

Mediating Role of Social Support in the Relationship between Psychological Capital and Mental Well-being in Students with Learning Disabilities

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Abstract

Background: Students with learning disabilities face social, emotional, and academic difficulties.

Objective: The present study aimed to assess the role of social support in the relationship between psychological capital and mental well-being in students with learning disabilities.

Methods: This cross-sectional correlational research was conducted using structural equation modeling. The statistical population comprised all students with learning disabilities residing in Tehran from July to November 2023. A sample of 250 adolescent students was selected using a multi-stage cluster and targeted sampling method. The data collection instruments were the Multidimensional Scale of Perceived Social Support (MSPSS), Subjective Well-being Scales (SWS), and Luthans Psychological Capital Questionnaires (PCQ). Data analysis was performed using SmartPLS (version 4) and SPSS (version 7) software packages.

Results: The present study revealed that self-efficacy positively affected mental well-being through the social support variable, with a significant effect ($\beta=0.241$; $P=0.000$). Hope had a beneficial effect on mental wellness through social support, with a substantial positive impact ($\beta=0.091$; $P=0.017$). Resilience had a beneficial impact on mental well-being through social support, with a significant result ($\beta=0.167$; $P=0.001$).

Conclusion: The results of this study demonstrated that hope and self-efficacy, two psychological assets, improve both mental well-being and social support. Nonetheless, optimism only boosts well-being, while resilience only improves social support. Furthermore, social support, acting as a mediator, enhances mental well-being.

Keywords: Learning disabilities, Mental well-being, Psychological capital, Social support

1. Background

Learning disability is a neurodevelopmental disorder that significantly impacts numerous children worldwide, causing difficulties in reading, writing, spelling, and math despite normal intelligence (1). Children with learning disabilities often have fewer friends and exhibit less positive social behavior compared to their peers. They struggle with interpersonal relationships due to their ineffective strategies and misbehavior in the classroom, making it challenging to establish positive connections with classmates (2). The prevalence of learning disabilities in various areas, such as reading, writing, and mathematics, during childhood ranges between 5%-15%. A meta-analysis conducted in Iran reported an overall prevalence rate of 81.8% for these disabilities (3). These issues are typically identified during elementary school and can impact cognitive, academic, and mental well-being throughout life (4). Research has indicated that while students with learning disabilities may demonstrate higher creativity, they often have lower academic self-efficacy, study resilience, and academic progress (5).

Effective, hopeful, optimistic, and adaptable learners are more attentive when acquiring knowledge. Psychological capital plays a crucial role

in the learning process, as individuals with positive psychological resources are more dedicated to learning and have confidence in their ability to succeed (6). Psychological capital encompasses self-efficacy, optimism, hope, and resilience, affecting people's attitudes, behaviors, and effectiveness at various levels (7). Studies have indicated that self-efficacy, hope, resilience, quality of life, and optimism contribute positively to well-being, with psychological capital displaying significant positive effects on overall well-being (8). Furthermore, research has demonstrated that interventions focusing on psychological capital can notably enhance mental well-being (9).

Students with learning disabilities often hold themselves responsible for their challenges due to their frequent setbacks (10). As a result, they tend to have lower levels of self-compassion and well-being compared to their peers (10). "Mental well-being" is about acknowledging one's abilities, ability to overcome challenges, success in personal and social aspects, and positive impact on the community (11). It encompasses various elements, such as optimism, self-discipline, contentment, and enthusiasm, as well as the absence of fear of failure, anxiety, and isolation (12). The related studies pointed out that students without learning disabilities attending inclusive schools tend to have better mental well-being

compared to those with learning disabilities (13). In addition, studies have illustrated that self-compassion, psychological capital, and social support play a role in mitigating the impact of academic stress on mental well-being (14).

One of the critical factors in dealing with severe mental issues and maintaining mental well-being is the presence of social support. Social support is closely linked to high satisfaction with academic life, reduced stress and emotional exhaustion, and increased positive emotions (15). Social support refers to the belief that one is cared for, loved, respected, and part of a network of mutual obligations. In simpler terms, it is the assistance and backing available to an individual through their connections with others in society (16). Research has pointed to a positive relationship between social support and mental well-being (17). Furthermore, studies have indicated that such factors as religion and social support can help enhance mental well-being in the face of challenges (18). Children who have learning disabilities exhibit a range of behavioral issues, such as problems with attention, hyperactivity, and externalizing behavior, particularly at a young age. Furthermore, they are twice as likely to display violent behavior compared to their peers without learning disabilities (2).

2. Objectives

Despite the importance of the challenges presented to children with learning disabilities, no studies have explored the role of social support in the relationship between psychological capital and mental well-being among these students. This research gap highlights the critical need for further investigation in this area, with the current study being one of the initial attempts to examine the connection between psychological capital and mental well-being, along with the mediating role of social support, in students with learning disabilities. The main objective of this study is to assess the role of social support in the relationship between psychological capital and mental well-being in these students. The researcher then presented the conceptual framework of the study in [Figure 1](#).

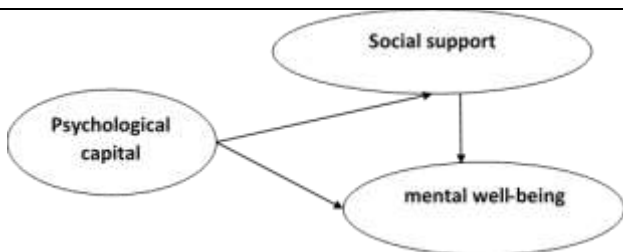


Figure 1. Conceptual framework of the research

3. Methods

This cross-sectional correlational research was conducted using structural equation modeling (SEM). Quantitative data for this research was collected using field-level questionnaires targeting the variables under study. The statistical population for this study consists of all students with learning disabilities residing in Tehran from July to November 2023. The statistical sample included 250 adolescent students with a history of learning disabilities. The adequacy of the sample size was calculated based on Cohen's formula in 2013 (19) to determine the sample size in SEM methods according to the number of observed and latent variables in the model, the anticipated effect size, as well as desired probability and statistical power levels. Based on this formula, the following were calculated to determine the sample size:

Anticipated effect size: 0.3

Desired statistical power level: 0.8

Number of latent variables: 3

Number of observed variables: 81

Probability level: 0.01

According to the aforementioned values, the sample size was calculated at 200 cases. Nonetheless, 250 subjects were considered taking into account sample attrition. The sampling technique employed in this study involved a combination of multi-stage cluster and targeted approaches. The process involved dividing Tehran city into 22 regions based on urban areas, creating a list of learning disorder treatment centers in clinics across Tehran, randomly selecting 11 regions from urban areas, followed by random selection of 6 learning disability treatment centers from those 11 regions. The randomization of the selection process was carried out by the authors using a coin-tossing method to ensure unbiased selection of urban areas and medical centers.

The inclusion criteria entailed having a documented history of psychological issues related to learning disabilities, obtaining informed consent from participants, securing consent from parents of teenagers involved in the study, and demonstrating adequate literacy and comprehension skills to answer questions. On the other hand, the exclusion criteria were an age range of <19 years, the presence of any physical or mental conditions that would hinder participation, failure to answer more than eight items on the questionnaires, or causing disruption to the study. The research methodology began with obtaining necessary approvals from the researchers' university, followed by visits to six clinics in Tehran specializing in learning disabilities treatment. Out of the six clinics that were contacted, four centers agreed to take part in the research.

The researchers collaborated with clinic management to organize the research following their visit. Subsequently, an announcement

regarding the research was shared online and on social media platforms by the clinics for families of children with learning disabilities who were referred to the research site. Detailed information about the research was then disseminated to families who had provided consent via social networks, outlining the research goals, permits, and ethical guidelines. Families were assured that their personal details would not be part of the research forms, and teenagers could withdraw from the research at any stage. Following that, 250 cases were cautiously selected and invited to participate in the evaluation session on their upcoming referral to the treatment centers. During this session, the questionnaires were filled out with the researchers' assistance, taking into account the teenagers' specific circumstances. Since there was a limited number of families with teenagers who met the criteria and were willing to participate, it took four months to collect the data. Eventually, 196 completed questionnaires were included in the study, while 54 were excluded due to incompleteness, families' absence, or teenagers' withdrawal during clinic visits. In order to avoid bias in the research, the researcher provided complete information to their families and left out the questionnaires that were not answered correctly. Before distributing the surveys, a research consent form was obtained from the families of the teenagers involved in the study to adhere to ethical guidelines. They were told that they had the option to participate voluntarily and could opt out at any point. The families were comforted with the assurance that the surveys did not necessitate any personal information.

Research instruments

Multidimensional Scale of Perceived Social Support (MSPSS): In 1988, Dahlem, Zimet, and Walker developed a self-report questionnaire to measure perceived social support (20). This questionnaire consists of 12 items which are rated on a seven-point Likert scale, ranging from 1 for completely disagree to 7 for completely agree. It assesses support from friends, family, and others. Overall scores reflect the level of perceived social support, with higher scores indicating greater support. Scores on the scale range from 12-84. According to the range of scores of this questionnaire, a score of 12-36 is considered low support, a score of 37-60 is moderate support, and a score of 61-84 is regarded as a high level of perceived social support. In a study conducted in Iran, Cronbach's alpha coefficient for this scale was found to be 0.88. The researcher in this study reported a Cronbach's alpha coefficient of 0.91 (21). Another study found a Cronbach's alpha coefficient of 0.70 for this scale. In a similar vein, the average variance extracted value of the validity scale in the present study was 0.51.

Subjective Well-being Scales (SWS): The self-report questionnaire developed in 2003 by Keyes and Magyar-Moe was designed to assess mental well-being, encompassing emotional, psychological, and social well-being (22). This questionnaire consists of 45 items rated on a seven-point Likert scale, ranging from 1 (completely disagree) to 7 (completely agree). The initial 12 questions pertain to emotional well-being, followed by 18 questions concerning psychological well-being, and concluding with 15 questions addressing social well-being. The cumulative scores obtained from individuals completing this questionnaire reflect their level of mental well-being, where a higher score signifies a higher level of well-being. The total score for an individual falls within the range of 45 to 300. According to the range of scores of this questionnaire, a score of 45 to 130 was considered low, a score between 131 and 215 was considered an average score, and a score between 216 and 300 was considered a high level of mental well-being. A study in Iran found that the reliability of this scale was measured at 0.75 using Cronbach's alpha coefficient (23). Similarly, in a separate study, the Cronbach's alpha coefficient for this scale was calculated to be 0.88. Likewise, the average variance extracted value of the validity scale in the present study was 0.55.

Luthans Psychological Capital Questionnaires (PCQ): In 2007, Luthans developed a self-report questionnaire to assess psychological capital (24). This questionnaire consists of 24 items divided into four subscales: hope (items 1-6), resilience (items 7-12), optimism (items 13-18), and self-efficacy (items 19-24). Each subscale contains six items which are rated on a 6-point scale ranging from completely disagree to completely agree. Scores for each component range from 6-36, with higher scores indicating more psychological capital in a person. According to the score of each component, a score of 6-16 is considered low, a score of 17-27 is regarded as moderate, and a score of 18-36 is deemed as high psychological capital. In Iran, a study found the test-retest reliability coefficient of the questionnaire to be 0.88 (25). The Cronbach's alpha coefficients were obtained at 0.73, 0.82, 0.71, and 0.80 for hope, optimism, self-efficacy, and resilience, respectively. In a similar vein, the average variance extracted values of the validity scale in the present study were reported as 0.66, 0.53, 0.56, and 0.54 for the components of hope, optimism, self-efficacy, and resilience, respectively.

Statistical analyses

The researchers used SPSS software (version 27) to perform descriptive statistics and SmartPLS software (version 4) to analyze the relationships between variables through path coefficients. In addition, Sobel's test was employed to assess the

significance of the mediator variable. The normality of the distribution of research variables was checked using the Kolmogorov-Smirnov test, which suggested a lack of normal distribution, leading to the use of SmartPLS. The sample size for implementing the structural equation model via the partial least squares method consisted of 196 individuals. The study set a significance level of 0.05.

4. Results

Initially, the researcher examined the descriptive statistics related to research variables. Students who had learning disabilities were assigned to three groups based on age: 15-16 (75.0%), 16-17 (12.8%), and 18-19 years old (12.2%). Similarly, adolescents were allocated to two groups by gender, with boys

making up 63.3% and girls 36.7%. In total, the present study was conducted on 196 subjects and 54 cases were excluded from the study (Table 1).

Table 2 displays the mean and standard deviation of research variables.

Table 3 illustrates the correlation between research variables based on Pearson's correlation coefficient.

As demonstrated in Table 3, there was a strong and positive connection between the research variables, such as hope, optimism, self-efficacy, resilience, and social support for mental well-being ($P < 0.001$). Following the model analysis, the researcher examined the path coefficients between the variables and their significance levels, as depicted in Table 4. The bootstrap value utilized in this study was set at 5000 by the researcher.

Table 1. Description of the demographic variables

Variables	Groups	Frequency	Percent	Sample size	Median
Gender	Boy	124	63.3	196	1
	Girl	72	36.7		
Age	15 to 16	147	75.0	196	1
	16 to 17	25	12.8		
	18 to 19	24	12.2		

Table 2. Description of the main research variables

Variables	Mean±SD	Max	Min	N	Skewness	Kurtosis
Mental well-being	133.68±45.24	208	70	196	0.157	-1.354
Hope	16.35±4.56	29	10	196	0.791	0.455
Optimism	15.97±5.009	29	10	196	0.99	0.242
Self-efficacy	16.75±4.64	29	10	196	0.667	0.246
Resilience	17.59±4.26	29	10	196	0.228	0.185
Social support	55.76±16.46	79	20	196	-0.858	-0.627

Table 3. Pearson's correlation coefficient

Variables	1	2	3	4	5	6	P-value
Mental well-being	-						$p < 0.001$
Hope	.678	-					$p < 0.001$
Optimism	.647	.625	-				$p < 0.001$
Self-efficacy	.766	.726	.745	-			$p < 0.001$
Resilience	.697	.677	.693	.791	-		$p < 0.001$
Social support	.875	.585	.534	.677	.647	-	$p < 0.001$

Table 4. Standard research coefficients, in general

path between variables	Path coefficient	STDEV	significance level	T-value	Result
Hope -> Mental well-being	0.114	0.047	0.015	2.442	Confirmation
Hope -> Social support	0.143	0.058	0.013	2.492	Confirmation
Optimism -> Mental well-being	0.109	0.054	0.042	2.032	Confirmation
Optimism -> Social support	-0.021	0.066	0.746	0.323	Rejection
Resilience -> Mental well-being	-0.005	0.067	0.939	0.077	Rejection
Resilience -> Social support	0.264	0.073	$p < 0.001$	3.618	Confirmation
Self-efficacy -> Mental well-being	0.177	0.061	0.004	2.904	Confirmation
Self-efficacy -> Social support	0.380	0.066	$p < 0.001$	5.725	Confirmation
Social support -> Mental well-being	0.633	0.057	$p < 0.001$	11.157	Confirmation

According to Table 4 and Figure 2, hope had a meaningful and positive impact on mental well-being ($\beta = 0.114$; $P = 0.015$) and social support ($\beta = 0.143$; $P = 0.013$). The results also indicated that optimism had a positive and substantial effect on mental well-being ($\beta = 0.109$; $P = 0.042$); nonetheless, it did not have a significant effect on social support ($\beta = -0.021$; $P = 0.746$). The research revealed that resilience did not significantly affect mental well-being ($\beta = -0.005$; $P = 0.939$); however, it did have a significant and

positive effect on social support ($\beta = 0.264$; $P < 0.001$). Furthermore, self-efficacy had a significant and positive impact on mental well-being ($\beta = 0.177$; $P = 0.004$) and social support ($\beta = 0.380$; $P < 0.001$). The positive and significant impact of social support on mental well-being was found to be statistically significant ($\beta = 0.633$; $P < 0.001$). Following this, the researcher employed the bootstrap method to analyze the indirect effects of study variables.

As presented in Table 5, self-efficacy exerted a

positive and significant impact on mental well-being through social support ($\beta=0.241$; $P=0.000$). In a similar vein, hope exhibited a positive and significant influence on mental well-being via social support ($\beta=0.091$; $P=0.017$). Optimism did not have a notable impact on mental well-being when considering social support ($\beta=-0.014$; $P=0.750$). On the other hand, resilience was found to have a positive and significant impact on mental well-being via social support ($\beta=0.167$; $P=0.001$). The researcher employed Sobel's test to evaluate the significance of the mediating variables in the study using a specific formula.

$$Z \text{ value} = \frac{|a \times b|}{\sqrt{(b^2 \times S_a^2) + (a^2 \times S_b^2) + (S_a^2 \times S_b^2)}}$$

- a: The path coefficient value between the independent variable and the mediator
- b: Path coefficient value between the mediator and dependent variable

and dependent variable

Sa: The standard error of the path between the independent variable and the mediator

Sb: The standard error of the path between the mediator and dependent variable

In the Sobel test, a Z value greater than 1.96 indicates that the mediating effect of a variable is statistically significant at a 95% confidence level. The Z value for social support as a mediator between hope and mental well-being was 2.4069, confirming the significance of the mediating variable in the research. In the same manner, the Z value for social support as a mediator between self-efficacy and mental well-being was 5.1114, indicating the significance of this mediating variable. The Z value for social support as a mediator between resilience and mental well-being variables was 3.4386, further highlighting the importance of this mediating variable. The author assessed the reliability and validity of the research model in Table 6.

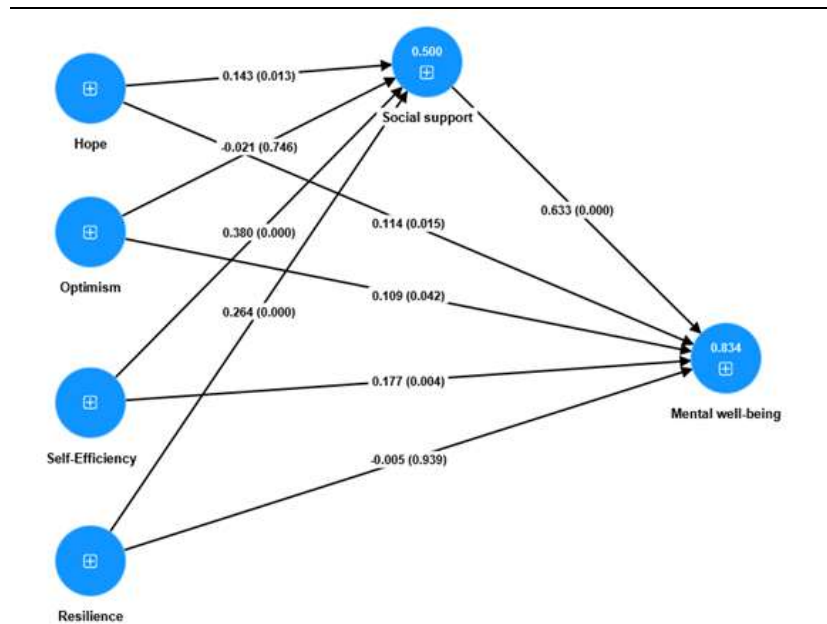


Figure 2. Path coefficients between variables and significance level

Table 5. Total Indirect effects between research variables

Path between variables	Estimate	STDEV	T-value	p-value	Lower	Upper
Self-efficacy -> Social support -> Mental well-being	0.241	0.053	4.575	0.000	0.150	0.357
Hope -> Social support -> Mental well-being	0.091	0.038	2.395	0.017	0.015	0.163
Optimism -> Social support -> Mental well-being	-0.014	0.043	0.319	0.750	-0.103	0.067
Resilience -> Social support -> Mental well-being	0.167	0.050	3.352	0.001	0.073	0.271

Table 6. Reliability and validity of the model

Variables	Cronbach's Alpha	Composite Reliability	Average variance extracted (AVE)
Hope	0.73	0.74	0.66
Optimism	0.82	0.83	0.53
Self-efficacy	0.71	0.76	0.56
Resilience	0.80	0.84	0.54
Social support	0.70	0.73	0.51
Mental well-being	0.88	0.901	0.55

Table 6 presents the confirmation of the reliability and validity of the model. The Cronbach's alpha

reliability coefficient for the variables exceeds 0.7. The combined reliability of these variables also

surpasses 0.7. Moreover, the researcher evaluated the credibility of the model utilizing the Average Variance Index, which demonstrated values exceeding 0.5 for the variables under study, thereby affirming the validity of the model. The researcher also thoroughly examined the model fit, ensuring that all fit indices met the necessary criteria. The standardized root mean square residual index, which compares observed and structural model correlations, was calculated at 0.026, while the Normed Fit Index and chi values were 0.975 and 30.055, respectively.

5. Discussion

The present study aimed to assess the role of social support in the relationship between psychological capital and mental well-being among students with learning disabilities. According to this research, hope had a positive effect on mental well-being and social support. In a similar way, optimism had a positive impact on mental well-being. Nevertheless, optimism did not significantly affect social support. Resilience did not exhibit a notable impact on mental well-being but positively affected social support. Moreover, self-efficacy had a beneficial and substantial impact on both mental well-being and social support. Furthermore, the findings revealed that social support, acting as an intermediary, had a favorable and significant effect on mental well-being.

In agreement with earlier research, the results of the current study indicated that hope contributes to improving mental well-being and social support (26-27). Previous research has suggested that hope is a predictor of enhanced well-being across various age groups, including students, children, adolescents, and adults (26). In addition, another study found that hope, as a positive trait, can enhance perceptions of social support (27). Having hope and the skill to choose the right paths can be the reason behind this discovery. Individuals who are efficient and hopeful are better able to bounce back from setbacks and are more likely to overcome despairing situations quickly (6).

Possessing hope, optimism, confidence, and resilience can contribute to emotional well-being and stress management (6). The enhancement of hope, a positive psychological quality, can significantly impact personal development. Hope plays a crucial role in goal-setting and pursuit, ultimately leading to effective behaviors, positive adjustments, and ultimately elevating the likelihood of experiencing a high quality of life and overall well-being. The theory of hope suggests that a person's belief in their ability to find ways to achieve a goal can impact their health and well-being (26). Moreover, hope can improve perceived social support. Social support is dimmed as a crucial

resource during difficult times and can contribute to success, a positive self-concept, and adaptability. Individuals with high levels of hope tend to have better outcomes and are more likely to receive increased social support, ultimately strengthening their overall social support network (27).

In accordance with previous studies, the present research also revealed that having a positive outlook can improve mental well-being but does not have a notable impact on social support [28-30]. Another study found that optimism and adaptive humor can directly enhance well-being (28). In addition, research has pinpointed that optimism and hope can help counteract the negative effects of stress on mental well-being [29]. An additional study indicated that while there may not be a strong link between social support and optimism, there is a significant connection between spiritual intelligence and optimism (30).

This finding can be ascribed to the fact that "optimism is a key aspect of positive psychology, being viewed as a lasting characteristic of a person's cognitive mindset and connected to their drive." It represents individuals' tendency to expect positive outcomes for themselves. Optimism is observed as a protective, adaptable, and coping mechanism against challenges and illnesses. Cultivating optimism results in mental and physical health, serving as a proactive tool for sustaining mental well-being. Optimism plays a role in moderating various outcomes related to psychological well-being, such as the significant moderation of the association between low distress and high psychological well-being by high levels of optimism (31). Not all optimistic individuals receive social support, as various factors are at play. Social support involves a network of connections that offer companionship, cooperation, and emotional reinforcement from family, friends, and others. It is crucial to consider factors beyond optimism, such as living conditions, when seeking to impact social support (30).

In line with previous studies, the current research revealed that resilience has a beneficial impact on social support (32-33). Resilience has been correlated to improved mental health, while social support helps to mitigate the negative effects of low resilience on mental well-being (32). A study pointed to a significant relationship between resilience, perception of stress, and perception of social support (33). Nonetheless, inconsistent with previous research, the current study suggested that resilience does not significantly affect mental well-being [34]. Another study pointed out that resilience can decrease rumination and anxiety, thus promoting mental well-being in challenging circumstances (34). This discrepancy in the results of the current study and earlier research can be attributed to differences in study population, timing, location, or sample size.

This finding can be clarified by understanding that

psychological resilience can be viewed as either an inherent characteristic or as an ongoing development. When seen as a dynamic process, resilience entails experiencing positive growth when faced with challenges. On the contrary, when viewed as a trait, resilience encompasses a range of qualities that allow individuals to adjust to their situations. Therefore, psychological resilience is a valuable asset in mitigating the harmful effects of a crisis and enhancing social support (32). There are two ways to look at social support: perceived and received. Perceived social support is how someone personally feels about the support available to them, while received social support is the actual support provided to someone at any given time (17). People with more social support can offset the effects of having less support. Psychological resilience is another crucial factor in protecting mental health (32). It is worth noting that psychological capital plays a beneficial role in the enhancement of psychological well-being. The four components of psychological capital (hope, optimism, resilience, and self-efficacy) serve as a protective shield against stress and contribute to the improvement of psychological well-being. Resilience is crucial; nonetheless, its impact on mental well-being may not be substantial when viewed independently due to the interconnectedness of the four components [14]. These components work together to form a robust structure of psychological capital that is stronger and more effective than each component (6).

Consistent with previous research, the current study findings suggest that self-efficacy has the potential to improve mental well-being and social support [35-36]. Earlier studies have highlighted self-efficacy as a significant factor in predicting psychological well-being (35). In addition, a study revealed that self-efficacy can enhance three types of social support (36). "Self-efficacy could have an impact on students' self-perception and the achievement of their life goals. Confidence in managing one's actions, social interactions, and drive can indicate self-efficacy. This concept is a fundamental psychological requirement that influences individuals' thinking, feelings, and choices concerning their mental well-being. Consequently, self-efficacy is essential for handling stress, shaping the perception of stressors, and selecting and employing strategies to address them. Accordingly, people with strong self-efficacy tend to see challenging circumstances as chances rather than risks (37)."

Self-confidence can be enhanced by gaining mastery experience, observational learning, social persuasion, and receiving positive feedback. Psychological capitals like self-efficacy are positive traits that reflect an individual's capabilities and can contribute to personal growth and mental well-being (9). Moreover, psychological capitals like self-efficacy comprise a collection of beneficial personal attributes that individuals can utilize to counteract the adverse

impacts of stress and promote mental well-being. Particularly during challenging times, individuals with strong social support can leverage their high psychological capital to manage stress and adapt to unpredictable circumstances. In reality, those with a strong social network may possess a substantial psychological capital that empowers them to cope with stress and anxiety related to uncertainties and fears (15).

The results of the current study revealed that social support serves as a mediator, exerting a positive and notable impact on mental well-being. This finding aligns with those reported in previous studies (17-18). Research has highlighted a positive relationship between social support and mental well-being (17). Another study also found that aspects, such as religiosity and social support, play a role in the enhancement of mental well-being during tough times (18).

"Social support is commonly understood as a multidimensional idea that includes forming secure connections with individuals." Perceived social support is an individual's self-assessment of their social support when dealing with stress and maintaining good mental health, with emotional support involving expressions of love, empathy, or trust and instrumental support referring to tangible assistance from others. Social support consistently affects stress and mental well-being by providing individuals with the necessary resources to regulate emotions and cope with stress, thereby moderating their responses to stressful situations. Essentially, a person's level and quality of social support can significantly mitigate the negative impacts of stress on their well-being (38). Understanding how family, friends, and other important individuals provide social support and the resulting psychological benefits can help develop strategies for the improvement of mental well-being. Social support can be evaluated based on the perception of available assistance or the actual help received, with the former potentially having a more significant effect on psychological well-being. Furthermore, the perception of social support is closely linked to greater happiness, decreased stress from academics, reduced emotional fatigue, and enhanced positive feelings (15).

The notable limitations of this study included the inability to control personality, physiological, social, and family factors that could affect psychological capital, as typically encountered in research studies. In addition, time constraints, challenges working with children with learning disabilities, the importance of parental involvement and coordination, difficulties in identifying and differentiating students with learning disabilities from typical students, as well as variations in the types of learning disorders among students were also noted as limitations. Another limitation of the study was the necessity for the

research results to be impactful. "To improve the relevance of the results, it is suggested that future studies replicate the research in various cities and cultures, taking into account and managing these factors from the beginning of the research proposal."

In the current study, it was not feasible to explore variations in social support levels and perceptions across different societies, differences in personality types affecting how people receive and perceive social support, and disparities in the assessment tools for social support, among other factors. Therefore, to gather more extensive data, additional studies should be carried out in diverse communities and educational settings, considering various moderating and mediating variables. This comprehensive approach will allow for a more accurate examination of the connection between social support, mental well-being, and psychological capital, ultimately leading to a better understanding of the true impact in this area.

6. Conclusion

As evidenced by the results of the current study, hope and self-efficacy from psychological capital positively impact both mental well-being and social support. Nevertheless, optimism only affects well-being, while resilience only influences social support. Furthermore, social support as a mediator contributes to the improvement of mental well-being. The study results highlighted the importance of social support in enhancing the well-being of children with learning disabilities. To further improve academic performance, parents, teachers, and trainers should receive education about other factors influencing academic success through schools, workshops, and the media, allowing them to create supportive environments. "It is possible to educate trustees and reputable organizations on the positive impact of social support on enhancing the mental well-being of students with learning disabilities. This can, in turn, motivate them to align the content of educational materials and programs with these values and promote social support among students. By emphasizing the significance and effectiveness of social support in academic performance, students can be encouraged to actively engage in teacher and trainer-led activities aimed at fostering friendships and support systems. Moreover, by introducing educational programs that aim to improve resilience, self-efficacy, optimism, hope, independence, sufficiency, and a desire for learning, schools can increase students' academic engagement and reduce the risk of negative consequences, such as poor academic performance, frequent absences, and emotional exhaustion."

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Conflicts of interest

The authors declare that they have no conflict of interest.

References

1. Seshadri NG, Agrawal S, Singh BK, Geethanjali B, Mahesh V, Pachori RB. EEG based classification of children with learning disabilities using shallow and deep neural network. *Biomed Signal Process Control*. 2023 Apr 1;82:104553. <https://doi.org/10.1016/j.bspc.2022.104553>
2. Zamani Behbahani E, Asgari P, Heydari A, Marashian FS. Comparison of the Effectiveness of Fernald's Multisensory Training and Computer Game Training on Dyslexia in Elementary Students with learning Disabilities. *Iranian journal of educational sociology*. 2021 Mar 10;4(1):58-67. [10.52547/ijes.4.1.58](https://doi.org/10.52547/ijes.4.1.58)
3. Niousha B. The Effect of Learning Memory Strengthening Skills on Improving Dictation in Female Students with Learning Disabilities in Arak Education Area. *Iranian journal of educational sociology*. 2018 Dec 10;1(10):133-40. <https://iase-idje.ir/article-1-423-en.html>
4. Abecassis S, Magen H, Weintraub N. Typing performance and technique of higher education students with specific learning disorders. *LD RP*. 2023 May;38(2):119-28. <https://doi.org/10.1111/ldrp.12305>
5. Casali N, Meneghetti C, Tinti C, MariaRe A, Sini B, Passolunghi MC, Valenti A, Montesano L, Pellegrino G, Carretti B. Academic Achievement and Satisfaction Among University Students With Specific Learning Disabilities: The Roles of Soft Skills and Study-Related Factors. *J Learn Disabil*. 2024 Jan-Feb;57(1):16-29. doi: [10.1177/00222194221150786](https://doi.org/10.1177/00222194221150786) .[PubMed: 36790042].
6. Lin YT. The interrelationship among psychological capital, mindful learning, and English learning engagement of university students in Taiwan. *Sage Open*. 2020 Jan;10(1):2158244020901603. <https://doi.org/10.1177/2158244020901603>
7. Ghadri V, Dortaj F, Bagheri F, Nasrollahi B. Explaining the causal model of perceived competence on psychological capital with the mediating role of academic emotions of tenth grade male students in the second year of high school in Tehran. *Iranian journal of educational sociology*. 2021 Aug 10;4(2):49-58. [10.52547/ijes.4.2.49](https://doi.org/10.52547/ijes.4.2.49)
8. Chiracu A, Cosma GA, Stepan AR, Cosma MA, Corlaci I, Călugăru EDC, Voinea F, Zăvăleanu M, Burileanu HA, Avramescu T. Psychological capital, quality of life, and well-being in mother caregivers of individuals with down syndrome. *Front Psychol*. 2023 Feb 21;14:1145104. doi: [10.3389/fpsyg.2023.1145104](https://doi.org/10.3389/fpsyg.2023.1145104). [PubMed: 36895731].
9. Sumalrot T, Suwanwong C, Pimthong S, Surakarn A, Chiangkhong A, Khunakorncharatphong A. The development and effectiveness of web-based psychological capital intervention on the mental well-being of tourism workers during the COVID-19 pandemic. *BMC Psychol*. 2023 Apr 28;11(1):138. doi: [10.1186/s40359-023-01189-0](https://doi.org/10.1186/s40359-023-01189-0) [PubMed: 37118838].
10. Nemati S, Badri Gargari R, Erfani S. Academic Well-being and Self-Compassion in Students with and without Specific Learning Disability. *J Learn Disabil*. 2021 Nov 22;11(1):64-79. [10.22098/JLD.2021.6231.1663](https://doi.org/10.22098/JLD.2021.6231.1663)
11. Delaney TW, Pollet TV, Cook C. The mental well-being of involuntary celibates. *Pers Individ Differ*. 2024 Feb

- 1;218:112474. <https://doi.org/10.18863/pgy.1315698>
12. Kachroo WQ, Reshi IA, War MI. QUALITY OF LIFE AND PSYCHOLOGICAL WELL-BEING AMONG MOTHERS HAVING CHILDREN WITH MULTIPLE DISABILITIES. *IJEBAS*. 2023 Feb 7;3(1):217-21. <https://doi.org/10.54443/ijebas.v3i1.672>
 13. Kausik NH, Hussain D. The impact of inclusive education on academic motivation, academic self-efficacy, and well-being of students with learning disability. *J Educ*. 2023 Apr;203(2):251-7. <https://doi.org/10.1177/00220574211031957>
 14. Poots A, Cassidy T. Academic expectation, self-compassion, psychological capital, social support, and student well-being. *Int J Educ Res*. 2020 Jan 1;99:101506. <https://doi.org/10.1016/j.ijer.2019.101506>
 15. Huang L, Zhang T. Perceived Social Support, Psychological Capital, and Subjective Well-being among College Students in the Context of Online Learning during the COVID-19 Pandemic. *Asia Pac Educ Rev*. 2022;31(5):563-74. doi: [10.1007/s40299-021-00608-3](https://doi.org/10.1007/s40299-021-00608-3)
 16. Hassani M, Hashemi SA, Bagheri M. The Role of Individual and Collective Components on the Formation of Social Trust in Secondary High School Students. *Iranian journal of educational sociology*. 2021 Mar 10;4(1):116-24. [10.52547/ijes.4.1.116](https://doi.org/10.52547/ijes.4.1.116)
 17. Simons EE, Bird MD. Coach-athlete relationship, social support, and sport-related psychological well-being in National Collegiate Athletic Association Division I student-athletes. *Journal for the Study of Sports and Athletes in Education*. 2023 Sep 2;17(3):191-210. <https://doi.org/10.1080/19357397.2022.2060703>
 18. Gan SK, Wong SW, Jiao PD. Religiosity, Theism, Perceived Social Support, Resilience, and Well-being of University Undergraduate Students in Singapore during the COVID-19 Pandemic. *Int J Environ Res Public Health*. 2023 Feb 17;20(4):3620. doi: [10.3390/ijerph20043620](https://doi.org/10.3390/ijerph20043620). [PubMed: 36834313].
 19. Cohen J. *Statistical power analysis for the behavioral sciences*. AP; 2013 Sep 3.
 20. Dahlem NW, Zimet GD, Walker RR. The multidimensional scale of perceived social support: a confirmation study. *J Clin Psychol*. 1991 Nov;47(6):756-61. [https://doi.org/10.1002/1097-4679\(199111\)47:6<756::AID-JCLP2270470605>3.0.CO;2-L](https://doi.org/10.1002/1097-4679(199111)47:6<756::AID-JCLP2270470605>3.0.CO;2-L)
 21. Besharat MA. Multidimensional Scale of Perceived Social Support: Questionnaire, Instruction and Scoring. http://jip.azad.ac.ir/article_668831_4fbd861cadf20649afa5fed9aeafa52a.pdf
 22. Keyes CL, Magyar-Moe JL. The measurement and utility of adult subjective well-being. <https://doi.org/10.1037/10612-026>
 23. Gouran Shourakchali S, Hosseinzadeh B, Fallah V. Modeling the Impact of Organizational Virtue on Psychological Empowerment of Faculty Members by the Mediating Role of Subjective Well-being: A Case Study of Mazandaran Province Universities. *Educational Development of Judishapur*. 2021 May 10;12(1):96-107. <https://doi.org/10.22118/edc.2020.233693.1394>
 24. Luthans F, Avolio BJ, Avey JB, Norman SM. Positive psychological capital: Measurement and relationship with performance and satisfaction. *Pers Psychol*. 2007 Sep;60(3):541-72. <https://doi.org/10.1111/j.1744-6570.2007.00083.x>
 25. Ghasemzadeh A, Zavvar T, Rezaei A. Impact of psychological capital and social capital on the job stress and deviant behaviors in clinical staff. https://ijhr.iuims.ac.ir/article_15470_0.html
 26. Murphy ER. Hope and well-being. *Curr Opin Psychol*. 2023 Apr;50:101558. doi: [10.1016/j.copsyc.2023.101558](https://doi.org/10.1016/j.copsyc.2023.101558). [PubMed: 36822123].
 27. Zhang M, Wu Y, Ji C, Wu J. The Role of Perceived Social Support and Stress in the Relationship between Hope and Depression among Chinese Shadow Education Tutors: A Serial Mediation Model. *Int J Environ Res Public Health*. 2022 Mar 12;19(6):3348. doi: [10.3390/ijerph19063348](https://doi.org/10.3390/ijerph19063348). [PubMed: 35329036].
 28. Reizer A, Munk Y, Frankfurter LK. Laughing to the lockdown: On humor, optimism, and well-being during COVID-19. *Pers Individ Differ*. 2022 Jan 1;184:111164. <https://doi.org/10.1016/j.paid.2021.111164>
 29. Genç E, Arslan G. Optimism and dispositional hope to promote college students' subjective well-being in the context of the COVID-19 pandemic. *JPSP*. 2021 Dec 24;5(2):87-96. [10.47602/jpsp.v5i2.255](https://doi.org/10.47602/jpsp.v5i2.255)
 30. Hatami M, Aref Nazari M. Predicting the level of optimism based on spiritual intelligence and social support. *Political Sociology of Iran*. 2022 Sep 23;5(7):929-45. [10.30510/psi.2022.316693.2683](https://doi.org/10.30510/psi.2022.316693.2683)
 31. Sabbaghi F, Karimi K, Akbari M, Yarahmadi Y. Predicting academic engagement based on academic optimism, competency perception and academic excitement in students. *Iranian journal of educational sociology*. 2020 Sep 10;3(3):50-61. [10.52547/ijes.3.3.50](https://doi.org/10.52547/ijes.3.3.50)
 32. Li F, Luo S, Mu W, Li Y, Ye L, Zheng X, Xu B, Ding Y, Ling P, Zhou M, Chen X. Effects of sources of social support and resilience on the mental health of different age groups during the COVID-19 pandemic. *BMC Psychiatry*. 2021 Jan 7;21(1):16. doi: [10.1186/s12888-020-03012-1](https://doi.org/10.1186/s12888-020-03012-1). [PubMed: 33413238].
 33. Yalcin-Siedentopf N, Pichler T, Welte AS, Hoertnagl CM, Klasen CC, Kemmler G, Siedentopf CM, Hofer A. Sex matters stress perception and the relevance of resilience and perceived social support in emerging adults. *Arch Womens Ment Health*. 2021 Jun;24(3):403-411. doi: [10.1007/s00737-020-01076-2](https://doi.org/10.1007/s00737-020-01076-2)
 34. Skalski SB, Konaszewski K, Büssing A, Surzykiewicz J. Resilience and Mental Well-being During the COVID-19 Pandemic: Serial Mediation by Persistent Thinking and Anxiety About Coronavirus. *Front Psychiatry*. 2022 Jan 27;12:810274. doi: [10.3389/fpsy.2021.810274](https://doi.org/10.3389/fpsy.2021.810274). [PubMed: 35153868].
 35. Fathi J, Derakhshan A, Saharkhiz Arabani A. Investigating a structural model of self-efficacy, collective efficacy, and psychological well-being among Iranian EFL teachers. *IJALS*. 2020 Jun 1;12(1):123-50. [10.22111/ijals.2020.5725](https://doi.org/10.22111/ijals.2020.5725)
 36. Liu Q, Jin Y, Wang Y, Feng J, Qiao X, Ji L, Si H, Bian Y, Wang W, Yu J, Wang C. Association between self-efficacy and self-management behaviors among individuals at high risk for stroke: Social support acting as a mediator. *J Clin Nurs*. 2023 Jan;32(1-2):71-82. doi: [10.1111/jocn.16191](https://doi.org/10.1111/jocn.16191). [PubMed: 34981582].
 37. Sabouripour F, Roslan S, Ghiami Z, Memon MA. Mediating Role of Self-Efficacy in the Relationship Between Optimism, Psychological Well-being, and Resilience Among Iranian Students. *Front Psychol*. 2021 Jun 14;12:675645. doi: [10.3389/fpsyg.2021.675645](https://doi.org/10.3389/fpsyg.2021.675645) [PubMed: 34194372].
 38. Deegan A, Dunne S. An investigation into the relationship between social support, stress, and psychological well-being in farmers. *J Community Psychol*. 2022 Sep;50(7):3054-3069. doi: [10.1002/jcop.22814](https://doi.org/10.1002/jcop.22814). [PubMed: 35132638].