The purpose of this research was to examine how physical exercise is conducive to reducing stress and enhancing overall well-being in university students. Previous research corroborate that a sense of control is conducive to enhancing health promoting behaviors by fostering motivational forces, affecting health behaviors or conferring a resource, positively impacting the way people react to stressors [44] - [46]. In addition, positive emotion elicited through active leisure, which can contribute to health behavior is a com- pelling finding inductively drawn from the interview, which deserves a further research attention in this area Pre- vious research substantiates the notion that improved physical health conditions through physical activity com- bined with a stress management program was effective in enhancing psychological well-being as well as im- proving physiological health indicators such as cholesterol and blood sugar [38]. Also, health behavior regulation enhanced by engaging in physical exercise is consistent with previous re- search that health promoting behaviors have ripple effects on other health behaviors. Although the average participants' stress levels based on the measure on Perceived Stress Scale as well as overrepresentation of white male in the study could have contributed to presumably lower improvements in stress as compared to a proportionally representative sample, the substantial effects of leisure time physical activity on alleviating stress drawn from all the participants are noteworthy. Also, there is a variety of physical exercises, for instance, aerobic exercise, anaerobic exercise or mind-body exercise, which may have varying degree of influences on mental health and stress coping. This is consistent with the previous research demonstrating the benefits of physical exercise for mental health is significantly pronounced in the context of leisure involving participants' personal choice and purely recreational pursuits regardless of types of exercises requiring different levels of energy expenditures [51]. Physical imbalance, such as excessive consumption of a high fat in diet or overeating without burning calories through physical activity, can elevate risks of chronic diseases, associated with obesity, such as diabetes, high blood pressure, and high cholesterol levels, which in turn, have negative impacts on psychological well-being [32]. Conversely, mental illnesses can trigger physical illnesses as well as obesity by altering hormonal balances and sleep cycles, impairing social and cognitive functions, and decreasing energy levels, which can negatively impact the adoptions of health behaviors [37] . Nevertheless, these findings of the positive impacts of physical exercise on effective stress coping and health through elicitation of positive emotion, unequivocally drawn from all the participants who engage in different types of leisure time physical exercise, would shed light on further research on the benefits of active leisure for one's psychological well-being with an emphasis on positive emotion, derived from physical activity. In addition, this finding also can contribute to yielding an implication that any types of physical activity performed in the context of leisure in which participants engage in freely chosen activities would be conducive to enhancing positive emotion, buffering against stress effectively. It is well-documented that obesity increases the risk of mental health disorders through poorer perceived health, low self-esteem, body image concerns, weight-related stigma and bias, increased rate of chro- nic disease, or dieting and binge eating [33] [34]. The link between positive emotion and health is aligned with previous research demonstrating positive emotion can lead to health outcomes through strengthened immune and cardiovascular systems, induced by enhancing social ties and health practices including regular physical exercise, optimal quality and quantity of sleep, and

healthy diet [47] [48] .It is noteworthy that most of the participants replied that they have experienced a clear mind and focus, derived from positively toned emotion after engaging in leisurely physical exercise, which helps them to capitalize on effective problem focused coping, as well as problem solving efficacy. Therefore, mind and body interacts reciprocally and synergistically as a unity in this respect and leisure time physical activity may play a crucial role in enhancing the well-balanced health through an elicitation of positive emotion coupled with physical movement/fitness. Further research with longitudinal and experimental designs need to replicate whether or not positive emotion elicited from various types of leisure contributes to physical health as well as mental health by generating effective stress coping strategies. There are some limitations in the research. On the contrary, avoi- dant type of coping style is negatively correlated with mastery-oriented goals and effective time management and positively associated with procrastination [30]. Also, participations in restorative activities such as sleep, exercise, relaxation, vocation, interacting with social ties, and spending time in natural environment are conducive to reducing stress appraisal and negative affective response to stress [49]. Further research need to be conducted by including a variety of populations with multiple study designs including an experimental research or a longitudinal research in order to increase the transferability of the study. In addition, the participants in the study are dominantly Caucasian males. Nevertheless, given the findings from the previous research regarding the susceptibility to stress across gender and ethnicity, it can be a promising result in that white male oriented sample in the study has drawn the finding showing the positive impacts of leisure time physical activity on stress coping and well-being. This is consistent with previous research which demonstrated effective emotion-focused coping, leading to better problemfocused coping with positively toned emotion elicited by engaging in leisure [22] [23]. Planned breather leisure coping style is positively associated with mastery- oriented goals, effective time management and negatively associated with procrastination. The approach type of coping appears to be derived from eliciting positive emotion, leading to cognitive reappraisal in the face of stress [22] [31] .Also, all participants mentioned that physical exercise seems to be more effective in reducing stress than passive forms of leisure such as watching TV or even social leisure, such as meeting with friends. Since leisure pertain to the notion in which people engage in a freely chosen activity outside of obligatory works, leisure activity can lend itself a sense of freedom and autonomy which contribute to enhancing sense of control [22] [28] [42] .In a similar vein, the self- determination disposition in leisure contributes to enhanced sense of control and intrinsic motivation which function as a stress coping resource [40] [43] .Thus, recruiting more females for a proportionately balanced sample with males might have contributed to better understanding for underlying reasons of engaging in physical exercise for stress management and psychological well-being. In addition, patients with chronic conditions, such as diabetes, congestive heart failure, and arthritis, elevate the risk of deteriorating well-being and psychosocial functioning [35] [36] .This may be a threat to selection bias which may trigger a transferability issue when it is applied to other settings where participants are not sufficiently motivated to engage in physical exercise in their free time. First, many leisure activities are characterized with using physicality as life does, contributing to one's well-being through enhancing a mind and body connection in a holistic way. This research shows that leisure time physical exercise contributes to effective coping by enhancing better problem-focused

coping derived from positive emotion. Also, Smith and Baum point out that positive emotion plays a crucial role in protecting individuals from negative response to stress through release of endogenous opioids. The findings in the qualitative research appear to further illuminate the pathways of how leisure time physical exercise contributes to well-being. The proportion of male participants is seven out of nine and the ethnicity of the participants consists of eight Caucasian and one African American. This is due to the fact that people with higher stress levels indicates more room to improve through leisure benefits as compared to those with lower levels of stress at baseline [40] . Many people seem to have clear and immediate benefits by inducing balance and harmony between mind and body by engaging in leisure time physical activity, which contributes to mental health as well as physical health. In particular, in the context of leisure, physical exercise may lead to health promoting behaviors due to the fact that people have enhanced sense of control over their time and health status. This may be the reason that people are more motivated to engage in physical exercise for a long time through enhanced sense of control, which in turn, lead to psychological and physical well-being in the light of leisure [18] [19] [40] [41] . This approach type of coping as opposed to an avoidance type of coping may play an important role in coping with stress effectively. This also warrants further studying in terms of active leisure in comparison with passive leisure. Physical activity is posi- tively associated with healthy diet and negatively associated with smoking [39]. Since it was conducted by using university students on a single campus, the findings may be difficult to be generalized for an entire population. Also, participants in this study were already motivated to engage in physical exercise before participating in the study. However, previous research show that perceived stress is relatively higher among female college students as well as minority college students, [1] [10] [12] [50] .Also, two of the participants directly mentioned that they take a more proactive approach to problem solving in the face of stress rather than avoiding the situation or blaming others. The current study seems to have brought up an important message in this respect.