168-181.



- Bennett, M. P., & Zeller, J. M. (2019). Laughter and stress in daily life: Relationship to positive and negative affect. *Motivation and Emotion*, 43(1), 1-9.
- Brickman, P., Coates, D., & Janoff-Bulman, R. (1978). Lottery winners and accident victims: Is happiness relative? *Journal of Personality and Social Psychology*, 36(8), 917-927. <https://pubmed.ncbi.nlm.nih.gov/690806/>
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Harvard University Press. <https://www.hup.harvard.edu/books/9780674224575>
- Celestine, N., (2017). *The Science of Happiness in Positive Psychology* 101. <https://positivepsychology.com/happ>
- Cohen, S., Kessler, R. C., & Gordon, L. U. (1995). *Measuring stress: A guide for health and social scientists*. Oxford University Press. <https://psycnet.apa.org/record/1998-07054-000>
- Cohen, S., Janicki-Deverts, D., & Miller, G. E. (2007). Psychological stress and disease. *JAMA*, 298(14), 1685-1687. doi:10.1001/jama.298.14.1685. <https://pubmed.ncbi.nlm.nih.gov/17925521/>
- Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227-268. [https://www.tandfonline.com/doi/abs/10.1207/S15327965PLI1104\\_01](https://www.tandfonline.com/doi/abs/10.1207/S15327965PLI1104_01)
- Diener, E. (1984). Subjective well-being. *Psychological Bulletin*, 95(3), 542-575. <https://psycnet.apa.org/record/1984-23116-001>
- Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin*, 125(2), 276-302. <https://psycnet.apa.org/record/1999-10106-007>
- Diener, E. (2000). Subjective well-being: The science of happiness and a proposal for a national index. *American Psychologist*, 55(1), 34-43. <https://psycnet.apa.org/record/2000-13324-004>
- Eisenberg, D., Hunt, J., & Speer, N. (2013). Mental health in American colleges and universities: Variation across student subgroups and across campuses. *Journal of Nervous and Mental Disease*, 201(1), 60-67. doi: 10.1097/NMD.0b013e31827ab077. <https://pubmed.ncbi.nlm.nih.gov/23274298/>
- Engel, G. L. (1977). The need for a new medical model: A challenge for biomedicine. *Science*, 196(4286), 129-136. <https://pubmed.ncbi.nlm.nih.gov/847460/>
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, 56(3), 218-226. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3122271/>
- Johnson, L. et al. (2016). Gender Differences in the Stress-Buffering Effect of Laughter. *Journal of Psychology and Gender*, 42(3), 256-268.
- Kaplan, S. et al (2012). The Perception of Stress and its Impact on Health in Poor Communities. *J Community Health*. DOI 10.1007/s10900-012-9593-5. [https://www.siumed.edu/sites/default/files/u971/perception\\_of\\_stress\\_and\\_its\\_impact\\_on\\_health\\_in\\_poor\\_communities.pdf](https://www.siumed.edu/sites/default/files/u971/perception_of_stress_and_its_impact_on_health_in_poor_communities.pdf)
- Kataria, M., & Kataria, M. (2002). *Laugh for no reason: Laughter yoga*. Madhuri International. <https://laughteryogawithalexa.com/wp-content/uploads/2017/11/Laugh-for-no-Reason-e-BOOK.pdf>
- Kataria, M., & Madan, K. (2013). Laughter yoga: A holistic wellness approach. *International Journal of Yoga*, 6(1), 66-69. doi:10.4103/0973-6131.105935
- Kataria, M., & Madan, K. (2014). Laughter yoga for students' stress and well-being: A pilot study. *Journal of Education and Health Promotion*, 3, 71. doi: 10.4103/2277-9531.145939
- Kim, S. H., & Kim, J. H. (2016). Effects of laughter therapy on depression, cognition and sleep among the community-dwelling elderly. *Geriatrics & Gerontology International*, 16(1), 28-37. doi: 10.1111/ggi.12434
- Kim, S. H., & Kim, J. H. (2016). The effects of laughter therapy on stress responses, quality of life, and immune functions in patients with breast cancer undergoing radiotherapy. *Asian Oncology Nursing*, 16(3), 138-146.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer Publishing Company. [https://books.google.iq/books/about/Stress\\_Appraisal\\_and\\_Coping.html?id=i-ySQQuUpr8C&redir\\_esc=y](https://books.google.iq/books/about/Stress_Appraisal_and_Coping.html?id=i-ySQQuUpr8C&redir_esc=y)
- Lee, Y., & An, S. (2017). Effects of laughter therapy on depression, cognition, and sleep among the community-dwelling elderly. *Geriatric Nursing*, 38(4), 377-383.
- Louie, D., Brook, K., & Frates, E., (2016). The laughter prescription. *National Library of Medicine*. 10(4): 262-267. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6125057/>

- Lyubomirsky, S., King, L., & Diener, E. (2005). The benefits of frequent positive affect: Does happiness lead to success? *Psychological Bulletin*, 131(6), 803-855. doi:10.1037/0033-2909.131.6.803 <https://www.apa.org/pubs/journals/releases/bul-1316803.pdf>
- Mariotti, A. (2015). The effects of chronic stress on health: new insights into the molecular mechanisms of brain-body communication: *Future Sci OA*, 1(3), FSO23. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5137920/>
- Martin, R. A., & Kuiper, N. A. (1999). Daily occurrence of laughter: Relationships with age, gender, and Type A personality. *Humor: International Journal of Humor Research*, 12(4), 355-384. <https://psycnet.apa.org/record/1999-15807-001>
- Mcleod, S.(2013). What is Reliability? *Simply Psychology*. From . <https://www.simplypsychology.org/reliability.html>
- National Institute of Mental Health (NIMH): [www.nimh.nih.gov](http://www.nimh.nih.gov)
- Pressman, S. D., & Cohen, S. (2005). Does positive affect influence health? *Psychological Bulletin*, 131(6), 925-971. <https://pubmed.ncbi.nlm.nih.gov/16351329/>
- Provine, R. R. (2000). *Laughter: A scientific investigation*. Penguin. [https://www.researchgate.net/publication/232489851\\_Laughter\\_A\\_Scientific\\_Investigation](https://www.researchgate.net/publication/232489851_Laughter_A_Scientific_Investigation) .
- Provine, R. R. (2017). The laughter of friendship: A study of laughter and social interaction in everyday life. *American Journal of Play*, 9(2), 185-206.
- Røysamb, E., Nes, R. B., Czajkowski, N. O., & Vassend, O. (2018). Genetics, personality and wellbeing. A twin study of traits, facets and life satisfaction. *Scientific reports*, 8(1), 12298. <https://doi.org/10.1038/s41598-018-29881-x>
- Ryan, R. M., & Deci, E. L. (2001). On happiness and human potentials: A review of research on hedonic and eudaimonic well-being. *Annual Review of Psychology*, 52, 141-166. doi:10.1146/annurev.psych.52.1.14. <https://psycnet.apa.org/record/2001-00511-006>
- Ryff, C. D., & Keyes, C. L. (1995). The structure of psychological well-being revisited. *Journal of personality and social psychology*, 69(4), 719-727. <https://pubmed.ncbi.nlm.nih.gov/7473027/>
- Schwartz, et al. (2015). *Mental and Emotional Impact of Stress*. <https://www.mentalhelp.net/stress/emotional-impact/>
- Seligman, M. E. (2011). *Flourish: A visionary new understanding of happiness and well-being*. Simon and Schuster. <https://psycnet.apa.org/record/2010-25554-000>
- Selye, H. (1950). Stress and the general adaptation syndrome. *British Medical Journal*, 1(4667), 1383-1392. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2038162/>
- Selye, H. (1976). *The stress of life*. New York: McGraw-Hill. <https://psycnet.apa.org/record/1957-08247-000>
- Smith, J. et al. (2018). The Effects of Laughter Therapy on Stress and Stress Coping Styles in Elderly Individuals. *Journal of Geriatric Psychology*, 25(2), 123-135.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. <https://psycnet.apa.org/record/1988-31508-001>
- World Health Organization (WHO): [www.who.int](http://www.who.int)

## أثر برنامج يوجا الضحك في تقليل الضغط النفسي وزيادة السعادة النفسية لدى طلبة الكلية

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### الملخص

يحاول الباحثون في بحثهم الحالي تحقيق هدف البحث وفرضياته من خلال التعرف على الفرق المعنوي أو غير المعنوي بين (الاختبار القبلي والاختبار البعدي)، وبين (الاختبار البعدي والإختبار البعدي للمتابعة) لكلا المقياسين (الضغط النفسي و السعادة النفسية) قبل البدء في تطبيق جلسات برنامج يوجا الضحك على (15) مشاركاً من المجموعة التجريبية، وبعد تطبيق البرنامج أيضاً. تم إعداد برنامج يوجا الضحك من قبل الباحثين بالاعتماد على الأدبيات. واعتمد الباحثون على مقياس الضغط النفسي لـ (كوهين وآخرون، 2004) - 14 فقرة، كما تم الاعتماد على مقياس السعادة النفسية لـ (هيلز وأرجيل 2002) - 29 فقرة. التحقق من صدق وثبات المقياسين. وبعد ذلك تم تطبيق المقياسين كاختبار قبلي على أفراد المجموعة التجريبية، وتم تطبيق البرنامج على المشاركين، ثم تم تطبيق الاختبار البعدي، وبعد معالجة البيانات باستخدام الحقيبة الإحصائية للعلوم الإجتماعية أظهرت النتائج: فعالية برنامج يوجا الضحك في تقليل الضغط النفسي وزيادة السعادة النفسية. واعتماداً على هذه النتائج قدم الباحثان بعض التوصيات والمقترحات.

**الكلمات المفتاحية:** البرنامج، يوجا الضحك، الضغط، السعادة النفسية

### كارينغري بهرنامه ی یوگای یتکه نین له سهرکه م کردنه وهی فشار و زیادکردنی خوڤحالی دهروونی له سهر ئاستی قوتایانی کۆلیژ

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### پۆخته

له توێژینه وه به دا، توێژه ران ههول بۆ به ده سه تهینانی ئامانج و گریمانه کانی توێژینه وه یان داوه له رینگای به لگه داربوون و به لگه دارنه بوونی جیاوازی ئیوان (تاقیکردنه وهی به رای- تاقیکردنه وهی دواتر) وه له ئیوان (تاقیکردنه وهی دواتر و تاقیکردنه وهی به دوا داچووی دواتر) بۆ ههردوو پتوهری (فشاری دهروونی و خوڤحالی دهروونی). پتیش ده ستپیکردنی ئه نجام دانی پروگرامی بهرنامه ی یوگای یتکه نین له سه ر 10 به شدار بوو له گرۆپی ئه زموونگه ری وه دوا ی ئه نجام دانی بهرنامه که ش.

بهرنامه ی یوگای یتکه نین له لایه ن توێژه رانه وه دارێژراوه به پشته ستن به توێژینه وه کانی پتیشوو. توێژه ران پتیهانی فشاری دهروونی کۆهین وه اوریکانی- (2004) 14 برگه، وه بۆ پتوانی خوڤحالی دهروونی هیلز و ئه رگاین- (2002) 29 برگه، به کارهات. ههردوو پتوه ره که پشتراستکراوه به راستگۆیی و جیگیری باش.

ههردوو پتوه ره که به شتیه ی تاقیکردنه وهی به رای له سه ر گرۆپی ئه زموونگه ری جتبه جیکرا، دواتر بهرنامه ی یوگای یتکه نین له سه ر هه مان گرۆپ جتبه جیکرا. دواتر تاقیکردنه وهی دوا ی به رتیه چوو. دوا ی شیکردنه وهی دانا کان به به کارهینانی ئاماری (SPSS)، ده رنجامه کان وا پشانه ده دن بهرنامه ی یوگای یتکه نین کارینه ری هه به له سه ر که مکردنه وهی فشاره دهروونی و زیادکردنی خوڤحالی دهروونی. له سه ر بنه مای دۆزه ره وه کانی ئه م توێژه وه به، توێژه ران چه ند پشینه یارو بۆ چوونیان پتیشه که شکرد.

**و سه سه ره کییه کان:** بهرنامه، یوگای یتکه نین، فشار، خوڤحالی دهروونی