



Depression, Coping, Self – Efficacy in Middle Adulthood

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ABSTRACT: Middle adulthood refers to that developmental period of lifespan which emerges after young adulthood and before old age. Depression is psychological disorder which causes sadness in one's life for prolonged period of time and they lose interest in their lives. It also affects one's thought process, behavior, and feeling. Coping is defined as "cognitive and behavioral efforts" a person employs to manage stress, generally categorized as emotion focused or problem focused coping. Self-Efficacy is a person's particular set of beliefs that determine how well one can execute a plan of action in prospective situations. The present study adopts a correlational design to determine whether there is any relationship between depression, coping, and self-efficacy in middle adults. It also adopts a between group design to determine whether gender differences exist with respect to depression, coping, and self-efficacy. A non-probability convenience sampling method was used to select sample. During the data collection, 40 middle adults were obtained out of which 21 are males and 19 are females. Findings of study show negative correlation between depression and coping in middle adults and positive correlation between coping and self- efficacy in middle adults. Findings of study show that it is imperative for middle adults to adopt positive habits in their lives to live a happy and healthy mental and physical life to not let depression capture their lives and cope with various life demands and problems effectively as it would enhance their levels of self- efficacy since they have so many roles, duties, and responsibilities on their shoulders.

KEYWORDS: depression, coping, self – efficacy, middle adults, correlational, between group, convenience sampling, responsibilities

I. INTRODUCTION

In today's world, depression in different walks of life has become common among people belonging to different age groups. Every stage of life has got different problems, challenges. In

process of dealing with them, people become victim of depression, anxiety, frustration, stress, violence and other psychological problems.

Middle adulthood is one stage of life where people deal with maximum demands of like doing jobs, getting married, taking responsibility of parents, parent in laws, raising children coupled with facing different problems in life which may give rise to various mental health issues like depression, anxiety, frustration, stress, violence and other psychological problems. Hence, they could consult mental health professionals to get guidance on how to deal with them or could watch different videos available on YouTube to get insight on how to deal with mental health issues. This would help them to cope with their mental health issues and would help their self - efficacy levels to get enhanced. Also, they could practice meditation in their free times and drink lots of water as they relax one's nerve and make one feel relaxed. All these would help them to make better adjustments and adaptations in their lives.

Middle adulthood refers to that developmental period of lifespan which emerges after young adulthood and before old age.

Middle adulthood coincides with Erickson's seventh stage of psychosocial development that is Generativity Versus Stagnation where middle adults pay more attention to their careers; they focus on their jobs, look after their adult children and provide them economic, social, emotional support. Also, they look after their parents. In this way, they provide positive things to society by doing productive and meaningful work which coincides with Generativity phase of Erickson's life stages. In case, if they can't achieve what they have targeted in their lives, sense of guilt sets in them, they become sad, depressed which coincides with Stagnation phase of Erickson's life stages.

In middle adulthood, crystallized intelligence continues to increase even though fluid



intelligence decreases. Fluid intelligence involves information processing abilities, such as logical reasoning, remembering lists, spatial ability, and reaction time. On the other hand, crystallized intelligence involves abilities that are based upon experience and knowledge.

One of the common phenomena which happens in women in middle adulthood is they experience Menopause which is a period where woman's ovaries stop producing eggs and there is reduction in the level of oestrogen and progesterone production. Women's menstruation ceases after menopause. Some of the common problems associated with menopause in women in middle adulthood are – changes in hormonal levels, hot flashes, sweats, depression, irritability, mood swings, and weight gain. To overcome problems associated with menopause, women who decided to go through hormonal replacement therapy have suffered from brain stroke, breast cancer, blood clots. Hence, some ways are suggested to get rid of these symptoms are avoiding caffeine and alcohol, eating soy, remaining sexually active, practicing relaxation techniques, and using water-based lubricants during intercourse.

Some of the common problems associated with middle adulthood in case of men is that they experience Andropause where men's level of libido gets decreased and their androgen level which is a type of testosterone gets lowered. Reduction in sex drive is very natural for men as they age. It has been found that testicular cancer which is a glandular disease is one of the main reasons for testosterone level getting lowered. Some of the common problems associated with low level of testosterone in men are loss of interest in sex, loss of body hair, difficulty achieving or maintaining an erection, loss of muscle mass, and breast enlargement which are experienced by 5 million men. Testosterone Replacement Therapy is done to help men get rid of these problems. This would result in sex drive, muscle mass, and beard growth getting increased.

Depression is psychological disorder which causes sadness in one's life for prolonged period of time and they lose interest in their lives. It also affects one's thought process, behavior, and feeling.

Some of the common facts associated with depression are as follows:

Depression is highly associated with heightened level of anxiety. When people are extremely anxious with anything for prolonged period of time, they gradually get into depression.

During depressive stage, our thinking pattern becomes distorted and we get negative thoughts. These negatives thoughts could make individuals who are into depression resort to suicidal attempt.

In depression, our interpersonal relations get hampered as we tend to isolate ourselves from external world by ignoring others, lashing out at them for no serious reasons, breaking contact with them.

At times when people are going through chronic pain for prolonged period of time, they can become depressed as there is discomfort in their bodies which also adversely affect their social lives, professional lives and they spend most of the times at homes.

Alcoholism, smoking, and drug addiction have high association with depression. People who get into depressive state for prolonged period of time, they start taking alcohol, they start smoking, they get into drugs.

Coming to genetic perspective, it has been found that parents who have gone through depressive state, their children are four times more prone to go through depressive state than others.

Coming to biomedical perspective, it has been found that people with high level of serotonin are more prone to get into depression than others.

Some of the common ways and treatments to deal with depression are as follows:

1. Cognitive Behavioral Therapy: It helps us to modify our distorted thought process and develop logical thought pattern to deal with negativity in life.
2. Behavioral Therapy: It helps us to develop adaptive behaviors when we are at negative state.
3. Insight Oriented Therapy: It helps us to gain insight about why and how did we get into depression so we could realize how to modify ourselves and in what areas.
4. Dialectical Behavioral Therapy: It helps clients to acknowledge and accept their negative thoughts leading to depression.
5. Psychodynamic therapy: It focuses on negative thoughts, beliefs lying in one's unconscious mind.
6. Interpersonal Therapy: It helps client to develop positive relation with other, get social support from others.
7. Exercising: Practicing exercise at least for 1 hour every day.
8. Meditation: Practicing meditation at least for 30 minutes every day.
9. Nutrition: Having balanced diet every day.



10. Sleep: Sleeping early at night to get adequate and quality sleep.

Coping is defined as “cognitive and behavioral efforts” a person employs to manage stress, generally categorized as emotion focused or problem focused coping (Lazarus and Folkman, 1984).

Coping is divided into two types:

- **Reactive coping:** Here, person reacts following stressors thus helping individual to perform better in more variable environment.
- **Proactive coping:** Here, person aims to neutralize future stressors thus helping individual to perform better in stable environment.

There are different types of coping strategies are:

- **Problem focused coping:** This type of coping analyses the problem, what factors are causing it, how to deal with it, how to implement solutions to deal with it. In this way, it tries to reduce distress level of person.
- **Emotion focused coping:** This type of coping find ways to regulate and manage negative emotions associated with the problem.
- **Meaning focused coping:** This type of coping tries to find meaning of the situation involving problems and accordingly uses cognitive strategies to deal with it.
- **Social coping:** This type of coping involves seeking emotional or instrumental support from beloved ones or from community to reduce one's distress level.

Coming to physiology of coping mechanism, serotonergic and dopaminergic input of the medial prefrontal cortex and the nucleus accumbens, neuropeptides vasopressin and oxytocin play important role in coping.

Self-Efficacy is a person's particular set of beliefs that determine how well one can execute a plan of action in prospective situations (Bandura, 1977).

Following are the determinants of self- efficacy:

- **Mastery Experiences:** It involves to what extent one is having belief in one's ability to master one's task. This is also known as Performance Outcomes.
- **Vicarious Experience:** It involves observing how others with whom we idolize are accomplishing their goals. It is also known as Social Role Models.

- **Social persuasion:** When a person receives positive verbal feedback while doing complex tasks, it persuades a person to believe that they have required skills and talents to succeed in the goals.

- **Emotional and physiological state:** It involves how a person's physical and psychological well- being determine how they would feel and think about their abilities to achieve their goals.

- **Imaginal Experiences:** It involves visualizing one's goal as attainable and oneself as successful in achieving one's life goals.

Following are the ways through which self- efficacy could be developed:

- **Emphasizing role model:** It involves developing positive behavior by imitating someone with whom we idolize so our positive beliefs about ourselves could increase.

- **Seeking feedback:** It involves seeking feedback from others as in how others are evaluating others with respect to how much improvement one has made in one's behavior, in what areas they need to improve more so one could develop more confidence in oneself.

- **Encouraging participation:** It involves encouraging one to get engaged in one's work environment actively.

- **People should be allowed to make their own decisions and choices:** Giving liberty to individual to make their own decisions and choices would help them to evaluate oneself, whether they have taken correct choices and decisions or not, if not where they have mistaken, how to correct it and if they have taken correct decisions how to maintain it or how to improve it all these factors are taken into consideration.

High self-efficacy is associated with resiliency, healthy lifestyle habits, improved employees performance, and educational achievement.

II. LITERATURE REVIEW

Research conducted by Jo, N. H., & Seong, C. H. to study effects of stress and self-esteem on depression in middle-aged women and middle-aged men in 2016, its results showed that 43.1% of the variance in depression has been explained by its predictors stress, self- esteem, and health perception in middle aged women. Also, 56.0% of the variance in depression has been explained by self- esteem and stress in middle aged men.

Again research focusing on exploring individual differences with respect to using



proactive coping strategies by middle-aged and older adults conducted by Ouwehand, C., de Ridder, D. T., & Bensing, J. M. In 2008, its results showed that proactive coping shares association with future temporal orientation and goal orientation but to lesser extent in middle aged and older adults.

On the contrary research conducted by Rivera-Hernandez, M. to examine impact of depression, self-esteem, diabetes care and self-care behaviors among middle-aged and older Mexicans in 2014, its results showed no relationship between depression and self care behaviors was found in middle and older adults of Mexicans and that likelihood to follow diet was less in them.

Again, research which was a Canadian longitudinal study conducted on aging to explore the role of immigration, nutrition, and other determinants of health with respect to depression in middle and older adulthood by Davison, K. M et al in 2019, its results showed depression shares association with socioeconomic, physical, and nutritional factors in middle and older adults. Also, significant gender differences have been found with respect to depression where depression have been found to be more among immigrant women who are middle and older adults.

Moreover another study conducted by Ellermann, C. R., & Reed, P. G. which focused on examining role of self-transcendence and depression in middle-age adults in 2001, its results showed self transcendence along with its other measures and depression along with its other measures share inverse correlation in middle age adults. Also, depression and acceptance share significant correlation in middle age adults.

According to research conducted by Havlik, R. J., Brennan, M., & Karpiak, S. E. to explore association between comorbidities and higher rates of depression found in older HIV patients whose age was 50 and above in 2011, its results showed significant correlation between depression and comorbidity and that for number of comorbid conditions, depression remained significant covariate which has been obtained through application of multivariate analyses.

Also, in another longitudinal study conducted by Geerlings, S. W. et al. to find relation between pain and depression in older adults whose age ranges between 55 and 85 with respect to age, sex, disability in 2002, its results showed strong association between pain and depression and that association was stronger more in older men than women. Age didn't have any kind of impact on pain – depression relation. Also, poor prognosis was

found between comorbid pain and depression and that depression has lesser persistence than pain in older adults.

Moreover in another research study conducted by Padayachey, U., Ramlall, S., & Chippis, J. to investigate depression in older adults whose age range between 58 to 91 years with special reference to prevalence and risk factors in a primary health care sample in 2017, its results showed that depression share association with female gender, widowhood and a negative subjective health status in older adults whose age range between 58 to 91 and that no association was found between depression and specific medical conditions in older adults.

Again, another population - based study conducted by Xiang, X., & Cheng, J. to investigate trajectories of major depression in middle aged and older adults whose ages are above 50 years in 2019, its results showed that chronic major depression is prevalent in middle aged and older adults in small but non ignorable proportion.

Also in another study conducted by Mojtabai, R., & Olfson, M. to study major depression in community-dwelling middle-aged and older adults to determine its prevalence and 2-and 4-year follow-up symptoms in 2004, its results showed that likelihood of significant depressive symptoms increased at follow-ups and that prevalence of it decreased with age. Also, it has been found that at follow-ups, socio-economic disadvantage and physical illness share association with both prevalence and persistence of significant depressive symptoms and that symptoms of anhedonia, feelings of worthlessness, and thoughts of death at baseline determined persistence of depressive symptoms at follow-ups.

Study conducted by Schoenmakers, E. C., van Tilburg, T. G., & Fokkema, T. which focused on exploring older adults suggestion with respect to how to cope with loneliness in 2012, its results showed that older adults aged 62 to 100 who were employed in midlife and have high self-esteem and also people who are older, in poor health were less involved in active coping. On the contrary, older people with low educational and mastery levels were involved more in regulative coping.

Again in another study conducted by Karen M. Zabrucky et al. to determine role of perceived stress and coping resource availability as predictors of life satisfaction in young, middle-aged, and older adults in 2001, its results showed that for young adults life satisfaction got better predicted by perceived stress and that for middle and older adults



life satisfaction got better predicted by coping resources. Also, significant age differences have been found with respect to life satisfaction, perceived stress, coping resources.

Similarly in another study conducted by Hamarat, E., Thompson, D., Steele, D., Matheny, K., & Simons, C. which focused on examining age differences with respect to coping resources, life satisfaction among middle-aged, young-old, and oldest-old adults in 2002, its results showed that oldest old like their younger counterparts cope effectively in case of healthy adults amidst high stress level and as a result old age is married as period of resilience and fortitude psychologically.

Also in another study conducted by Lohr, M. J., Essex, M. J., & Klein, M. H. which focused on exploring how coping resources is related to physical health status and life satisfaction among older women in 1988, its results showed that at each point of model, effects of physical conditions has been buffered by positive - cognitive coping, deleterious effects on health status has been created by passive - cognitive coping and also lowering life satisfaction by negative health outcomes has been prevented by passive - cognitive coping. Moreover, little effect has been obtained from direct-action coping.

Another study conducted by Conner, K. O. et al. which focused on identifying barriers to treatment and culturally endorsed coping strategies among depressed African-American older adults in 2010, its results showed that to deal with depression, culturally endorsed coping strategies are to be identified and utilized based on number of experiences identified by older African-Americans living in Black community for which their attitudes and behaviors while seeking treatment got impacted.

Research conducted by Fiori, K. L. et al. to examine impact of self- efficacy on social relations and depressive symptomatology as mediator in 2006, its results showed that in middle aged adults partial mediator's role has been played by general self- efficacy and in case of older adults partial mediator's role between social relations and depressive symptomatology has been played by social self- efficacy.

Also, longitudinal analysis conducted by Holahan, C. K., & Holahan, C. J. on self-efficacy, social support, and depression to see its results in aging in 1987, its results showed that through its effect on social support in preventing depression, self- efficacy functions directly and indirectly through path analysis. Also, it has been found that initial self- efficacy, depression, and social support

share relation when depression is controlled in aged adults as observed through initial structured interview and follow up interview a year later.

Again, research conducted by Ahmad, Z. R., Yasien, S., & Ahmad, R. to examine relationship between perceived social self-efficacy and depression in adolescents in 2014, its results showed negative correlation between perceived social self-efficacy and depression in adolescent through application of Pearson product moment correlation.

On the contrary research conducted by Byers, P. H., & McDougall, G. J. on coping, depression, and self-efficacy to investigate older adult's metamemory in 1993, its results showed no significant correlation was found between metamemory, coping, depression, and self- efficacy in older adults through application of Pearson product moment correlation.

Moreover research which is a systematic review conducted by BorjAlilu, S et al. which focused on exploring role played by self- efficacy for coping with breast cancer in 2017, its results showed for enhancing goal directed behaviors in patients with breast cancer, self- efficacy proved to be crucial component.

Research Objectives:

- To find relation between depression and coping in middle adults.
- To find relation between depression and self-efficacy in middle adults.
- To find relation between coping and self-efficacy in middle adults.
- To find gender difference with respect to depression.
- To find gender difference with respect to coping.
- To find gender difference with respect to self-efficacy.

Research Questions:

- Is there any relation between depression and coping in middle adults?
- Is there any relation between depression and self- efficacy in middle adults?
- Is there any relation between coping and self-efficacy in middle adults?
- Is there any gender difference with respect to depression?
- Is there any gender difference with respect to coping?
- Is there any gender difference with respect to self- efficacy?



Research Hypothesis:

- H1: There is relation between depression and coping in middle adults.
- H2: There is relation between depression and self-efficacy in middle adults.
- H3: There is relation between coping and self-efficacy in middle adults.
- H4: There is gender difference with respect to depression.
- H5: There is gender difference with respect to coping.
- H6: There is gender difference with respect to self-efficacy.

III. METHODOLOGY

Research Design:

The present study adopts a correlational design to determine whether there is any relationship between depression, coping, and self-efficacy in middle adults. It also adopts a between group design to determine whether gender differences exist with respect to depression, coping, and self-efficacy.

Sample:

A non-probability convenience sampling method was used to select sample. During the data collection, 40 middle adults were obtained out of which 21 are males and 19 are females.

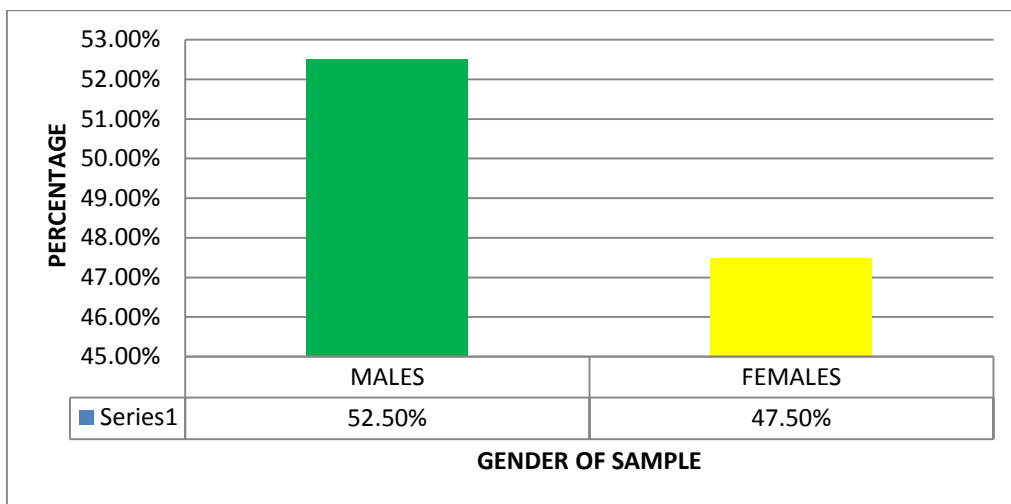


Figure 1: Bar graph showing percentage of sample belonging to different genders. From the graph it could be seen that 52.5 % of sample are males and 47.5 % of sample are females.

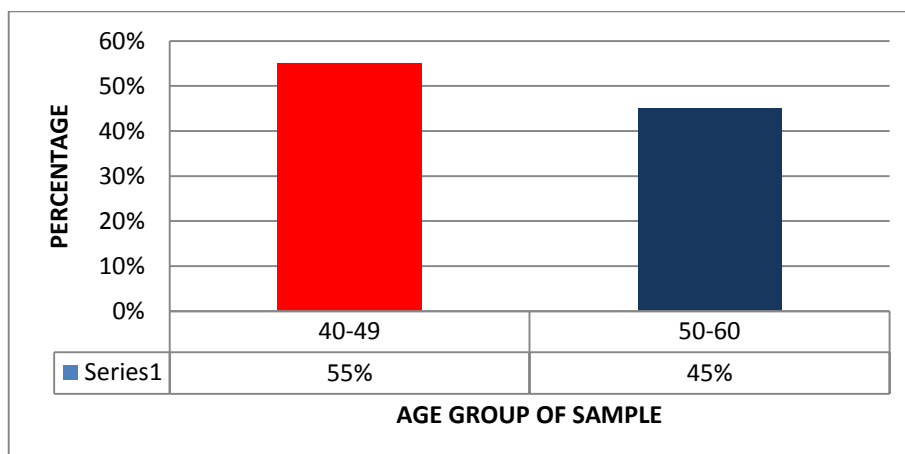


Figure 2: Bar graph showing percentage of sample belonging to different age group. From the graph it could be seen that 55% of sample are within the age group of 40- 49, 45% of sample are within the age group of 50-60.



Inclusion Criteria:

- Participant has to be within the age range of 40-60.
- Participant has to be proficient in English or Hindi or Bengali.

Exclusion Criteria:

- Participant who are outside the age range of 40-60.
- Participant who are not proficient in English or Hindi or Bengali.

Tools Applied:

Following tools have been used for data collection:

Depression:

Developed by Kroenke, K., et al. in 2010, the 9-item patient health questionnaire scale has been used to assess to what extent middle adults felt depressed over the last two weeks. The responses are rated on a four point scale ranging from not at all to nearly every day.

Coping:

Developed by Hamby, Grych, and Banyard in 2015, the 13-item coping scale has been used to assess how middle adults cope with negativity of their lives. The responses are rated on a four-point scale ranging from mostly true about me to not true about me.

Self-Efficacy:

Developed by Schwarzer, R. and Jerusalem, M. in 1995, the 10-item general self-efficacy scale has been used to assess to what extent middle adults believe that they have required abilities in them to achieve their goals by coping with negativity of their lives. The responses are scored on a four-point scale ranging from not at all true to exactly true

Procedure:

After selecting measures for the study, the researcher conducted the study by taking permission. Responses of the participants have been taken manually. Rapport was established with

the participants by visiting their places as per their convenience. They were made aware that their participation in the study was purely voluntary and whatever doubts raised by the participants were all cleared by the researcher. They were assured of maintaining confidentiality through-out the study and were asked to sign the informed consent form. Next, the information schedule was administered. The researcher had put the instructions in the questionnaires itself. Participants took average of 10 minutes to fill the information schedule and the questionnaires. The researcher had made few who lack proficiency in English; understand the meaning of the statements in local language. The data collected was then coded, entered in SPSS and statistically analysed.

Statistical Analysis Of Data:

After completion of data collection, the responses were scored. Then the statistical treatments of the scores were done using the data analysis software IBM SPSS version 22. Spearman Rank Correlation was computed to determine the relationship between depression, coping, and self-efficacy in middle adults. This was followed by computing Mann Whitney U test for comparing gender difference with respect to depression, coping, and self-efficacy.

IV. RESULTS AND DISCUSSIONS

The aim of this study is to find relation between depression, coping, and self-efficacy in middle adults. Categories were discovered in three main areas - depression, coping, and self-efficacy.

The obtained data of this study were analysed using Non-Parametric Tests- Spearman Rank Correlation, Mann Whitney U test using the Statistical Package for Social Sciences (SPSS) version 22.0 since normality of distribution could not be determined. Spearman Rank Correlation was used to determine the relationship between depression, coping, and self-efficacy in middle adults. Also, Mann Whitney U test has been used to compare genders with respect to depression, coping, and self-efficacy.

Table 1: Correlation matrix showing relation between depression, coping, and self-efficacy in middle adults.

VARIABLES	DEPRESSION	COPING	SELF- EFFICACY
DEPRESSION	1	-.393*	-.271
COPING	-.393*	1	.379*
SELF- EFFICACY	-.271	.379*	1

Note: $p < 0.05^*$



From Table 1 it could be seen that there is significant negative correlation between depression and coping in middle adults ($r = -.393, p < 0.05$). Thus, hypothesis H1 is accepted and null hypothesis is rejected. It could be seen that coping and self- efficacy share a significant positive correlation in middle adults ($r = .379, p < 0.05$). Thus, hypothesis H2 is accepted and null hypothesis is rejected. Also, it could be seen that there is no correlation between depression and self- efficacy in middle adults ($r = -.271, p > -.271$). Thus, hypothesis H3 is rejected and null hypothesis is accepted.

Research conducted by Greenglass, E., Fiksenbaum, L., & Eaton to study the relation between coping, social support, functional disability and depression in the elderly in 2006 , its results through application of structural equation modeling showed that proactive coping, depression, and disability share negative association in elderly. Social support share positive association with proactive coping and negative

association with depression in middle adults. Also, depression shares positive association with functional disability in middle adults. Again, a literature review conducted by Helvik, A. S et al. to examine the impact of depression and coping in old age in 2013, its results showed that fewer symptoms of depression and a higher sense of control and internal locus of control, more active strategies and positive religious coping share significant association in old age.

A positive relation has been found between self-efficacy and positive coping strategies as per results of literature conducted on self- efficacy and coping (Devenport & Lane, 2006; Khan, 2013; Mantzicopoulos, 1997; Taylor et al., 1992). High self-efficacy and active coping like problem-solving and information seeking share association. In active coping, problem focused coping is most commonly used. On the other hand, low self-efficacy and passive coping like avoidance and distraction share association (Carver et al., 1989; Shen, 2009; Hsieh et al. 2012).

Table 2: Mann Whitney U values showing gender difference with respect to depression, coping, and self- efficacy in middle adults.

VARIABLES	DEPRESSION	COPING	SELF - EFFICACY
Mann Whitney U	160.000	198.000	198.000
Asymp. Sig (2 -tailed)	.294	.979	.979

Note: $p > 0.05$

From Table 2 it could be seen that no significant gender differences exist with respect to depression ($U = 150.000, p = .294 > 0.05$), coping ($U = 198.000, p = .979 > 0.05$), and self-efficacy ($U = 299.000, p = .979 > 0.05$). Thus, hypothesis H4, H5, H6 are rejected and null hypotheses with respect to gender differences are accepted.

The quantitative findings of the study suggest that every individual who is in middle adulthood stage of their lives should be resilient, optimistic by nature as these psychological capitals would help them to cope up with any negativity they are facing or might face in their lives. It in turn would prevent them from going through depression or developing any kind of depressive symptoms due to that negativity and would also enhance their self – efficacy levels.

Limitation of this study is on the fact that very few research studies focusing on middle adults have been conducted which in turn is giving rise to problem of literature gap.

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Conflict of Interest:

The author declared no conflict of interests.

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