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The influence of engagement with inspirational literature, health consciousness, and self-efficacy on health promotion during the pandemic

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Abstract

The COVID-19 pandemic has presented a significant global challenge, exerting considerable pressure on healthcare systems due to its rapid spread. This study aims to enhance health-promoting behaviors in response to the pandemic's threats. The research investigated factors influencing health promotion among university students by utilizing structural equation modeling (SEM). The constructed SEM was grounded in health promotion theory and incorporated three external variables to address its limitations: health consciousness, self-efficacy, and engagement with inspirational literature. Empirical validation confirmed that the model achieves adequate discriminant and convergent validity, and the overall fit is robust. All proposed hypotheses were confirmed. The study's importance lies in its examination of how reading inspirational literature affects health promotion, particularly through the engagement of university students with such material.

Keywords: Health consciousness, Health promotion, Inspirational Literature, Structural equation modeling.

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1. Introduction

The rapid spread of COVID-19 has exerted a severe burden on healthcare systems worldwide. Numerous international studies on mental health have revealed that fear of death from COVID-19 has escalated anxiety and stress levels, which in turn have diminished individuals' resilience and overall mental well-being [1-5]. This psychological strain has contributed to an increase in cases of depression and bipolar disorder [6, 7]. In response to the pandemic, countries have mobilized resources to address its impact on public safety, economic stability, healthcare policies, and healthcare infrastructure [8]. Against this backdrop, the role of public health promotion and education has become increasingly vital [9]. Therefore, it is

critical to identify and clarify simple and effective personal health promotion strategies. Such strategies are essential to mitigating the adverse effects of COVID-19 on physical and mental health while simultaneously conserving public health resources and alleviating the economic strain on national systems.

The uncertainty and infection risks associated with COVID-19 have significantly heightened fear of death, anxiety, and stress in individuals [2, 3, 5]. While the pandemic has posed severe threats to public health and well-being, it has simultaneously heightened awareness around "health consciousness" [10]. Health consciousness refers to an individual's focus on personal health behaviors, including diet, lifestyle choices, sleep habits, and exercise, to maintain or improve health [11]. During the pandemic, there has been a growing recognition of the importance of strengthening the immune system to prevent infection. This has led to an increased emphasis on consuming nutritious foods to enhance immunity [10]. Consequently, the pandemic led to a significant shift toward proactive health-promoting behaviors [12].

The rapid spread of the COVID-19 pandemic has underscored the critical importance of health promotion. As a discipline within public health, health promotion plays a key role in mitigating the multifaceted threats posed by the virus [13]. During the pandemic, schools have been tasked with creating and sustaining environments that prioritize student health more than ever before [14]. Beyond efforts to reduce COVID-19 transmission, nations worldwide must address individual stress, anxiety, and fear to achieve the broader goal of mitigating the pandemic's societal impact Dadfar and Sanadgol [14]. Meyer, et al. [4] emphasized that COVID-19 can erode individuals' confidence in their ability to manage the pandemic, resulting in heightened stress and anxiety. Conversely, self-efficacy enhances an individual's sense of control in challenging situations and serves as an effective coping mechanism for stress [15]. It is also a critical protective factor against stress-related negative outcomes [4].

Inspirational books represent a distinct category of functional social literature, set apart from mainstream works by their focus on uplifting and motivating readers [16]. The concept of inspirational literature varies in definition; for instance, Penn [17] described it as encouraging readers to maintain a positive outlook, set meaningful goals, reflect on life's purpose, improve personal well-being, and manage mental health. Such literature aims to motivate individuals to discover their best selves [17] and serves as a valuable tool for understanding emotions, relationships, and other essential aspects of life [18].

From the standpoint of functional social literature, reading inspirational books plays a crucial role in helping individuals achieve their life goals [18]. These uplifting works foster an optimistic and positive mindset, enhancing confidence and promoting a constructive outlook on life [18]. Autobiographies of influential figures, success stories of athletes, and various inspirational narratives all possess the potential to inspire and motivate readers [17, 18].

A review of previous research on inspirational books revealed that most studies have been confined to qualitative analyses. Adopting an empirical research approach could provide valuable insights. While numerous studies have explored the physical and mental health threats posed by COVID-19 and contributed significantly to health promotion literature, the connection between reading inspirational books and health promotion remains underexplored. Additionally, few studies have examined the extent of individual engagement with inspirational reading as a variable in understanding its impact on health promotion. Addressing this gap in the literature is the primary motivation for this study.

2. Literature Review and Hypotheses

2.1. Health Consciousness and Health Promotion

Previous research has offered various conceptualizations of health consciousness. Gould [19] defined it as an individual's awareness and active monitoring of their health, describing it as a psychological state characterized by self-health cognition. Newsom, et al. [20] broadened this definition, focusing on the proactive behaviors that individuals adopt to prevent illness and maintain health. By synthesizing these views, health consciousness can be understood as an individual's mindset regarding their health, diet, and lifestyle. This mindset reflects not only an awareness of one’s health status but also a commitment to engaging in health-promoting behaviors [19, 21, 22].

The goal of health promotion is to enhance human potential and empower individuals to engage in self-care to achieve health promotion objectives [23]. Health promotion is not merely about passively reducing health risks; it actively involves adopting a series of positive behaviors to attain higher levels of well-being Laffrey, et al. [24]. Van den Broucke [9] emphasized that enabling individuals to exert greater control over factors influencing their health is central to health promotion. For instance, to prevent the spread of infection among citizens and healthcare workers, various health behavior modifications have been implemented, such as frequent handwashing, mask-wearing, glove use, and social distancing—each representing a key practice of health promotion [3, 9].

The literature has indicated that individuals with higher levels of health consciousness tend to monitor their health consistently, actively seek health-related information, and adopt a health-oriented lifestyle [25]. When individuals acquire accurate knowledge about infectious diseases or access relevant information through specific channels, it strengthens their health consciousness and promotes health-enhancing behaviors [25, 26]. Given the established connection between health consciousness and proactive health behaviors, we propose the following hypothesis:

Hypothesis 1 (H1): Health consciousness has a positive impact on health promotion.

2.2. Health Consciousness and Self-Efficacy

Self-efficacy refers to an individual's belief in their capability to complete tasks and achieve goals [15]. A fundamental component of self-efficacy is self-talk, which encompasses the internal beliefs that an individual holds before beginning a task—specifically, their perception of their ability to succeed under given circumstances [15, 27]. According to Hong and Chan [28] individuals with high self-efficacy approach challenges optimistically, with the belief that they can solve problems and effectively manage a variety of tasks. As a personality trait, self-efficacy reflects a generalized trust in one's

abilities, facilitating proactive coping strategies in the face of difficulties [29]. In health-related behaviors, self-efficacy refers to an individual's confidence in their capacity to engage successfully in specific health-promoting actions Dadfar and Sanadgol [14].

Shah, et al. [30] conducted a structural equation modeling (SEM) analysis and found that fear of COVID-19 complications, awareness of COVID-19, and health consciousness significantly and positively influenced attitudes toward mask-wearing. These findings suggested that during the pandemic, heightened health consciousness motivated individuals to adopt mask-wearing as a preventive behavior against infection. Bandura [31] posited that verbal persuasion can be an effective tool for enhancing self-efficacy, improving performance, and fostering persistence, particularly in challenging or uncertain situations. Positive verbal reinforcement plays a pivotal role in this process [32]. For example, both the World Health Organization (WHO) and various media outlets promoted mask-wearing as a critical measure to prevent COVID-19 infection [33] serving as a form of verbal persuasion likely to influence individuals' self-efficacy. Moreover, observing widespread mask-wearing and witnessing its preventive efficacy reinforce others' successful health behaviors Bandura [34] which can substantially enhance self-efficacy beliefs. Based on this rationale, we propose the following hypothesis:

Hypothesis 2 (H2): Health consciousness has a positive influence on self-efficacy.

2.3. Self-Efficacy and Health Promotion

Previous research has demonstrated that health values, perceived social support from family and friends, and health self-efficacy are positively correlated with participation in health-promoting behaviors Jackson, et al. [35]. Meyer, et al. [4] examined beliefs and perceived stress during the pandemic, concluding that enhanced self-efficacy is the most critical factor in fostering resilience against high stress. This finding suggested that individuals with high self-efficacy are better equipped to manage psychological stress [14].

During lockdowns, while people were required to stay at home, limiting opportunities for outdoor exercise, the World Health Organization [36] still recommended home workouts tailored to different age groups to support both physical and mental health. Individuals with high self-efficacy were more likely to engage in frequent exercise and exert greater effort to sustain longer workout durations [31] ultimately enhancing their exercise performance. For example, Gould and Weiss [37] found that individuals with higher self-efficacy exhibited greater persistence and effort, which contributed to improved performance in exercise and muscle endurance George, et al. [38].

Meyer, et al. [4] highlighted that increasing self-efficacy is crucial for building resilience against high stress and anxiety. Individuals with strong psychological resilience, such as athletes, tend to demonstrate greater confidence and reduced levels of worry [39]. This evidence suggested a significant correlation between self-efficacy and engagement in health-promoting behaviors. Therefore, we propose the following hypothesis:

Hypothesis 3 (H3): Self-efficacy has a positive influence on health promotion.

2.4. The Mediating Role of Self-Efficacy

Self-efficacy plays a critical role in shaping health-related cognitions, such as pain perception and management, dietary and weight control, and adherence to preventive health programs Ke and Tung [40] and Hung and Chen [41]. Meyer, et al. [4] identified self-efficacy as a key factor in building resilience against heightened stress and anxiety during the pandemic. Similarly, Dadfar and Sanadgol [14] emphasized that individuals with high self-efficacy are more capable of mitigating psychological stress, underscoring the strong link between self-efficacy and health promotion.

During the pandemic, extensive media coverage of health information and the promotion of preventive policies significantly heightened public health consciousness and encouraged the adoption of health-promoting behaviors [10]. As individuals became more health-conscious and successfully practiced social distancing in public spaces, achieving the desired preventive outcomes [33] they experienced the effectiveness of mask-wearing firsthand. This positive experience reinforced their health self-efficacy, motivating them to adopt more proactive health-promoting behaviors.

Thus, it can be inferred that health consciousness and self-efficacy may mutually influence each other, with health consciousness impacting health-promoting behaviors through its effect on self-efficacy. Based on this relationship, we propose the following hypothesis:

Hypothesis 4 (H4): Self-efficacy has a mediating effect between health consciousness and health promotion.

2.5. The Moderating Role of Reading Involvement

Involvement is an intrinsic motivator that drives consumers to process information actively Celsi and Olson [42]. Zaichkowsky [43] defined involvement as the degree of personal relevance that an individual assigns to an object, based on their needs, interests, and values. van der Bolt and Tellegen [44] categorized reading involvement into three dimensions: focus during reading, imaginative involvement, and emotional engagement. Lin, et al. [45] further described reading involvement as the level of interest, concern, and active participation arising from an individual’s internal psychological state and external behaviors during leisure reading.

Building on these perspectives, this study defines the level of involvement in reading inspirational books as the extent to which readers engage with the demands and values of such literature. This involvement is critical for enhancing psychological resilience [46]. When individuals experience anxiety, depression, or fear, finding emotional outlets becomes particularly important [47]. During the pandemic, heightened health consciousness motivated individuals to adopt health-promoting behaviors Shah, et al. [30] and Andruliene and Urbonavicius [48]. Fu, et al. [47] found that two-fifths of college students exhibited symptoms of anxiety, highlighting the necessity for students to regulate their mental health and mitigate the psychological impact of COVID-19. Additionally, enhancing psychological skills training can help students manage

their mental well-being and reduce psychological distress Fu, et al. [47]. Chen [49] observed that positive engagement with books can alleviate negative emotions, restore psychological resilience, and enhance the ability to cope with setbacks. Similarly, Desforges and Abouchaar [50] argued that strengthening reading involvement improves stress resilience, life satisfaction, self-control, interpersonal relationships, and overall mental health.

Additionally, involvement in reading inspirational books enables individuals to motivate and inspire themselves to face adversity with resilience, finding positive meaning in challenges [51]. For instance, reading inspirational literature provides support, encouragement, and even humor for cancer patients and their families Moorjani [52]. Penn [17] noted that inspirational books help readers maintain a positive attitude, enhancing their well-being and ability to manage mental health. Similarly, Wang, et al. [53] found that individuals who engage in inspirational self-talk during exercise are more likely to participate in physical activities and take proactive steps toward improving their health.

In summary, involvement in reading inspirational books may act as a moderating factor in the relationship between health consciousness and health-promoting behaviors. Based on this finding, we propose the following hypothesis:

Hypothesis 5 (*H5): Reading involvement has a moderating effect on the relationship between health consciousness and health promotion.*

3. Methodology

3.1. Research Hypotheses and Model

This study developed an SEM grounded in the health promotion theory, incorporating three external variables: health consciousness, self-efficacy, and reading involvement. Based on the research objectives and theoretical framework, the following conceptual SEM was proposed Figure 1.

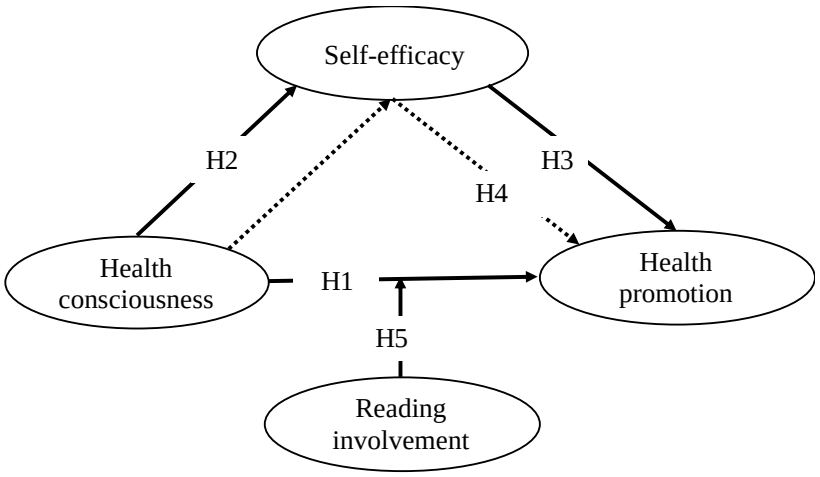

Figure 1.
Research model.

3.2. Participants

This study targeted university students in Taiwan, using a cluster sampling method to survey higher education institutions across four regions—Northern, Central, Southern, and Eastern Taiwan—between December 2021 and April 2022. All participants were over 18 years old and were informed that the questionnaire was anonymous. Completion of the survey implied consent to participate, and all data collected were used exclusively for academic research. A total of 412 valid questionnaires were obtained, comprising 210 males (51.0%) and 202 females (49.0%). Aged between 18-32 years old.The geographical distribution of students was as follows: Northern Taiwan - 132 (32%), Central Taiwan - 178 (43.2%), Southern Taiwan - 90 (21.8%), Eastern Taiwan - 7 (1.7%), and outlying islands - 5 (1.2%).

3.3. Measures

This study developed four questionnaires—the reading involvement scale, health consciousness scale, self-efficacy scale, and health promotion scale—aligned with the research objectives and framework. Theoretical dimensions and designs from previous studies were referenced, and in response to the pandemic, the wording and appropriateness of each item were revised accordingly. All questionnaires utilized a five-point Likert scale for scoring. Reliability was assessed using Nunnally and Berstein [54] criterion, which suggests that a Cronbach's α value greater than 0.7 indicates sufficient internal consistency among the scale items.

The reading involvement scale was adapted from the involvement scale proposed by Lee [55] and modified to suit the specific focus of this study. The Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy for the scale was 0.70 ($p < .001$), accounting for 78.2% of the cumulative variance. The scale consisted of a single dimension with three items (e.g., "I find that reading inspirational books fills my heart with hope"). The internal consistency, measured by Cronbach's α, was 0.86, indicating a satisfactory level of reliability.

The health consciousness scale was adapted from the scales developed by Gould [19] and Lin [56] and revised to align with the research objectives and the context of college students during the pandemic. The KMO value for this scale was 0.70 ($p < .001$), accounting for 74.8% of the cumulative variance. The scale comprised a single dimension with three items

(e.g., "I often pay attention to my feelings about my health"). The internal consistency, measured by Cronbach's α, was 0.88, indicating a satisfactory level of reliability.

The self-efficacy scale was adapted from Schwarzer, et al. [57] and revised to fit the research objectives and the context of college students during the pandemic. The KMO value for this scale was 0.73 ($p < .001$), accounting for 80.4% of the cumulative variance. The scale consisted of a single dimension with four items (e.g., "I am confident that I can handle unexpected situations"). The internal consistency, measured by Cronbach's α, was 0.89, indicating a satisfactory level of reliability.

The health promotion scale was adapted from the scale proposed by Lin [56]. The KMO value for this scale was 0.85 ($p < .001$), with a cumulative explained variance of 56.7%. The scale consisted of four dimensions: "Health Responsibility" (e.g., "I observe my body daily"), "Exercise" (e.g., "I exercise for at least 30 minutes each time"), "Stress Management" (e.g., "I sleep six to eight hours daily"), and "Nutrition" (e.g., "I consume a balanced amount of food at each meal"), comprising a total of 13 items. The internal consistency coefficients for the four subscales were 0.85, 0.89, 0.82, and 0.85, respectively, all indicating acceptable reliability.

3.4. Data Analysis

The statistical analysis in this study utilized SPSS and AMOS software. First, exploratory factor analysis and confirmatory factor analysis were conducted on the valid sample data to evaluate the model's reliability, convergent validity, and discriminant validity, ensuring its internal quality. Subsequently, the overall fit of the SEM was analyzed, and the bootstrapping method was applied to obtain confidence intervals for the indirect effects while also testing whether self-efficacy mediated the relationship between health consciousness and health promotion. Additionally, the moderating effect of reading involvement in inspirational books on the relationship between health consciousness and health promotion was examined.

3.5. Validity Analysis

This study assessed the average variance extracted (AVE), with results indicating that the AVE for each construct ranged from 0.55 to 0.73 (specific values: 0.68, 0.71, 0.67, 0.64, 0.73, 0.72, 0.55). Additionally, the composite reliability (CR) for each construct ranged from 0.78 to 0.92, all exceeding the standard threshold of 0.60, demonstrating strong internal consistency in the model. The factor loadings (FL) were also evaluated, with values ranging from 0.62 to 0.95, all surpassing the minimum standard of 0.50 Table 1. Overall, the assessment of the latent variables met the validation criteria recommended by Fornell and Larcker [58] indicating that the model exhibited good internal quality and strong convergent validity.

Table 1.
Convergent analysis.

Variable	Constructs	Items	FL	CR	AVE	*α*
Reading involvement						
		T1	0.84	0.86	0.68	0.86
		T2	0.88			
		T3	0.74			
Health consciousness						
		T4	0.86	0.88	0.71	0.88
		T5	0.87			
		T6	0.79			
Self-efficacy						
		T7	0.82	0.89	0.67	0.89
		T8	0.93			
		T9	0.84			
		T10	0.67			
Health promotion						
	Health responsibility	T11	0.91	0.84	0.64	0.85
		T12	0.78			
		T13	0.71			
	Exercise	T14	0.91	0.92	0.73	0.89
		T15	0.95			
		T16	0.82			
		T17	0.74			
	Stress management	T18	0.71	0.88	0.72	0.82
		T19	0.93			
		T20	0.89			

	Nutrition	T21	0.62	0.78	0.55	0.80
		T22	0.75			
		T23	0.84			

This study adhered to the discriminant validity testing standards recommended by Fawcett, et al. [59] which stated that the correlation coefficients between different dimensions must be less than the square root of their AVE. The square roots of the AVE values for health consciousness, self-efficacy, health responsibility, exercise, stress management, nutrition, and reading involvement were 0.82, 0.84, 0.81, 0.80, 0.85, 0.84, and 0.74, respectively Table 2. All these values exceeded the correlation coefficients between the dimensions, indicating that each dimension demonstrated good discriminant validity.

Table 2.
Discriminant analysis.

Constructs	Correlation coefficient						
	1	**2**	**3**	**4**	**5**	**6**	**7**
1. Health consciousness	(**0.82**)						
2. Self-efficacy	0.39	(**0.84**)					
3. Health responsibility	0.40	0.55	(**0.81**)				
4. Exercise	0.27	0.34	0.33	(**0.80**)			
5. Stress management	0.33	0.44	0.40	0.30	(**0.85**)		
6. Nutrition	0.46	0.45	0.43	0.37	0.39	(**0.84**)	
7. Reading involvement	0.22	0.24	0.20	0.36	0.15	0.20	(**0.74**)

Note: The bold numbers represent the square root of the AVE values, while the others are correlation coefficients.

3.6. Model Fit Evaluation

The overall model fit assessment for the SEM in this study yielded the following results: $\chi^2/df = 2.36$, which falls within the acceptable range of 1 to 3 [60] indicating an acceptable value. The Adjusted Goodness of Fit value was 0.934, exceeding the 0.8 threshold [61] while the Goodness of Fit value was 0.96, surpassing the 0.9 standard [62]. The Standardized Root Mean Square Residual was 0.04, well below the acceptable limit of 0.08 [63]. Both non-normed fit index = 0.97 and normed fit index = 0.96 exceeded the recommended benchmark of 0.9 [64] and the comparative fit index was 0.97, also greater than the 0.9 threshold [65]. Additionally, the Parsimonius Goodness of Fit Index was 0.60, surpassing the standard of 0.5 [66]. Based on these results, the SEM constructed in this study demonstrated good model fit.

4. Results

4.1. Hypothesized Path Analysis

This study tested multiple hypotheses, with the results presented in Figure 2 and Table 3. *H1* posited that health consciousness significantly affects health promotion. The analysis confirmed this with a path coefficient of $\beta = 0.40$ ($t = 6.75$, $p < 0.001$), indicating a strong, positive relationship. *H2* proposed that health consciousness has a significant effect on self-efficacy. This was supported by a path coefficient of $\beta = 0.60$ ($t = 8.36$, $p < 0.001$), highlighting the critical role of health consciousness in enhancing self-efficacy. *H3*, which examined the effect of self-efficacy on health promotion, also revealed significant results with $\beta = 0.45$ ($t = 8.60$, $p < 0.001$).

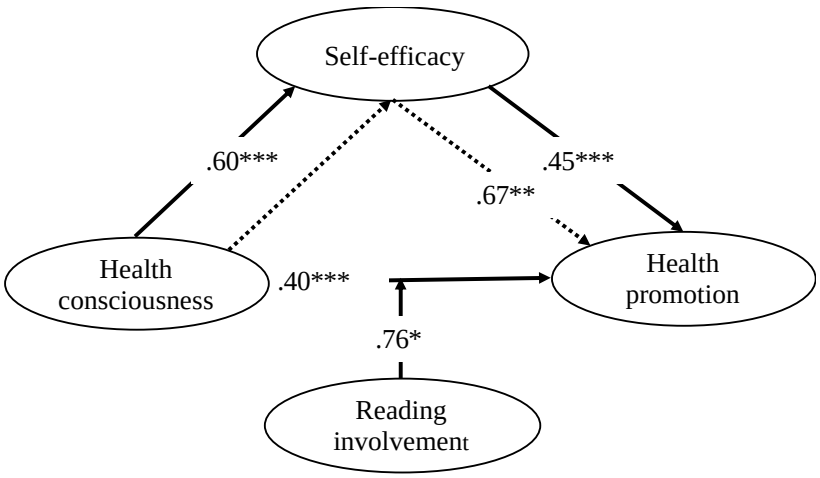

Figure 2.
Structural pattern diagram.

4.2. Mediating Effect Testing

This study used the bootstrapping method to analyze the mediating effect of self-efficacy. The results showed that the indirect effect of self-efficacy on the relationship between health consciousness and health promotion was 0.27, with a bias-corrected 95% confidence interval of [.25, .35], excluding 0, and $p < .05$, indicating statistical significance. The direct

effect of health consciousness on health promotion was 0.40, with a bias-corrected 95% confidence interval of [.29, .52], also excluding 0, and $p < .05$, confirming significance. These findings indicated that self-efficacy has a partial mediating effect between health consciousness and health promotion, thereby supporting *H4*.

4.3. Moderating Effect Testing

This study used AMOS statistical software to test the moderating effect of involvement in inspirational books. According to the overall structural model (Figure 2), the interaction term between health consciousness and the level of involvement in inspirational books had a coefficient of .76 ($t = 2.07$, $p < .05$). Therefore, *H5* is supported. This finding indicated that the level of involvement in inspirational books has a significant positive moderating effect between health consciousness and health promotion. In other words, the higher the level of involvement in reading inspirational books, the greater the enhancement of the positive impact of health consciousness on health promotion.

5. Discussion

5.1. Health Consciousness Positively Influences Health Promotion

These results suggested that health consciousness has predictive power for health promotion. This aligns with terror management theory, which posited that when individuals confront the uncertainty of death, they adopt defensive measures to manage the fear of mortality [67]. During the pandemic, the fear induced by the threat of the virus [2, 3] drove individuals to increase their health consciousness to prevent physical harm or infection, thus promoting health-related behaviors [12, 48]. In response, educational institutions should not only enhance the dissemination of health information through various channels and mediums but also implement health education programs and activities to raise college students' health consciousness. This approach can strengthen students' proactive engagement in health-promoting behaviors when faced with pandemic threats [12].

5.2. Health Consciousness Positively Influences Self-Efficacy

The findings of this study are consistent with Bandura [68] view that self-efficacy positively correlates with behavior, indicating that higher self-efficacy increases the likelihood of engaging in health-promoting actions. Consequently, this study recommends that schools integrate strategies to enhance health consciousness into psychological counseling programs. Counselors can support students in setting health goals and improving self-efficacy by breaking down goals into small, achievable steps. For instance, practices, such as wearing masks, maintaining social distance, and daily health monitoring, significantly increase students' awareness. When individuals personally experience the success of these preventive measures, they are more likely to rely on feedback regarding their health behavior performance. This, in turn, shapes their self-efficacy expectations more effectively [31, 68] further strengthening their ability to cope with pandemic-related threats.

5.3. Self-Efficacy Positively Influences Health Promotion

This finding is consistent with research by Jackson, et al. [35] which underscored the importance of self-efficacy in promoting preventive behaviors, particularly in the context of preventing the transmission and spread of COVID-19 [69]. Self-efficacy plays a critical role in shaping health-related cognition, influencing personal pain management, diet and weight control, and adherence to preventive health behaviors [40, 41]. Moreover, self-efficacy acts as a protective factor for resilience during a pandemic, helping to reduce stress and anxiety among college students [70]. In response to pandemic threats, schools can implement health courses that focus on COVID-19 prevention, the importance of nutrition and exercise, and mental health. Additionally, providing psychological counseling services can help students manage anxiety and stress, enhancing their self-efficacy and encouraging more proactive health-promoting behaviors.

5.4. Self-Efficacy Plays a Mediating Role

During the COVID-19 pandemic, individuals encountered significant challenges related to health, social isolation, and economic instability. These stressors highlighted the importance of studying psychological factors, such as stress, depression, and fear. The present study demonstrated that self-efficacy serves as a partial mediator between health consciousness and health-promoting behaviors. This finding suggested that increasing individuals' awareness of health-related issues, particularly during the pandemic, not only directly influences health-promoting behaviors but also enhances self-efficacy. In turn, improved self-efficacy indirectly facilitates more effective health behaviors. Moreover, the study's findings underscored the potential of self-efficacy as a critical coping mechanism during the pandemic. Individuals with higher self-efficacy are more adept at managing stress and mitigating its adverse effects [71]. Self-efficacy shapes how individuals perceive and respond to threats, motivating them to take proactive steps to reduce stress [72].

This study recommends that schools enhance their focus on health education advocacy and successful prevention case studies to improve students' self-efficacy effectively, which in turn encourages healthier behaviors. In conclusion, self-efficacy is a critical variable in assessing how individuals manage the risks associated with the COVID-19 pandemic. It also serves as a partial mediator between health consciousness and health-promoting behaviors. This finding, which has been relatively underexplored in previous research, warrants further investigation.

5.5. The Moderating Role of Reading Involvement

In this study's SEM model, reading involvement was treated as an extraneous variable. In certain research contexts, it can systematically influence the strength of the relationship between independent and dependent variables. As a moderating

factor, reading involvement can either amplify or weaken the relationship between health consciousness and health promotion. The findings suggested that greater engagement with inspirational literature among college students enhances the positive effect of health consciousness on health-promoting behaviors.

During the pandemic, schools can utilize remote learning to create engaging online courses centered on motivational literature, particularly stories that emphasize health consciousness and pandemic response. This strategy would strengthen the positive influence of health consciousness on health-promoting behaviors. It not only helps students recognize the importance of adopting health-promoting lifestyles but also supports the broader health-promotion efforts of the school. The study's findings highlighted the critical roles of reading involvement and health consciousness in predicting health-promoting behaviors during the pandemic.

6. Conclusion

During the pandemic, enhancing health promotion to counter the associated risks has become a global priority; it is the central theme of this study. Empirical validation of the SEM model confirmed its reliability, discriminant validity, and convergent validity, with the model demonstrating a good overall fit. Additionally, all hypotheses were supported: health consciousness positively influences health promotion; health consciousness enhances self-efficacy; self-efficacy positively affects health promotion; and self-efficacy mediates the relationship between health consciousness and health promotion. Furthermore, engagement with inspirational literature moderates the relationship between health consciousness and health promotion. These findings are significant as they underscored the influence of reading inspirational literature on health behaviors and offered insights into health promotion through the lens of college students' engagement with such books. This model not only predicted and explained factors that drive health promotion but also contributes to the academic understanding of health promotion theories. In the future, this model could be expanded to other populations or applied in the development of educational and public health policies.

6.1. Implications

This study found that self-efficacy partially mediates the relationship between health consciousness and health promotion, while engagement with inspirational literature has a significant moderating effect on this relationship. Therefore, schools should focus on enhancing both students' self-efficacy and their engagement with inspirational books when developing mental health promotion programs. It is recommended that schools strengthen health education advocacy and incorporate successful prevention case studies to boost self-efficacy and encourage health-promoting behaviors among students effectively. School libraries should also expand their collections of inspirational literature, including e-books, to support these initiatives. Furthermore, on line teaching platforms should integrate inspirational literature into their curricula, using digital resources to foster self-motivation, enhance emotional intelligence, and support mental health management. These measures will improve the overall effectiveness of school health promotion programs.

6.2. Limitations and Recommendations

This study employed a cross-sectional research design, surveying college students who experienced the pandemic, and thus focused on short-term outcomes. As a result, the causal relationships established in the SEM among the variables may shift over time as the COVID-19 situation evolves, which cannot be determined in this study. Therefore, future research should consider adopting a longitudinal design to elucidate better the relationships between the variables and assess their stability over time. Additionally, this study measured health consciousness, self-efficacy, and reading involvement as uni-dimensional constructs, which may have led to an overemphasis on a single aspect of each variable. Future studies should aim to develop multi-dimensional measures of these variables to enable more accurate and comprehensive assessments.

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