

THE EFFECTS OF LAUGHTER THERAPY ON MENTAL HEALTH: AN INTEGRATIVE LITERATURE REVIEW

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ABSTRACT

Laughter as alternative therapy is of great interest in the present times, that needs to be investigated. The purposes of this review are to explore the therapeutic and negative effects of Laughter Therapy (LT) on mental health. An Integrative Literature Review of published literature about effects of Laughter Therapy on mental health was conducted. Articles were identified through electronic database from PubMed, Google scholars, EBSCO, and ProQuest within the timeframe of 2010 to 2018 from peer review journals. Total of 18 articles related to the objectives was reviewed. The findings showed that the therapeutic effects of LT on mental health namely: improving positive emotion, stimulating cognition, reducing stress, improving positive coping, and improving the interpersonal relationship. It was found that the negative effect of LT is very minor, and the weakness can be resolved. After conducting a comprehensive investigation towards the effects of LT on mental health, it was concluded that LT has bigger therapeutic effects than negative effect on mental health. The LT is recommended for improving mental health because this therapy is cheap and easy to execute. However, we should always pay attention to the contradiction and negative risks of this therapy.

Keywords: *Laughter Therapy, Mental Health, Therapeutic Effect, Negative Effect*

INTRODUCTION

The increasing the number of mental health problems worldwide has led to the conduct of numerous studies on mental health. The main goal of those studies was to find a solution in reducing the number of mental health problems. Mental health is defined by WHO as a state of well-being in which every person realizes his own potential, able to cope the normal stresses of life, able to work productively and fruitfully, and able to make a contribution to the community. Whereas, mental health problems is a set of medical conditions that affect a person's thinking, feeling, mood, ability to relate to others, and daily functioning such as depression and anxiety, drug and alcohol abuse, and schizophrenia (WHO, 2014).

Regarding the problems in mental health, many studies had been done through various approaches, designs, and methods. Many therapies were developed to address mental health problems. One of the therapies that have been developed since several years ago was Laughter Therapy (LT). This therapy constituted a

complementary or alternative therapy.

As we know, laughter is as one of the emotional expressions and it is the universal language of the human that commonly is related to joyful expression. Yim (2016) stated that laughter is a physical reaction to be seen in humans and some other species of primates, consisting typically of rhythmic, often audible, contractions of the diaphragm and other parts of the respiratory system.

The results of many types of research found that laughter has many effects on our health, both positive and negative effects on physical and mental wellbeing. Yim (2016) stated that the psychological benefits of laughter is greater than physiological benefits, such as Laughter reduces stress, anxiety, and tension, and counteracts symptoms of depression; elevates mood, energy, hope, self-esteem, and vigor; enhances creative thinking, memory, and problem-solving; improves relationships, interpersonal interaction, attraction, and closeness; increases helpfulness, friendliness, build group identity, solidarity, and cohesiveness; promotes

psychological well-being; improves quality of life and patient care; and intensifies mirth and most significantly laughter is contagious.

Laughter is believed to have a huge effect on our physical and mental health. Therefore, laughter has been developed as a therapy in health practice. Laughter Therapy (LT) is a therapy that uses humor to relieve stress and improve a sense of well-being (NCI Dictionary). Laughter therapy is means of communication that arouses smile, laughter, pleasant feelings, and enables interaction among others. Laughter therapy is used as a mode of treatment to promote a desirable life, by maintaining, recovering, and preventing physical, psychological, social, mental and spiritual functions through spontaneous and nonspontaneous laughter (Mora-Ripoll, 2010).

Some literature above explained the positive effects of LT. However, there has not been studies regarding the negative effects of LT. Besides that, there is a contradiction with another research that was conducted by Ghodsbin *et al.*, (2014). They investigated the effect of laughter therapy program on public health of senior citizens. They found that there was no statistically

significant correlation between laughter therapy and social dysfunction and depression.

The purposes of this article to explore and to seek the answer: What are the therapeutic effects of Laughter Therapy on mental health through a comprehensive review? Does Laughter Therapy have negative or harmful effects on mental health?

RESEARCH METHODOLOGY

An Integrative Literature Review was conducted to investigate the effects of Laughter Therapy on mental health and its negative effects. The literatures are searched in the relevant databases (PubMed, ProQuest, EBSCO, and Google scholars). The inclusion criteria are limited to literature in English, in a peer-reviewed journal, published within 2010-2018, include patent, the article must report an empirical study or must be a review papers, and the article must have abstract and full-text paper. Whereas, the exclusion criteria are humor stimulus or intervention, cartoon, pictures, commentary, linguistic, history, or nontherapeutic research such as joke construction, entertainment and other non-English language publication. The process of the search strategy is given in details in Figure 1.

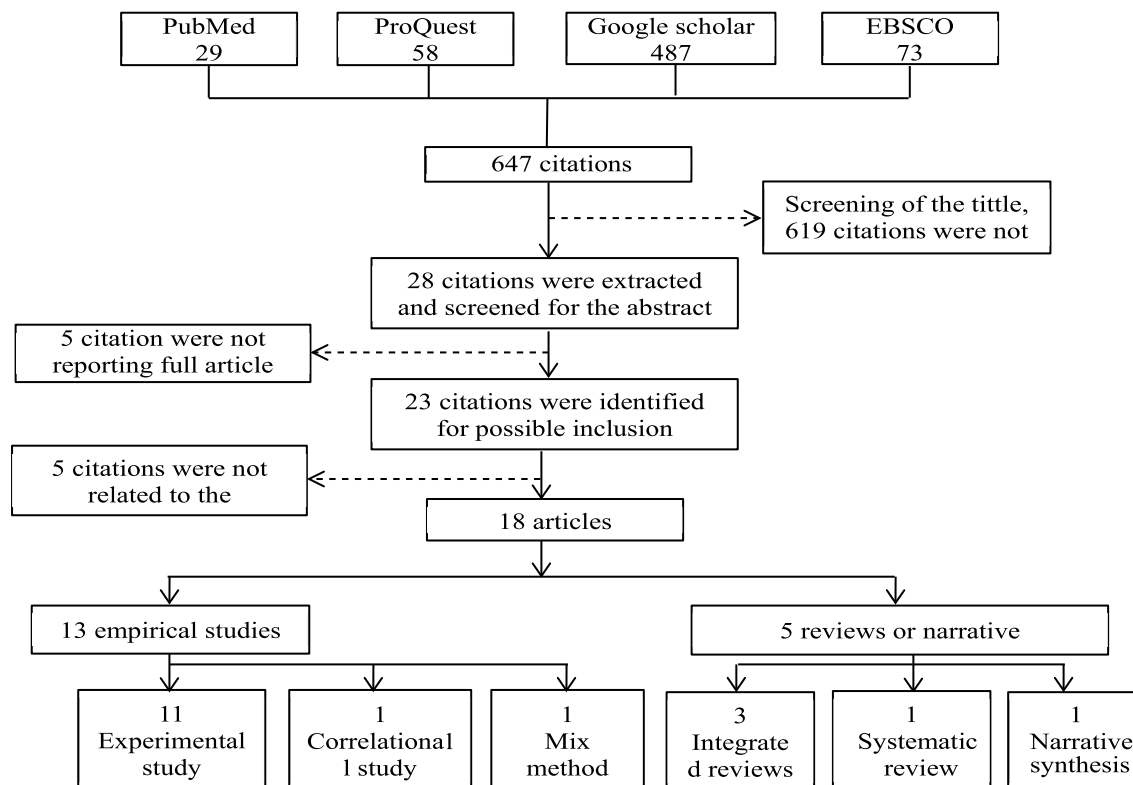


Figure 1: The process of search strategy

RESULTS

The Laughter Therapy does not only have therapeutic effects, but it also has a negative effect. Like drugs, if Laughter Therapy is given in overdoses or without considering contraindications; it will have dangerous impacts on the health.

The therapeutic effect of Laughter Therapy on mental health

The therapeutic effect of Laughter Therapy on mental health can emerge many effects, these effects are as follows:

Improving positive emotions

A study conducted by Shaw (2013) stated that Laughter Therapy reduced depressive symptoms and increased life satisfaction among patients. Han, Park & Park, (2017) revealed that Laughter Therapy with more intense physical activities reduced depression and improved sleep among the participants. Furthermore, Mora-Ripoll (2016) stated that the effects of laughter reduced anxiety, tension and counteracts symptoms of depression; elevating mood, self-esteem, hope, energy, and vigor; intensifies mirth. Laughter improved mood and positive effect in healthy adults; temporarily improved depressive disorder, moderated stress in healthy adults, and anxiety. Among schizophrenia patient, a laughter intervention reduced hostility, depression, and anxiety scores; improved activation scores, social competence, and social support; lowered the levels of psychopathology.

The research was conducted by Vijay & Gandam, (2018) on 76 elderly used pre-test and post-test exposure design found that laughter therapy had significantly reduced the levels of anxiety and depression. Then, Joseph & Riaz, (2015) assessed the effect of laughter therapy on depression; they found that the levels of depression among elderly were reduced after laughter therapy. Song, Park, Park (2013) investigated the effects of Laughter Therapy on negative mood and life satisfaction in older adults in care facilities. They found that LT improved mood and life satisfaction for older adults staying in care facilities. Another research by George, and Jacob (2014) assessed the effectiveness of laughter therapy on depression among elderly people. They found that laughter therapy was effective to reduce depression for elderly people.

Furthermore, Kim *et al.*, (2015) investigated whether laughter therapy lowers total mood disturbance scores and improves self-esteem scores in patients with cancer. These results indicated that laughter therapy improved mood state and self-esteem for patients with cancer. Then, Yim, (2016) explained that the therapeutic benefits of laughter on mental health can alter dopamine and serotonin activity, release endorphins that can help people in a depressed mood. Dollgorf-Kaspar *et al.*, (2012) evaluated the clinical utility of laughter yoga in improving psychological and physiological measures in outpatients awaiting organ transplantation. They found that Laughter Yoga increased feelings related to liveliness, activation, cheerfulness, and friendliness.

Besides that, Hatzipapas, Visser & Rensburg, (2017) in their study established that care workers reported development in emotional aspect after laughter therapy with positive emotions. In the laughter therapy session, most of the participants were initially skeptic about the value of laughter therapy. However, as the sessions progressed they began to enjoy it. In contrast with the pre-interviews, they reported experiencing a variety of positive emotions such as joy, happiness, relief, and hope. Participants reported a feeling of joy after laughing, felt relieved. They felt happy, something likes relief in the body with a feeling of stress relief. They stated that immediately after laughter was initiated, there was shift from the present condition to another better situation. They also stated that laughter can even change the life.

Moreover, Ferner & Aronson (2013) reviewed the beneficial and harmful effects of laughter. They found that the benefits of laughter on mental health include reduced anger, anxiety, depression, stress, and reduced tension (psychological and cardiovascular). Laughter associated with life satisfaction, but reciprocal causality has not been confirmed. An integrated literature review was conducted by Demir (2015) to determine the effects of laughter therapy on anxiety, stress, depression, and quality of life in cancer patients. The results of this study showed that laughter therapy may decrease anxiety, stress, and depression and increase the quality of life in cancer patients. Weinberg (2014) stated that Laughter Yoga (LY) an effective intervention to increase well-being. The benefits of laughter included development of positive emotions and reduced negative emotions.

In addition, Kim, Kim & Kim (2015) in their

randomized controlled trial examined the effect of a therapeutic laughter program on anxiety, depression, and stress among breast cancer patients. They found that laughter program was effective in reducing anxiety, depression, and stress in breast cancer patients after a single session.

Stimulating Cognitive

Mora-Ripoll (2016) revealed that that LT enhanced memory, creative thinking, and problem-solving. Furthermore, Hatzipapas, Visser & Rensburg, (2017) through triangulation of qualitative and quantitative method stated that laughter therapy helped to develop a positive mindset. Participants had more positive feelings, were more hopeful and made intimate contact with the children. Participants stated that after LT they felt lighter, they were able to give their children hope, and evoked hope, even if they are in a bad situation.

Improving interpersonal relationship

Yim (2016) explained that the psychological effects of laughter is primarily related to enhance interpersonal relationships. Then, Mora-Ripoll (2016) stated that laughter therapy improved interpersonal interaction, relationship, attraction, and closeness, increased friendliness and helpfulness and built group identity, solidarity, and cohesiveness. In another research, through quasi-experiment design, Dollgorf-Kaspar (2012) found that Laughter Yoga increased feelings related to liveliness, activation, cheerfulness, and friendliness.

Furthermore, Hatzipapas, Visser, & Rensburg (2017) in their study established that one of the impacts of laughter therapy was able to improve social relationships. Laughter could improve their ability to provide care for the families. Laughter functioned as a binding factor in relationships. They felt that laughing as a group had strengthened their work relationships and improved their relationships with friends and family as well. It awakened them to want to be more sociable and interactive with others. Participants reported that before LT they stayed alone, but after intervention they spoke to others over telephone. Laughter helped them to be engaged with other people. Before LT they were not in the mood to be with people, but after LT they really wanted to be with people, wanted to see other people.

Gray, Parkinson & Dunbar (2015) conducted an experiment to compare the characteristics of self-

disclosing statements by making them watch video clips that they elicited laughter. They found that intimacy was significantly higher after laughter than in the control condition. The laughter increased people's willingness to disclose, but they may not be aware of the happenings.

Reducing stress

Mora-Ripoll (2016) stated that the effect of laughter reduced stress. While, Weinberg (2014) stated that Laughter was associated significantly with reduced anxiety and stress symptoms. Moreover, Kheirandish (2015) investigated the effects of Laughter Yoga on stress and depression in 30 patients with Multiple Sclerosis. The results showed that laughter yoga techniques decreased stress, depression, and aggression in patients with multiple sclerosis patients.

In addition, Yim (2016) explained that there are therapeutic benefits of laughter even in mentally healthy individual, namely: laughter mitigated the effects of stress; laughter decreased serum levels of cortisol, epinephrine, growth hormone, and 3, 4-dihydro phenylacetic acid (a major dopamine catabolite). These are indicating a reversal of the stress response.

Improving positive coping

Yim (2016) explained that the psychological effects of laughter were related to the betterment of coping mechanism and to enhance interpersonal relationships. Mora-Ripoll (2016) stated that purposeful laughter significantly increased different aspects of self-efficacy, including self-regulation, optimism, positive emotions, and social identification, and maintained these gains at follow-up; laughter and humor improved coping abilities.

Moreover, Hatzipapas, Visser & Rensburg, (2017) in their study claimed that through daily exposure to laughter sessions, the care workers could improve ways of coping as well. The participants reported that laughter had changed the way they interpreted situations. Laughter worked as an effective tool to help the participants see a negative incident in a positive light. Performance of laughter sessions in a group helped in the development of a support system by care workers from co-workers as an effective coping mechanism in a stressful work environment. Participants stated that they used to be very anxious but after LT the situation was different. They said that they

felt better in a stress situation because now they learnt to control anger, bad emotions, and tension.

The negative effect of Laughter on mental health

The literature review written by Ferner & Aronson (2013) about “Laughter and MIRTH (Methodical Investigation of Risibility, Therapeutic and Harmful) explained many harmful effect of laughter in physical aspect that included syncope, cardiac and esophageal rupture, and protrusion of abdominal hernias (from side-splitting laughter or laughing fit to burst), asthma attacks, interlobular emphysema, cataplexy, headaches, jaw dislocation, and stress incontinence. Whereas, the negative effects or the harm of laughter on a psychological health is only minor (Ferner & Aronson, 2013). Besides that, Kataria (2010) stated that LT for major psychiatric disorder is contradictory; but he does not explain why major psychiatric disorder patient are not suggested LT and what is the negative effect on the psychiatric disorder.

The comprehensive scheme of the findings in this Integrative Literature Review can be seen in figure 2.

DISCUSSION

The therapeutic effect of Laughter Therapy helps in the development of positive emotion and reducing negative emotions such as depression and anxiety. Why this therapy can influence our emotion such as depression? Kheirandish *et al.*, (2015) stated that depression can be caused by an imbalance in neurotransmitters and neuropeptides in the blood. Laughter triggers the release of endorphins that will create euphoria. Similarly, Yim (2016) explained that laughter can alter dopamine and serotonin activity; releasing endorphins that can help people in a depressed mood.

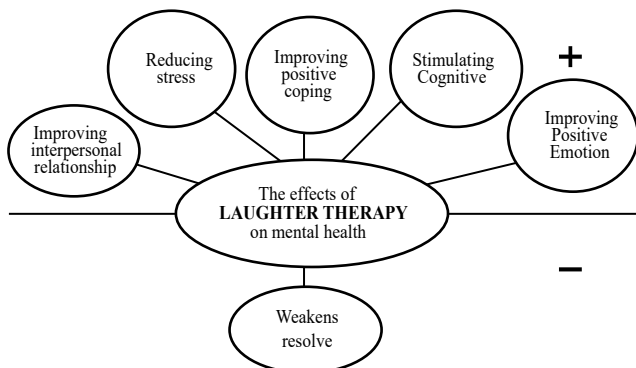


Figure 2: Finding the review

Hatzipapas, Visser & Rensburg (2017) revealed that laughter is associated with the cathartic release of accumulated emotions. Participants expressed and released the emotions that previously they had ignored and suppressed. Many of them expressed positive emotions, such as joy, happiness, relief, and hope after the intervention.

Laughter Therapy improves positive coping. Laughing is kind of unconscious defense mechanism that repressed psychic energy liberation of its importance in mind. According to Freud, ego rejects incentives and palate. Anger or what is forbidden, and taboos is repressed or is expressed by vulgar slang words. Laughing or joke helps to release internal tensions that ultimately brings relief (Kheirandish *et al.*, 2015).

Laughter Therapy reduces stress. The use of Laughter Therapy is effective in reducing the stress of patients. One way to reduce stress is to activate the parasympathetic system. This process can occur through changes in breathing pattern. Diaphragmatic breathing exercises during Laughter Therapy can be done to facilitate it. Measuring brain waves before and after two hours of laughter yoga showed that alpha waves (associated with relaxation) and beta waves (associated with alertness, sleep, and emotions) increased by 40%. The researchers argued that this means that the brain after the laughter yoga is to calm down quickly and thus this training can significantly reduce levels of stress and depression. Research showed that laughing helps to stimulate blood circulation and muscle relaxation which is a process of reducing physical symptoms associated with stress. Laughter Yoga calms the sympathetic nervous system of the natural antidote to cope with stress. The physiological change as result of laughing occurs after 12 to 24 hours (Kheirandish *et al.*, 2015).

Laughter Therapy improves the interpersonal relationship. In Laughter therapy, participants get positive experiences during interaction with other participants or friends. Positive social interactions can strengthen positive emotions, thereby contributing to the positive cycle of well-being. Positive social interactions aid the development and maintenance of psychological well-being (Hatzipapas, Visser & Rensburg, 2017). In addition, Mireault & Reddy (2016) stated that laughing is to learn social and emotional development.

Finally, the Humour weakens resolve (Ferner & Aronson, 2013) but there are no argumentation why laughter can weaken resolve.

Limitation

Literature that had been reviewed are not all describing the effect of Laughter Therapy; but there are also studies about effects of Laughter Yoga on mentally ill patients (Kheirandish *et al.*, 2015); Weinberg (2014); Dollgorf-Kaspar, 2012). So, perhaps there is little difference between laughter therapy and laughter yoga. Laughter Yoga is a unique exercise which combines unconditional laughter with yogic breathing (Pranayama); anyone can laugh without relying on humor, jokes or comedy (Kataria, 2010).

CONCLUSION

The literature about the effect of Laughter Therapy

on mental health in this review utilizes various methods and research designs. So, we can better understand the effects of Laughter Therapy on mental health from many perspectives. As a result, the credibility of these findings can be fully accepted.

After conducting a comprehensive investigation of the effect of Laughter Therapy on mental health, it can be concluded that LT has bigger therapeutic effects than negative effects on mental health. The therapeutic effects of LT on mental health are emerging positive emotion, stimulating cognition, reducing stress, generating positive coping, and improving the interpersonal relationship. While the negative effect of LT on mental health is only minor namely it can weaken resolve. Therefore, I recommend utilizing LT in improving mental health condition. However, we should always pay attention to the contraindication and negative effect although these effects are only minor.

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