

Mental health literacy is useful for women's psychological empowerment

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Abstract

Mental health literacy is improving the health behavior of the public in developed countries. The governments of developing nations are working to provide better health facilities to the public by reforming the health sector with new policies. Women are a significant part of society, but many countries have fewer policies for women's health. Turkish women are reportedly facing health issues in their routine life. The significant objective of this research is to determine the moderating impact of health education, physical exercise, and psychological control between mental health literacy and Turkish women's psychological empowerment. This research is based on primary data and collected responses using a random sampling method from 402 female respondents. The findings disclose that mental health literacy is useful for women when they have health education, physical exercise, and psychological control. The model developed by this research is a significant addition to the knowledge as the gap identified in the research. Furthermore, the research has critical practical implications for improving Turkish women's psychological empowerment. In the final section of the research, the limitations of this study are highlighted. Furthermore, these limitations are demonstrated with practical implications that scholars can use in future studies to develop the research gap better to contribute significantly to the literature.

Keywords. Mental health literacy, psychological control, health education, physical exercise, psychological empowerment.

1. Introduction

Mental health is necessary for everyone because it improves routine life. People with strong mental health are more productive in schools, offices, and other workstations (Massar, Kopplin, & Schelleman-Offermans, 2021). From the students' learning to the working of the employees, mental health is critical and facilitates people to perform their duties best (Lee, 2021). Every organization's employees should have better mental health as it affects their performance. The employees of organizations that aren't motivated to perform their duties in a better way, these employees are recommended to get better exercise because it will reboot their performance productively (Lo, Gupta, & Keating, 2018). The doctors recommend that the employees have strong mental health because of being comfortable with the work of art (Pandori-Chuckal, 2020). Employees who are less productive and have very little demonstrated to improve their mental health. These employees are fired by their organization bosses (Gray, 2020). Health exercise is necessary to ensure that appropriate mental health is developing (Dias et al., 2018). Many researchers claim that thinking behavior and a better learning attitude are useful in

improving people's mental health, which is necessary for better performance and reasoning (Oftadeh-Moghadam & Gorczynski, 2021).

Similarly, Turkish women work in different national and multinational organizations and their mental health is also critical to understand (Yılmaz Akbaba & Eldeleklioğlu, 2019). The role of women is necessary for organizational performance because they are a critical part of the organization (Chen et al., 2020). The strong reasoning and judgmental attitude of the women make them perform in the best positions in the organization (Massar et al., 2021). Every organization has tested in the recruiting process, and these organizations warmly welcome candidates with positive thinking and mental well-being (Asgari, Navab, & Bahramnezhad, 2019). The productivity of the organizations in their learning facilitates them to improve their learning performance productively (Hahn & Truman, 2015). For women with solid reasoning and who have been involved in critical tasks, the performance of these women is improved compared to the other women (Angadi et al., 2019). Turkish women are highly motivated to travel to Europe for better learning because their attitude and performance are necessary for their productive work (Derman & Gurbuz, 2018). Indeed, psychological capital matters a lot in the personality development of any individual, and based on this capital, women are improving their life to fit in the working organization (Ware et al., 2019). The psychological capital and health exercise are not only limited to male students but female students also should be provided with the same opportunity for better working performance (Hill et al., 2021). The employment rate of Turkish women is increasing and decreasing over time due to different social and other factors. Figure 1 highlights the employment rate of Turkish women.

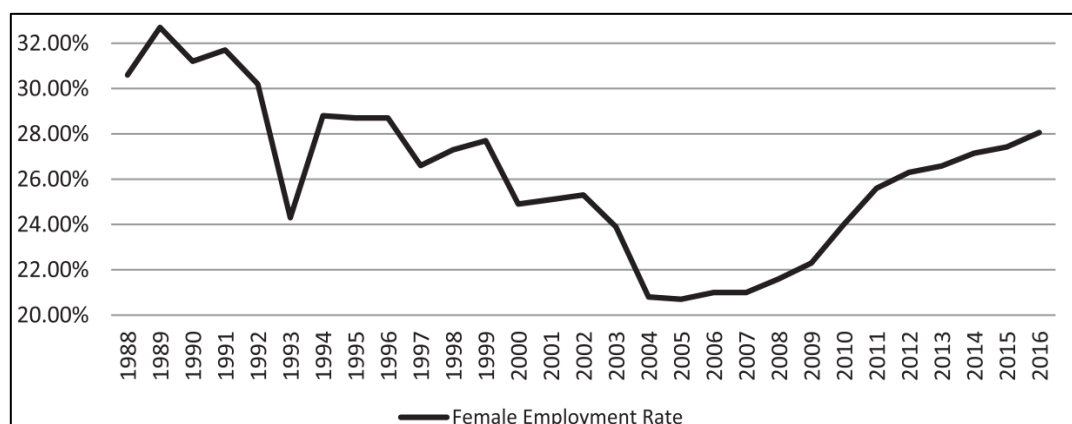


Figure 1. Turk Female Employment Rate

Source: TurkStat (2016)

Mental health literacy is studied widely in the Turkish context of students and males. Indeed, many studies have concluded significant findings related to the mental health literacy of women. Still, these studies haven't disclosed the factors that support the improved mental health behavior of women. The study [Strid, Andersson, and Öjehagen \(2018\)](#) highlighted that women should have strong reasoning and they should have access to health education. Similarly, the research [Steele et al. \(2009\)](#) demonstrated that women's health is as critical as men's health because they contribute equally to the country's economic growth. [Digan et al. \(2018\)](#) concluded that women shouldn't be considered as the object, but their health should be improved for their better work performance and standard of life. [Iqbal et al. \(2022\)](#) highlighted that women who are motivated to perform their organizational responsibilities critically, these women should be supervised by the health teams to make sure that their health status is appropriate. The study [Owan et al. \(2020\)](#) concluded that females in educational institutes should have access to health education because women's information about their health status improves their lives and working situations critically. Furthermore, the research [Abdulrab et al. \(2017\)](#) concluded that women are respectable members of society, and the family and the associated organizations should provide all related resources to the women to improve their learning and better performance. Additionally, [Stanescu, Zbucea, and Pinzaru \(2020\)](#) recommended that the government is responsible for spreading mental health literacy in society to better learning of women to educate them about health information.

The theoretical framework of this study is designed to address the gap in the literature. The core objective of this research is to determine the moderating impact of health education, physical exercise, and psychological control on mental health literacy and Turkish women's psychological empowerment. The model developed by this research is a significant addition to the knowledge as the gap identified in the research. The study is based on the significant findings leading to the theoretical implications for the advancement of the relationship between different variables in the literature. Furthermore, the research has critical practical implications that are notable for improving Turkish women's psychological empowerment. In the final section of the research, the limitations of this study are highlighted. Furthermore, these limitations are demonstrated with practical implications that can be used by scholars in future studies for better developing the research gap to contribute significantly to the literature.

2. Literature review

Mental health literacy refers to the information shared with the public by the health department for their awareness about diseases and critical health situations (Oftadeh-Moghadam & Gorczynski, 2021). This information is published in different research journals that are useful for people to get reasonable information. The people are highly motivated to get information about their mental health as they believe that this information makes them aware of the problems to get the appropriate consultation on time (Dias et al., 2018). The role of mental health literacy is essential for the information of the public to improve the health literacy and health of the people in a significant context (Gray, 2020). Physical exercise refers to the exercise routine for people that is necessary for information sharing and improving their health status (Pandori-Chuckal, 2020). The public is always motivated to get appropriate physical exercise; many go to parks and other places like the gym to work on their health activities (Lo et al., 2018). Furthermore, people who are motivated to improve their physical health, these people are regularly working on health-improving activities that are critical for the better development of their personalities (Lee, 2021). Many people are in the routine of physical exercise as they believe it would help them better understand health and their advancement critically (Massar et al., 2021).

Health education is critical in modern times for the better health development of the public (Zimmerman, Woolf, & Haley, 2015). Importantly, the women who have health education are more fit in health and in their routine work than the other women who have little awareness about mental health and literacy (Hoppe-Herfurth et al., 2021). Indeed, the mental health literacy of the people is necessary and this must be taken to the advanced level for better development of mental attitude (Lee & Liu, 2021). People who are highly motivated to get health education want to improve their life (Li, 2021). Health education should be a complementary course for the students to improve their understanding and provide a way to improve their health status (Yilmaz Akbaba & Eldeleklioglu, 2019). Psychological control is the mental activeness of highly motivated people to get better results in their learning (Steele et al., 2009). People with better psychological control have strong reasoning and don't perform any activity without proper reason (Zimmerman & Rappaport, 1988). The individuals

with no psychological control are emotional and they don't have the qualities to judge people and their routine activities productively (Strid et al., 2018). The psychological control of people is necessary for their better life and judgmental working in the domain of their learning. Even organizations are recruiting employees with robust psychological control necessary for better performance (Stanescu et al., 2020). Women are a large part of our society, and their appropriate societal position must be understood. The women who are actively working to improve their mental health, their daily routine life of these women is improved as they haven't regret of work (Abdulrab et al., 2017). However, the women with little reasoning and emotional attitude and fewer performers and productive as compared to the other women (Iqbal et al., 2022). The logical attitude of the women is helpful for them to improve their mental health (Degago, 2014). Indeed, women with strong reasoning and judgmental attitude are the best learners, and their performance is appropriate according to their work. Finally, the framework of this research on women's psychological empowerment is reported in Figure 2 which shows women empowerment as dependent variable and mental health literacy as independent variable. Furthermore, this study used three moderating variables; physical exercise, health education, and psychological control.

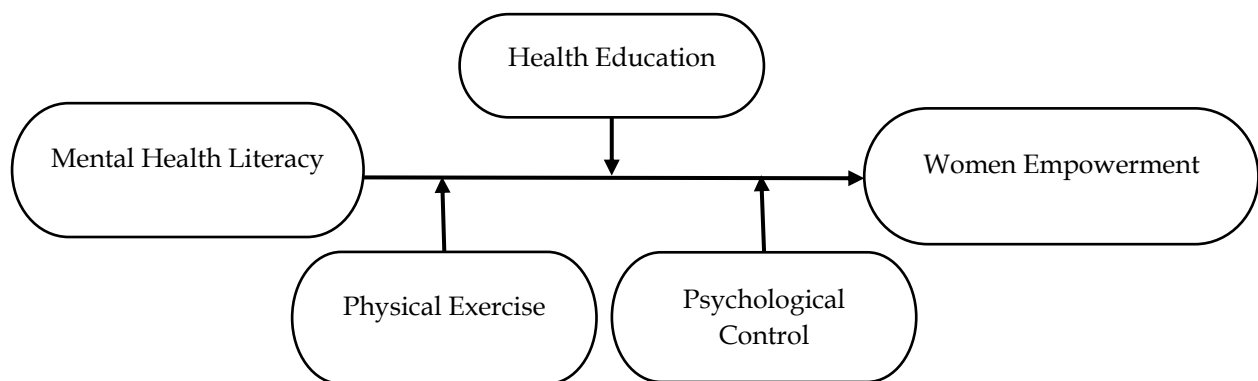


Figure 2. Study framework of women's psychological empowerment

2.1 Hypotheses development

Women's mental health is necessary for their well-being and better living standards (Massar et al., 2021). According to Lee (2021), women are the key stakeholders of the society and they must be provided with all kinds of information

regarding their health for better learning and performance. Furthermore, [Lo et al. \(2018\)](#) concluded that women who can get information about mental health are working appropriately to improve their performance productively. Also, [Pandori-Chuckal \(2020\)](#) concluded that health education is not only the right of men, but women can improve their mental health by getting all the necessary information about it. The women who are working in different offices, these women must be motivated to perform their roles in an active way for their better development and learning that could facilitate them for their better performance after availing the mental health information ([Gray, 2020](#)). In the study [Dias et al. \(2018\)](#), it is concluded that women with mental health improvement information, attitude, and performance of these women are more productive and appropriate compared to other women in the society. [Oftadeh-Moghadam and Gorczynski \(2021\)](#) concluded that women should have all the information to get emotional intelligence because it would help them avoid negative attitudes and learn everything better. Likewise, the mental health literacy of the women is necessary for their productive working in the home and organization and they can improve their family life as well.

According to [Hill et al. \(2021\)](#), mental health literacy is useful for everyone because it facilitates people's positive attitudes and feelings towards their work and appropriate performance. Meanwhile, [Ware et al. \(2019\)](#) concluded that the people who get mental health education are responsible for improving their life because they've access to all necessary information about their mental well-being. According to [Derman and Gurbuz \(2018\)](#), women in society are performing a critical role in their better life. These women are educated about their health as it is critical to improving their standard of living. [Angadi et al. \(2019\)](#) demonstrated that women's clubs sharing information about women's well-being to improve their mental health are using health education necessary for their better working behavior. Women aren't ill creatures and their health is important ([Hahn & Truman, 2015](#)). Still, the government's responsibility is to educate women in a productive way for better health and learning. The appropriate attitude of the women makes them able to perform their routine activities in the offices productive, and the responsibility of the management is to provide related health education to the women to improve their health behavior

(Massar et al., 2021). Women with better health behavior are better learners, and their understanding can be improved if women's work is better (Chen et al., 2020; Hayee et al., 2021). Yılmaz Akbaba and Eldeleklioğlu (2019) described that the women living in the developed countries have better opportunities and their living standard is appropriate for their performance.

The study by Spreitzer (1995) concluded that physical exercise is best for better health and learning. The women, and men who continuously work physical exercise, are mentally fresh, and their critical thinking is improved (Murcia, Gimeno, & Camacho, 2007). Shuja, Aqeel, and Khan (2020) informed that doctors recommend a better health-learning approach for women. This learning would be useful for their physical health when they exercise appropriately. Dias et al. (2018) also highlighted that physical exercise is necessary for the development of the brain and better learning of people, and students who are highly motivated for physical exercise, the performance of these students is far better compared to the students who are not getting physical exercise.

Furthermore, Massar et al. (2021) concluded that health education is necessary for people, but it should be with the routine of physical exercise that improves people's productivity. Lee (2021) concluded that women shouldn't be emotionally weak. Still, they should have a judgmental approach in their routine work necessary for their best performance and better learning. Moreover, Iqbal et al. (2022) emphasized healthy exercise for the women for their mental prosperity and advanced learning that is necessary for their better development and understanding. Lee and Nie (2017) highlighted that women should get healthy exercise because this exercise is necessary for their fitness and strong health behavior. Likewise, Owan et al. (2020) demonstrated that the healthy attitude of the women is useful for their better learning that could facilitate them in their reasonable working.

The research by Digan et al. (2018) highlighted that women's psychological control is logical for better understanding and performing their routine work. Furthermore, Iqbal et al. (2022) concluded that the administration should motivate women with health education to perform their work productively. Owan et al. (2020) concluded that women who aren't productive in their working behavior, these women

are getting little health education and psychological control. Psychological control is not necessary for women, but it is also necessary for men because it facilitates them to improve their operational working that would be helpful for their productive work in the organization (Abdulrab et al., 2017). Women are required to have solid judgmental reasoning and mental health literacy when they are occupying the high positions because their positions are helpful to improve their learning performance in the better way. Stanescu et al. (2020) reported that the women must have strong reasoning and learning necessary for a better life.

Meanwhile, Lee and Nie (2017) concluded that those women and men who don't have mental health literacy and psychological control, these individuals face difficult situations in their learning. Moreover, Degago (2014) highlighted the strong reasoning of the students is necessary for their better learning and reasonable performance. Strid et al. (2018) reported that the mental well-being of women is necessary for their critical performance because women with strong thinking are better performers than other women with emotional bent. Furthermore, Steele et al. (2009) highlighted that those with solid psychological control, these women are risk-taking, and their mental health is better, facilitating productive learning. The framework of this research on women's psychological empowerment is reported in Figure 1 demonstrating the hypotheses.

Hypothesis (H1): Mental health literacy impacts women's empowerment.

Hypothesis (H2): Health education has a moderating impact on mental health literacy and women empowerment.

Hypothesis (H3): Physical exercise has a moderating impact on mental health literacy and women empowerment.

Hypothesis (H4): Psychological control has a moderating impact on mental health literacy and women empowerment.

3. Methodology

The research methodology is a critical part of any study in literature. Most studies in the same area of research have the same methodology. The research work is based in the area of "social sciences"; therefore, the research methodology is

based on “cross-sectional” data collection on a “Likert scale” questionnaire. This scale questionnaire is widely used in the research of “social science” to get the opinion-based response from the researchers. Furthermore, the “cross-sectional” data-taking method is applied following the nature of the research. Since this research is dedicated to collecting the data from the respondents for the significant findings; thus, this method of data collection is applied. Importantly, this research has used the “survey-based” data collection method because it is appropriate to collect data from the population as it is useful to save the cost and the research time.

Furthermore, this research has used a “random sampling technique” in data collection that is useful to take the data with the survey-based method as it is appropriate for it. Furthermore, this research used a “random sampling technique” because the study population was Turkish women. “Morgan’s Table” of population and sampling is used in this study to determine the appropriate sample size. The population of Turkish women is more than 10,000 in the country; therefore, the sample size “of 384” endorsed by Morgan is considered for this research. The Turkish women were targeted in different parks and shopping malls to collect the data. These women were asked about their consent regarding the research response. Most of the women agreed since this research is related to improving the psychological empowerment of women. They were asked not to provide their confidential information because the researchers' intention wasn't to add their personal information to the study. Thus, considering the sample size of 384, the printed 620 questionnaires surveyed these women, and only 411 questionnaires were collected back for the research findings. The women were appreciated for their response to the study. However, the researchers analyzed the data, and 9 questionnaires were found incomplete. These questionnaires were removed from the collected data to be analyzed for this study.

3.1 Measurement Scale

The study has adopted the “valid” measurement scale developed by the researchers for significant contribution to the research. These scales are used in

the questionnaire to collect the data. The validity of “adapted scale items” is tested in two stages; the first stage is based on the checking of reliability with “Cronbach Alpha” value, and in the second stage, the expert researchers are asked to check the face validity of the scale items with the operational definition of these scales. The study identified that the scale items considered for the questionnaire have “ α ” more than 0.70, which is the recommended threshold. Furthermore, the study used the face validity test to check these scales and the experts endorsed these items. 6 scale items for mental health literacy are adapted from [Dias et al. \(2018\)](#) to determine its impact on women's empowerment. 5 scale items for psychical exercise were adapted from [Murcia et al. \(2007\)](#) to investigate its moderating impact on mental health literacy and women empowerment. 5 scale items for health education were adapted from [Abolfotouh et al. \(2019\)](#) to investigate its moderating impact on mental health literacy and women empowerment. 6 scale items for psychological control were adapted from [Spreitzer \(1995\)](#) to investigate its moderating impact on mental health literacy and women empowerment. Finally, 5 items for women's empowerment were adapted from [Shuja et al. \(2020\)](#) to find the impact of direct and moderating variables on women's empowerment.

4. Findings

“Smart PLS” is used for the findings of this research. The “measurement model” and “structural model” calculations were considered for these findings. “Kurtosis and skewness” values for the data normality test are used in this research. “Skewness is a measure of symmetry, or more precisely, the lack of symmetry, and kurtosis is a measure of whether the data are heavy-tailed or light-tailed relative to a normal distribution.” [Field \(2013\)](#) reported, “a general guideline for skewness is that if the number is greater than +1 or lower than -1, this is an indication of a substantially skewed distribution, and for kurtosis, the general guideline is that if the number is greater than +1, the distribution is too peaked.” The data of this research is normal, check the findings in Table 1.

Table 1. Missing value, outlier, and normality of the data

Items	Mean	Standard Deviation	Excess Kurtosis	Skewness
MHL1	3.227	1.522	-0.506	0.112
MHL2	3.24	1.809	-0.591	0.452
MHL3	3.502	1.901	-0.81	0.34
MHL4	3.48	1.912	-0.788	0.404
MHL5	3.524	1.735	-0.487	0.318
MHL6	3.485	1.826	-0.735	0.248
HE1	3.485	1.845	-0.909	0.153
HE2	3.668	1.889	-0.827	0.205
HE3	3.699	1.876	-0.775	0.311
HE4	3.664	1.957	-0.833	0.356
HE5	3.555	1.9	-0.747	0.379
WE1	3.581	1.862	-0.626	0.377
WE2	3.611	1.897	-0.789	0.311
WE3	3.489	1.806	-0.519	0.441
WE4	3.52	1.93	-0.946	0.216
WE5	3.463	1.835	-0.682	0.318
PE1	3.659	1.782	-0.633	0.253
PE2	3.035	1.48	-0.07	0.623
PE3	3.14	1.497	0.553	0.922
PE4	3.192	1.438	0.894	0.954
PE5	3.105	1.447	0.587	0.817
PC1	3.074	1.386	0.591	0.709
PC2	3.166	1.512	0.321	0.707
PC3	3.109	1.466	0.538	0.83
PC4	2.978	1.428	-0.204	0.464
PC5	3.162	1.359	0.512	0.681
PC6	3.07	1.449	0.196	0.657

“Factor loadings (FL)” for reliability test is used in this research. Field (2013) defined, “factor loading shows how well an item represents the underlying construct, and it must be over 0.70.” The findings of this study reveal the research items got appropriate factor loadings. “Cronbach’s alpha (α),” “composite reliability (CR),” “and average variance extracted (AVE)” is also checked for this study. “Cronbach’s alpha ($\alpha > 0.70$), composite reliability (CR > 0.70) and average variance extracted (AVE > 0.50)” are the recommended values findings. The values of FL are reported in Table 2, and the values of α , CR, and AVE are reported in Table 3. The study has reliability for data taken for findings (Figure 3).

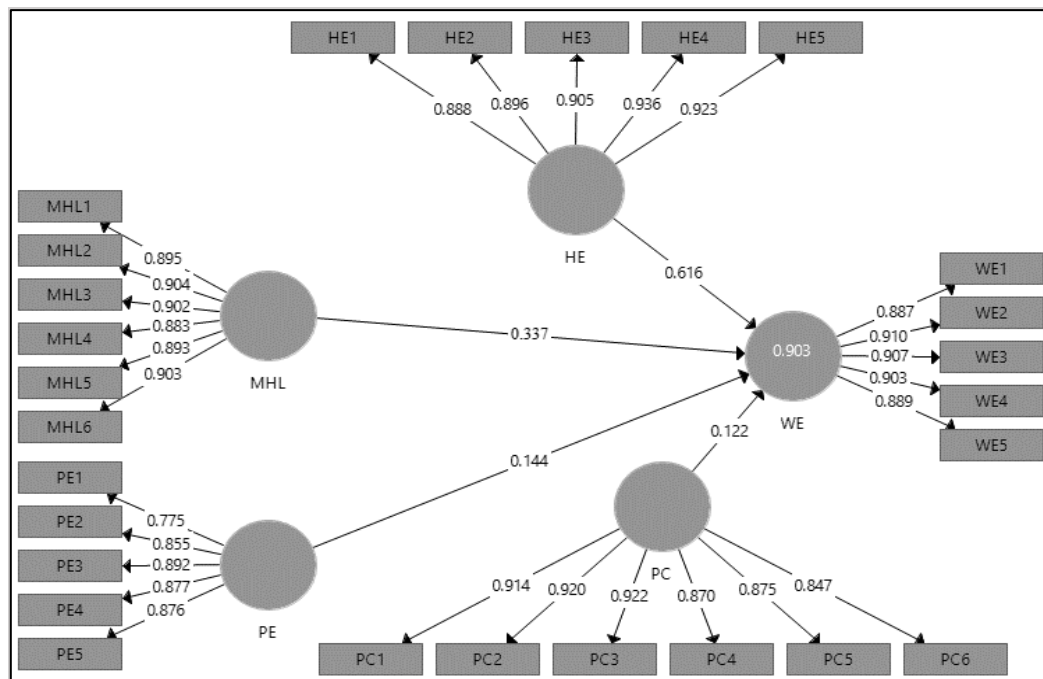


Figure 3. Measurement model

Table 2. Scale items and factor loadings (FL)

“Constructs	Items	Description	FL
Health Education	HE1	People with mental health problems are primarily to blame for their condition.	0.888
	HE2	One can always tell a mentally ill person by their physical appearance.	0.896
	HE3	Mentally ill persons are not capable of true friendships.	0.905
	HE4	Mentally ill persons can work.	0.936
	HE5	The mentally ill should not be allowed to make decisions, even concerning recurring events.	0.923

"Constructs	Items	Description	FL
Mental Health Literacy	MHL1	Mental disorders affect people's thoughts.	0.895
	MHL2	Drug addiction may cause mental disorders.	0.904
	MHL3	Changes in brain function may lead to the onset of mental disorders.	0.902
	MHL4	Highly stressful situations may cause mental disorders.	0.883
	MHL5	The symptom's length is one of the important criteria for diagnosing a mental disorder.	0.893
	MHL6	Doing something enjoyable contributes to good mental health.	0.903
Psychological Capital	PC1	I feel confident in analyzing a long-term problem to find a solution.	0.914
	PC2	I am confident in my performance and that I can work under pressure and challenging circumstances.	0.920
	PC3	I feel confident that I can accomplish my work goals.	0.922
	PC4	I'm optimistic about what will happen to me in the future regarding work.	0.870
	PC5	At work, I always find that every problem has a solution.	0.875
	PC6	I believe that all the problems at work always have a bright side.	0.847
Psychological Empowerment	PE1	I have significant autonomy in determining how I do my job.	0.775
	PE2	I can decide on my own how to go about doing my work.	0.855
	PE3	I have considerable opportunities for independence and freedom in my job.	0.892
	PE4	My impact on what happens in my department is large.	0.877
	PE5	I have a great deal of control over what happens in my department.	0.876
Women Empowerment	WE1	Empowering women is necessary for society and the country to flourish.	0.887
	WE2	It is necessary to give women equal occupational opportunities.	0.910
	WE3	Women should be allowed to go wherever they want to on their own.	0.907
	WE4	Women should be allowed to live their lives the way they want.	0.903
	WE5	There should be complete gender equality between men and women in every field."	0.889

Table 3. Cronbach's Alpha, rho_A, CR and AVE

	Cronbach's Alpha	rho_A	Composite Reliability	Average Variance Extracted (AVE)
HE	0.948	0.948	0.96	0.827
MHL	0.951	0.951	0.961	0.804
PC	0.948	0.951	0.959	0.795
PE	0.91	0.926	0.932	0.733
WE	0.941	0.941	0.955	0.808

The "Heteritrait-Monotrait (HTMT)" technique helps analyze study discriminant validity, as Gold, Malhotra, and Segars (2001) explained, "HTMT is a measure of similarity between latent variables." "HTMT < 0.90" is the recommended threshold for the discriminant validity test. The study has significant "HTMT" and obtained values are reported in Table 4.

Table 4. HTMT

	HE	MHL	PC	PE	WE
HE					
MHL	0.791				
PC	0.687	0.737			
PE	0.788	0.825	0.687		
WE	0.597	0.676	0.668	0.779	

The study has checked the findings of "t" and "p" for the findings of hypotheses. Furthermore, the value of " β " is also checked for it. The "structural model findings" are used for this test of the study that is available in Figure 4. The data analysis values show that mental health literacy's impact is "significant" on women's empowerment, and this influence is accepted "t = 5.442, β = 0.337 and p = 0". The first hypothesis results are available in Table 5.

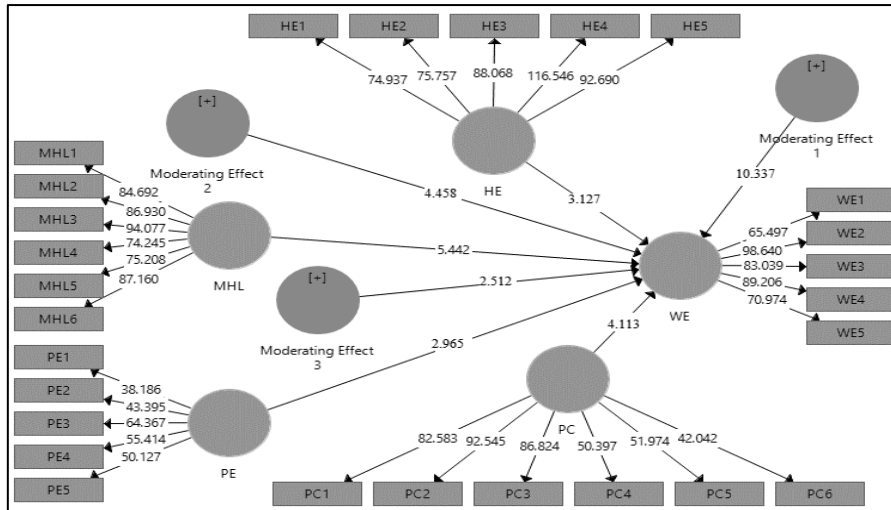


Figure 4. Structural model

Table 5. Direct effect

Direct Path	Original Sample (O)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
MHL -> WE	0.337	0.062	5.442	0.000

In addition, the moderating relationship of this research is tested, and results are available in Table 6. The outcomes of the first moderating relationship confirm the “significant” moderating influence of health education between the association of mental health literacy and women empowerment. This developed relationship is also checked further. The results show that the connection between mental health literacy and women empowerment is positively moderated by health education “ $t = 10.377$, $\beta = 0.582$ and $p = 0$ ”. This relationship is displayed in Figure 5.

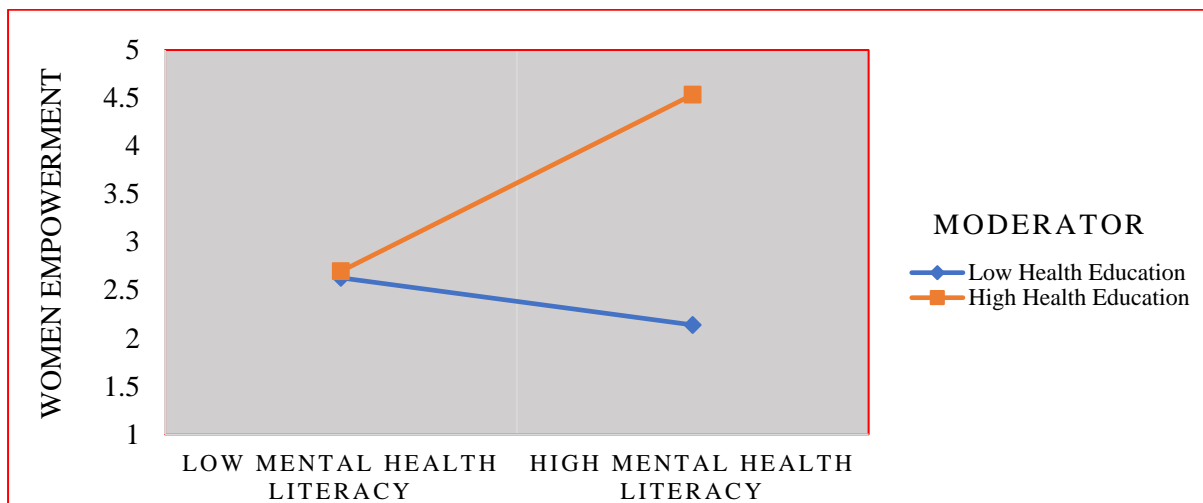


Figure 5. Moderation effect 1

Likewise, second moderating relationship results confirm the “significant” moderating influence of physical exercise between the association of mental health literacy and women empowerment. This developed relationship is also investigated further. The results show that the connection between mental health literacy and women empowerment is positively moderated by physical exercise “ $t = 4.458$, $\beta = 0.107$ and $p = 0$ ”. This relationship is displayed in Figure 6.

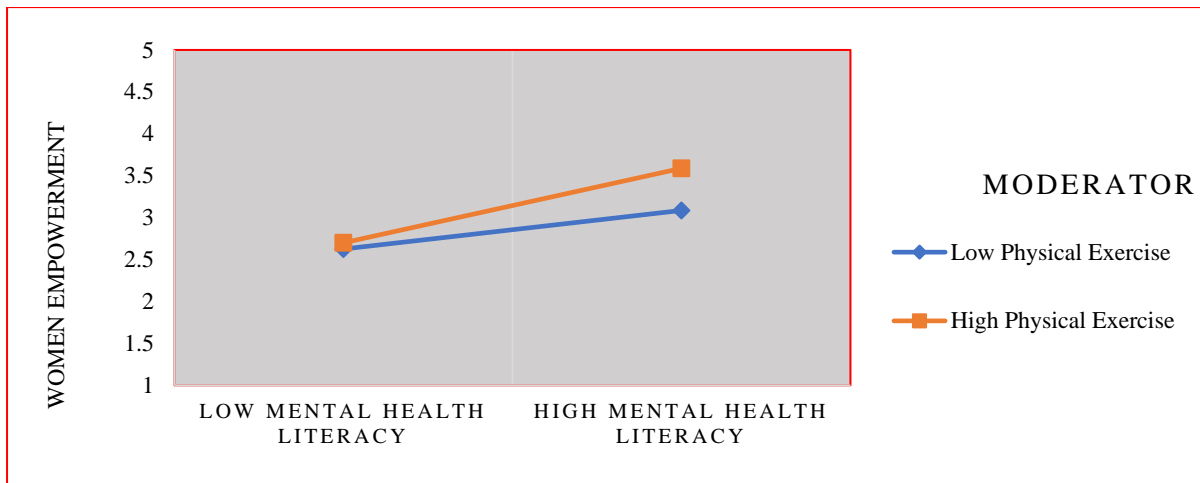


Figure 6. Moderation effect 2

Finally, the last moderating relationship results approve the “significant” moderating influence of psychological control between the association of mental health literacy and women empowerment. Furthermore, this developed relationship is also checked further. The results show that the connection between mental health literacy and women empowerment is positively moderated by psychological control “ $t = 2.512$, $\beta = 0.169$ and $p = 0.012$ ”. This relationship is displayed in Figure 7.

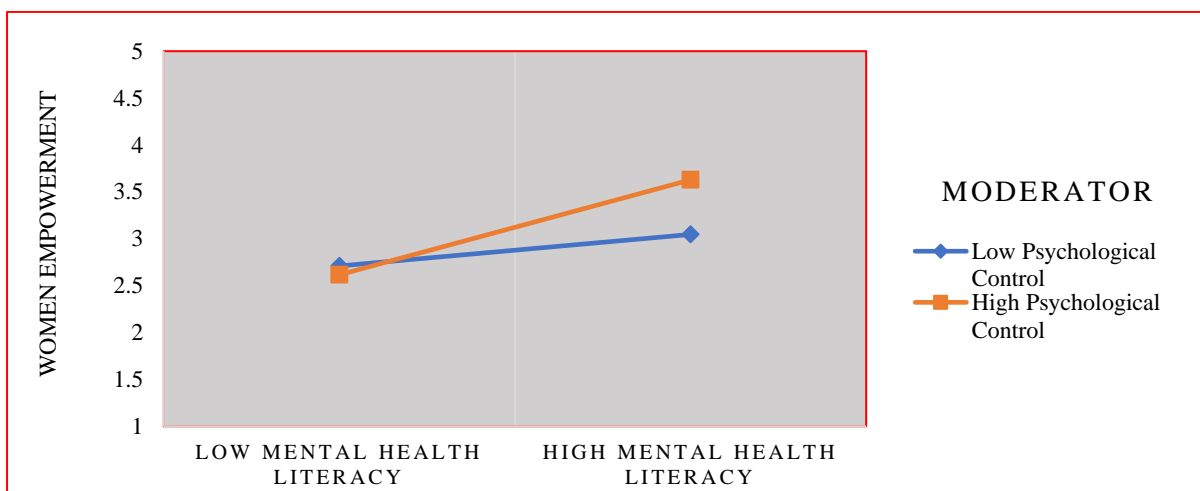


Figure 7. Moderation effect 3

Table 6. Moderating effects

Moderating Path	Original Sample (O)	Standard Deviation (STDEV)	T Statistics (O/STDEV)	P Values
Moderating Effect 1 -> WE	0.582	0.056	10.377	0.000
Moderating Effect 2 -> WE	0.107	0.024	4.458	0.000
Moderating Effect 3 -> WE	0.169	0.067	2.512	0.012

“Predictive relevance” is tested to check the strength of the model (Figure 8). Ringle, Da Silva, and Bido (2015) explained, “Q-square is predictive relevance, measures whether a model has predictive relevance or not ($Q^2 > 0$) is good.” The results in Table 7 show this study's predictive solid relevance, which is 72%.

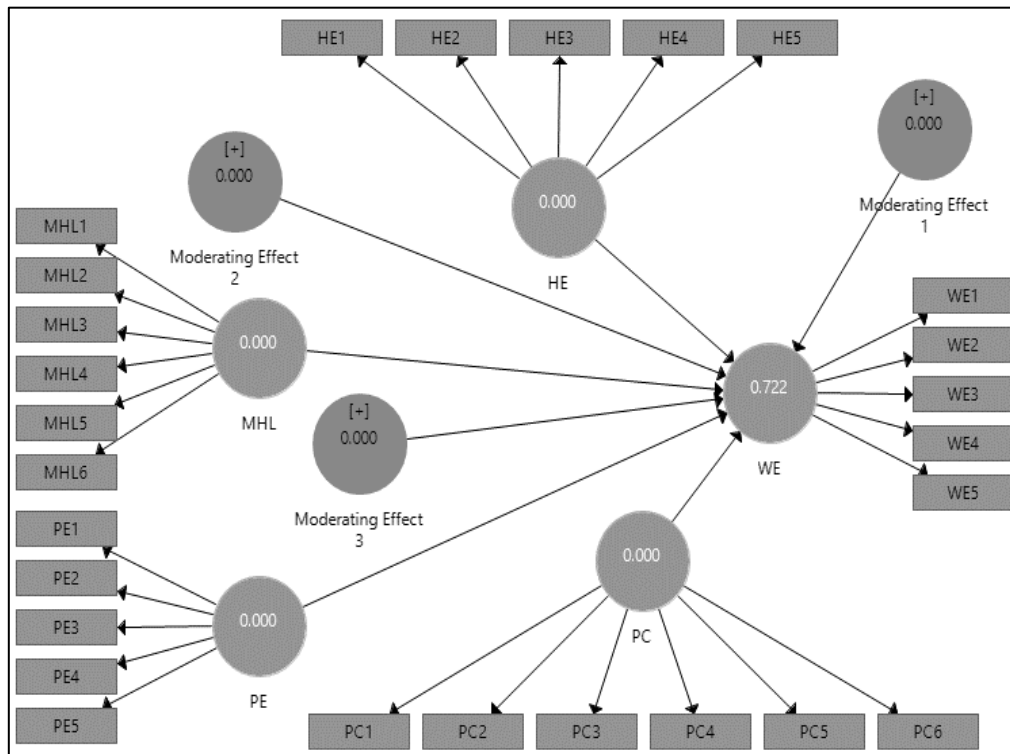


Figure 8. Predictive Relevance

Table 7. Predictive Relevance (Q^2)

	SSO	SSE	$Q^2 (=1-SSE/SSO)$
WE	1145	318.517	0.722

5. Discussion and Conclusion

The outcomes of hypothesis (H1) highlighted the direct impact of mental health literacy is accepted on women's empowerment. This relationship is appropriately

supported by the researchers who worked on the idea related to psychological empowerment. Women's comfort and a higher quality of life depend on their psychological health. [Oftadeh-Moghadam and Gorczynski \(2021\)](#) contend that women are significant contributors to society and that, to improve their capacity for academic achievement, they must always be given access to all relevant health-related knowledge. [Dias et al. \(2018\)](#) additionally stated that women with access to psychological health data are correctly trying to enhance their productivity beneficially.

Additionally, [Gray \(2020\)](#) concluded that women have the chance to improve their psychological state by receiving all the required knowledge about it. For their improved advancement and learning, which might assist their efficiency after receiving the data on psychological care ([Pandori-Chuckal, 2020](#)), the women who engage in various workplaces should be inspired to do their roles in an advanced manner. According to [Lo et al. \(2018\)](#), women with access to information about improving their psychological health exhibit more constructive and suitable attitudes and behaviors than other women in society. [Lee \(2021\)](#) concluded that women should have access to all information necessary to develop emotional intelligence. Doing so would enable them to avoid developing unfavorable attitudes and understand everything more effectively. [Massar et al. \(2021\)](#) also showed that women's psychological health knowledge is essential for their organized and effective work from home and their ability to enhance family relationships.

Likewise, hypothesis (H2) outcomes demonstrated the moderating impact of health education is accepted between mental health literacy and women empowerment. Although this moderating impact is new, the scholars highlighted the supportive evidence for this relationship's validity in their research work. [Chen et al. \(2020\)](#) contend that society benefits from knowledge about psychological health since it helps people have optimistic sentiments and attitudes about their employment and organizational effectiveness. [Asgari et al. \(2019\)](#) concluded that those who receive social-emotional learning are accountable for improving their lives since they have access to all the knowledge they need concerning their emotional well-being. [Hahn and Truman \(2015\)](#) assert that women are crucial to society's advancement and should

receive health information to raise their living levels. [Derman and Gurbuz \(2018\)](#) showed how female organizations use healthcare, essential for their improved working behavior, to communicate knowledge about women's welfare and enhance their psychological health. [Ware et al. \(2019\)](#) asserted that women are healthy and their health is vital; nonetheless, it is the administration's obligation to inform women in a way that will improve their education and health. The right attitude of the women enables them to execute their normal tasks in the offices efficiently, and the management has to offer the women relevant health training to improve their health behavior. Women who practice stronger mental health behaviors are better students, and if women do more productive things ([Hill et al., 2021](#)), their knowledge will also grow. According to [McGettigan and McKendree \(2015\)](#), women in industrialized nations have greater possibilities and a level of existence that is acceptable for their achievements.

Similarly, the final results of hypothesis (H3) established the moderating impact of physical exercise is accepted between mental health literacy and women empowerment. Even though this moderating impact is innovative, the scholars in their research studies also emphasized the supportive evidence for this relationship's reliability. [Abolfotouh et al. \(2019\)](#) also showed that women's healthy attitudes are essential for their differentiated instruction, which might help them find suitable employment. The work by [Spreitzer \(1995\)](#) concluded that strength training is the most effective way to boost knowledge and wellness. Women and men who regularly exercise have clean minds and better abilities to think critically, according to [Shuja et al. \(2020\)](#). [Oftadeh-Moghadam and Gorczynski \(2021\)](#) stated that physicians advise women to adopt a healthier teaching method, stating that this knowledge would benefit their overall fitness if they engage in the proper activity. [Massar et al. \(2021\)](#) also underlined the importance of physical activity for cognitive growth and more significant learning. Children who are highly motivated to be physically active have significantly higher achievement levels than students who do not. In addition, [Lee \(2021\)](#) concluded that while health awareness is so important, it must be combined with a regular exercise regimen that enhances people's ability to work sensibly. [Lo et al. \(2018\)](#) concluded that while women wouldn't have been psychologically feeble,

they should view their daily tasks with a critical eye to achieve their full potential and learn more effectively. [Gray \(2020\)](#) also emphasized women's reproductive health workout for mental prosperity and expanded education, which is essential for their better growth and innovation of new. [Murcia et al. \(2007\)](#) emphasized the need for women to engage in regular physical activity as it is essential to their fitness and good health habits.

As well, the conclusions of hypothesis (H4) demonstrated the moderating impact of psychological control is acknowledged between mental health literacy and women empowerment. While this moderating impact is unique, the researchers' significant contribution to the literature also emphasized the supportive evidence for this relationship confirmation. The study by [Degago \(2014\)](#) showed that women's conscientiousness makes sense for their better comprehension and execution of their normal tasks. [Lee and Nie \(2017\)](#) also concluded that the government should inspire the women who have received health services to carry out their tasks in a useful manner. [Stanescu et al. \(2020\)](#) concluded that women who exhibit unproductive work habits receive minimal mental support and health instruction. Although mental control is not required for women, it is also required for males because it helps them to better their practical work, which is beneficial for their productive job in the [Abdulrab et al. \(2017\)](#) organization. Since women hold essential roles, they must have sound critical thinking skills and psychological health literacy since these roles enhance learners' productivity. According to [Owan et al. \(2020\)](#), women must be highly intelligent and educated to live better lives. [Iqbal et al. \(2022\)](#) concluded that people who lack emotion regulation and mental health awareness encounter challenging circumstances when learning. [Digan et al. \(2018\)](#) further emphasized that good thinking is essential for pupils to study more effectively and perform as expected. According to [Strid et al. \(2018\)](#), dealing with psychological health is crucial for their ability to function under pressure since they think more clearly and do better than other women with just an emotional tendency. [Steele et al. \(2009\)](#) additionally emphasized that these women take risks and have a higher mental state, which enables them to study productively.

6. Implications, limitations, and future directions

Current research's remarkable findings lead to theoretical and practical implications for advancing literature. This research addresses the significant gap in the literature, and newly developed relationships are added to the knowledge. The research model revealing the relationship between different variables is also a theoretical addition to this research. This research has disclosed four newly developed connections; one is a direct impact, and the other is moderating relationship. The study revealed the unique impact of mental health literacy on women's empowerment.

Furthermore, the research has enriched the literature with three moderating variables; health education, physical exercise, and psychological control. The study added a newly developed moderation relationship of health education between mental health literacy and women empowerment in the literature. The current research added a newly developed moderation relationship of physical exercise between mental health literacy and women empowerment in the literature. In addition, the study added a newly developed moderation relationship of psychological control between mental health literacy and women empowerment in the literature. These relationships are significantly added to the literature and improve the knowledge of women's empowerment from three new dimensions.

In the meantime, this research demonstrated few practical implications based on its findings to improve Turkish women's empowerment. However, the findings of this research aren't limited to Turkish women only. These findings can be generalized to women's psychological empowerment in the rest of the world. The study highlights that the Turkish government has to make health sector reforms to improve Turkish women's living standards. These reforms must improve the well-being of the women in offices and other females working or learning in different sectors of society. The government's responsibility is to include health education as a necessary part of the course at the diploma level, as it would be an effective strategy to improve the mental health learning of Turkish women.

Furthermore, public society and local governments should collaborate to promote the culture of physical exercise for women. Parks should be established in every community to provide them with this facility. Likewise, women should be

motivated by cultural norms and traditions to use their reasonable understanding to improve their living standards and health behavior. Women's health behavior can only be improved when they have access to reliable health care. The government is responsible for providing reliable healthcare facilities to women to advance their living standards and psychological empowerment.

Although the research has significant findings and, based on these findings, the research has developed appropriate practical and theoretical implications. This study has some limitations that must be tackled by the advanced studies established after this research. This research deals with a significant gap in the literature that is deliberated, but other factors are yet to be considered in this research. This research has limitations in its model as it has determined the impact of mental health literacy on women's empowerment. Still, it hasn't considered the other factors that directly contribute to women's psychological empowerment. The researcher's researchers should address this limitation while checking the direct impact of financial capital, equality law, and equal wages on women's psychological empowerment. Furthermore, this research has determined the direct relationship between mental health literacy and women empowerment without considering any mediating variable. Thus, this research limitation should be contributed by the researchers in their significant work by demonstrating the mediating impact of women's higher education between mental health literacy and psychological empowerment. The impending research is recommended to follow these directions for developing research frameworks.

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