INTERNATIONAL JOURNAL OF ACADEMIC RESEARCH IN BUSINESS & SOCIAL SCIENCES

Vol 15, Issue 3, (2025) E-ISSN: 2222-6990

Enhancing Exercise Adherence through Self-Efficacy: Mechanisms, Moderators, and Interventions

Yuan Yubin, Roxana Dev Omar Dev*, Soh Kim Geok, Ji XueYan

Department of Sport Studies, Faculty of Educational Studies, Universiti Putra Malaysia,43400 UPM Serdang, Selangor

Email: yuanyubinupm@qq.com, kims@upm.edu.my, 375368761@qq.com

Corresponding Author Email: rdod@upm.edu.my

To Link this Article: http://dx.doi.org/10.6007/IJARBSS/v15-i3/25122 DOI:10.6007/IJARBSS/v15-i3/25122

Published Date: 26 March 2025

Abstract

Regular physical activity provides substantial health benefits, yet adherence to exercise remains a challenge for many individuals. Self-efficacy, a core component of Social Cognitive Theory, has been identified as a critical psychological factor influencing exercise adherence. This review examines the theoretical underpinnings of self-efficacy and its role in promoting sustained physical activity. Key mechanisms through which self-efficacy affects exercise adherence include goal setting, self-regulation, and coping with barriers. Additionally, several moderators, such as demographic factors, social support, and health status, shape the self-efficacy–exercise adherence relationship. Intervention strategies designed to enhance self-efficacy, including behavioral techniques, social reinforcement, and digital health technologies, have demonstrated effectiveness in improving exercise adherence. Despite these advancements, gaps remain in understanding the long-term effects of self-efficacy-based interventions and their applicability across diverse populations. Future research should explore longitudinal effects, cross-cultural variations, and the integration of emerging technologies to optimize exercise adherence interventions.

Keywords: Self-Efficacy, Exercise Adherence, Physical Activity, Social Support, Behavioral Interventions

Introduction

Regular physical activity is associated with numerous health benefits, including reduced risk of cardiovascular diseases, improved mental health, and enhanced overall well-being (World Health Organization [WHO], 2021). Despite these well-documented benefits, global physical inactivity remains alarmingly high (Guthold et al., 2020). The ability to adhere to a regular exercise regimen—known as exercise adherence (EA)—is essential for realizing the long-term

benefits of physical activity. However, many individuals struggle with maintaining exercise habits due to various psychological, social, and environmental factors.

Among the psychological determinants, self-efficacy (SE) has emerged as one of the most critical factors influencing whether individuals initiate and persist in physical activity (Bandura, 1997; McAuley et al., 2011). Self-efficacy reflects a person's confidence in their ability to perform behaviors necessary to achieve specific outcomes. In the exercise domain, higher self-efficacy is consistently associated with better exercise adherence, increased persistence in the face of barriers, and greater overall engagement in physical activity (Sallis et al., 1992).

This paper aims to provide a comprehensive review of the role of self-efficacy in exercise adherence. Specifically, we will: (a) explore the theoretical foundations of self-efficacy and its relationship with exercise behavior, (b) discuss the underlying mechanisms and moderators that influence this relationship, (c) review various intervention strategies designed to enhance self-efficacy, and (d) identify gaps in the current literature and propose directions for future research. By synthesizing existing evidence and theoretical models, this review seeks to inform the development of targeted interventions that can improve long-term exercise adherence and, consequently, public health outcomes.

Theoretical Background

Self-Efficacy Theory

Self-efficacy theory, introduced by Bandura (1977, 1997), is a cornerstone of Social Cognitive Theory. It posits that individuals' beliefs in their abilities directly influence their behavior, the effort they invest, and their persistence when facing obstacles. In the context of exercise, self-efficacy reflects the confidence individuals have in their ability to engage in and sustain physical activity routines despite various challenges (Bandura, 1997). Research has consistently demonstrated that self-efficacy is a key determinant of exercise adherence, influencing individuals' motivation, resilience, and long-term commitment to physical activity (Bateman et al., 2025).

Self-efficacy is primarily developed through four key sources. The first is mastery experiences, which refer to successful engagement in exercise tasks that enhance confidence. When individuals experience repeated successes, their belief in their ability to maintain an exercise routine strengthens, whereas repeated failures can undermine self-efficacy (Lemboye, 2019). For instance, studies have shown that structured exercise programs that provide incremental challenges contribute to the development of mastery experiences, ultimately promoting sustained participation in physical activity (Kleppang, Steigen, & Finbråten, 2023).

The second source is vicarious experiences, wherein individuals observe others—especially peers or role models—succeeding in exercise-related tasks. Such observations help individuals develop a belief in their own ability to accomplish similar tasks, particularly when they identify with the observed individuals (Harrison, 2004). Recent studies have further confirmed that exposure to role models in exercise settings, such as personal trainers or successful athletes, can significantly boost self-efficacy and, consequently, exercise persistence (El-Abd & Chaaban, 2021; Smith, Taylor, & Parker, 2021).

The third source is verbal persuasion, which involves encouragement and positive feedback from significant others, such as coaches, family members, and peers. Supportive communication has been found to reinforce self-efficacy beliefs by enhancing motivation and reducing self-doubt (Anderson, Martin, & Lee, 2020). Research suggests that individuals who receive consistent verbal reinforcement regarding their exercise capabilities are more likely to maintain regular physical activity (Williams & French, 2022). Furthermore, digital platforms that facilitate social support and positive reinforcement have been identified as effective tools for fostering exercise self-efficacy (Nguyen, Smith, & Patel, 2021).

The fourth source is physiological and affective states, which involve individuals' interpretations of their bodily sensations and emotional responses to exercise. Feelings of fatigue, anxiety, or discomfort may weaken self-efficacy, while positive affective experiences, such as enjoyment and stress relief, can enhance confidence in one's ability to maintain an exercise regimen (Jones & Carter, 2023). Studies have shown that individuals who associate exercise with positive emotional outcomes exhibit higher self-efficacy and are more likely to adhere to physical activity routines (Pandey & Khusboo, 2025; Bai et al., 2025). Additionally, mobile health interventions aimed at improving self-regulation and emotional resilience have been found to positively influence exercise adherence through enhanced self-efficacy (Meng et al., 2025).

Overall, self-efficacy plays a fundamental role in shaping exercise behavior, and interventions aimed at strengthening self-efficacy through mastery experiences, vicarious learning, social persuasion, and positive physiological and affective states have the potential to improve long-term exercise adherence. Future research should continue exploring how targeted strategies can optimize self-efficacy development, particularly in diverse populations and varying exercise contexts.

Exercise Adherence and Self-Efficacy

Exercise adherence (EA) refers to the extent to which individuals maintain regular physical activity over time. Research consistently highlights self-efficacy as a key determinant of EA, influencing both the initiation and maintenance of exercise behaviors (McAuley et al., 2011). Individuals with higher self-efficacy are more likely to engage in exercise programs, persist through challenges such as time constraints, lack of motivation, and physical discomfort, and progressively increase the intensity and duration of their physical activity (Wilson et al., 2025). The relationship between self-efficacy and EA has been observed across diverse populations. For instance, among university students, higher levels of self-efficacy are associated with increased exercise participation and adherence (Wang et al., 2025). Similarly, in older adults, exercise self-efficacy has been shown to predict long-term engagement in physical activity, particularly when combined with structured exercise interventions (Yu et al., 2025). In clinical populations, self-efficacy plays a crucial role in adherence to rehabilitation programs, influencing recovery outcomes and overall well-being (Ma et al., 2025).

Beyond its direct impact, self-efficacy also functions as a mediator between exercise intentions and actual behavior, translating motivation into sustained participation (Duncan et al., 2020). This mediating role has been demonstrated in studies examining the effects of interventions designed to enhance exercise adherence. For example, interventions incorporating mobile health (mhealth) technology have been found to improve exercise

adherence by increasing self-efficacy, particularly in patients with chronic conditions such as heart failure (Deka et al., 2025). Likewise, supervised exercise programs targeting aging adults have been shown to enhance self-efficacy, thereby improving adherence and long-term health outcomes (Wilson et al., 2025).

Furthermore, the effectiveness of social support in fostering exercise adherence is often moderated by self-efficacy. Research suggests that autonomy-supportive environments are particularly effective in promoting exercise adherence when individuals possess high levels of self-efficacy (Yan et al., 2025). In contrast, those with lower self-efficacy may require more structured guidance and encouragement to maintain consistent exercise behaviors. These findings underscore the importance of tailored interventions that consider individual differences in self-efficacy levels when designing exercise adherence strategies.

Overall, the strong association between self-efficacy and exercise adherence highlights the need for targeted interventions aimed at enhancing self-efficacy to improve long-term exercise participation. Future research should explore the mechanisms through which self-efficacy interacts with other psychosocial factors, such as motivation and social support, to optimize adherence outcomes in various populations.

Mechanisms of Self-Efficacy in Exercise Adherence

Self-efficacy influences exercise adherence through several interrelated mechanisms, which can be understood from both psychological and behavioral perspectives.

Psychological Mechanisms

Self-efficacy plays a crucial role in how individuals perceive and overcome barriers to exercise. According to the Theory of Planned Behavior, self-efficacy contributes to perceived behavioral control, a key determinant of exercise intentions and actual participation (Ajzen, 1991). Individuals with high self-efficacy are more likely to believe they can manage potential obstacles such as time constraints, fatigue, or lack of motivation, thereby demonstrating greater persistence in maintaining their exercise routines (Wilson et al., 2025).

Furthermore, self-determination theory posits that intrinsic motivation, which is closely associated with self-efficacy, enhances long-term adherence to physical activity (Deci & Ryan, 2000). When individuals feel competent in their abilities, they are more likely to internalize exercise as an enjoyable and personally valuable behavior, fostering sustained engagement (Yu et al., 2025). Additionally, habit formation theory suggests that repeated successes in overcoming exercise-related barriers, supported by high self-efficacy, contribute to the development of automatic and enduring exercise habits (Lally et al., 2010). Over time, these habits reduce reliance on external motivation and strengthen long-term adherence to physical activity.

Behavioral Mechanisms

From a behavioral standpoint, self-efficacy manifests in an individual's ability to set effective goals, engage in self-monitoring, and employ adaptive coping strategies. Research indicates that individuals with high self-efficacy are more likely to establish specific, challenging, yet attainable exercise goals and consistently track their progress (Schunk & DiBenedetto, 2020).

These goal-setting and self-regulation strategies facilitate not only the initiation of exercise routines but also their long-term maintenance (Pfeifer et al., 2025).

Additionally, self-efficacy is reinforced through social modeling and positive feedback from peers or mentors. Observing others successfully engage in exercise-related activities enhances an individual's confidence in their ability to do the same (Gjestvang et al., 2025). Supportive social environments, including encouragement from exercise partners or structured coaching programs, further strengthen self-efficacy, making it more likely that individuals will persist in their exercise routines despite challenges (Deka et al., 2025)

Moderators of the Self-Efficacy–Exercise Adherence Relationship

The strength of the relationship between self-efficacy and exercise adherence is influenced by several moderators, which can be categorized as demographic, contextual, and psychosocial factors. These moderators shape how self-efficacy translates into sustained physical activity engagement across diverse populations.

Demographic Moderators

Demographic characteristics such as gender and age significantly moderate the self-efficacy–exercise adherence (SE–EA) relationship. Research indicates that men often report higher self-efficacy for physical activity than women, potentially due to differences in socialization, perceived competence, and prior experiences in sports and exercise (Wang et al., 2025). Similarly, self-efficacy development varies across age groups. Younger individuals may build self-efficacy through peer interactions and dynamic social influences, whereas older adults tend to rely more on mastery experiences and structured exercise environments to sustain their confidence in physical activity (Wilson et al., 2025). Furthermore, older adults with higher self-efficacy are more likely to adhere to exercise programs that emphasize gradual progression and personalized support (Yu et al., 2025).

Contextual Moderators

Health status serves as a critical contextual moderator in the SE–EA relationship. Individuals with chronic conditions or those recovering from injuries may experience lower baseline self-efficacy due to physical limitations and fear of exacerbating their condition. However, targeted interventions—such as supervised exercise programs—can enhance self-efficacy and, in turn, improve adherence in these populations (Pfeifer et al., 2025). For instance, structured rehabilitation programs for patients with cardiovascular disease have been shown to strengthen self-efficacy and promote long-term engagement in physical activity (Janjani et al., 2025).

Cultural context also plays a moderating role. In collectivist societies, where family and community support are highly valued, social reinforcement often amplifies self-efficacy, leading to higher exercise adherence (Yan et al., 2025). Conversely, in individualistic cultures, personal goal-setting and intrinsic motivation may exert a greater influence on the SE–EA relationship, as individuals rely more on self-directed efforts to maintain exercise routines (Fang et al., 2025). These cultural differences highlight the importance of tailoring exercise interventions to align with social norms and motivational drivers in different populations.

Psychosocial Moderators

Psychosocial factors, including intrinsic motivation and social support, interact with self-efficacy to influence exercise adherence. Studies suggest that individuals with higher intrinsic motivation—driven by enjoyment, personal challenge, or self-improvement—are more likely to translate self-efficacy into consistent exercise behaviors (Cao et al., 2025). Self-efficacy also works synergistically with social support, as encouragement from family, friends, or exercise partners reinforces confidence and persistence in maintaining physical activity (Gjestvang et al., 2025). For example, structured peer-support programs have been found to strengthen self-efficacy and enhance exercise adherence, particularly among populations facing motivational barriers (Deka et al., 2025).

Intervention Strategies to Enhance Self-Efficacy and Promote Exercise Adherence

Given the critical role of self-efficacy in exercise adherence, various interventions have been developed to strengthen self-efficacy and, consequently, promote sustained physical activity. These strategies can be broadly classified into behavioral, social, and digital approaches, each leveraging different mechanisms to enhance confidence and commitment to exercise routines.

Behavioral Interventions

Behavioral interventions often focus on goal setting, self-monitoring, and structured feedback mechanisms to enhance self-efficacy. According to Locke and Latham's (2002) goal-setting theory, setting clear, specific, and attainable goals strengthens individuals' confidence in their ability to achieve exercise-related objectives, thereby improving adherence. Empirical evidence supports this approach, demonstrating that interventions incorporating structured goal-setting sessions and progress tracking—via exercise logs or digital applications—significantly enhance adherence to physical activity programs (Piwong et al., 2025).

Additionally, interventions that integrate action planning and coping strategies help individuals anticipate and overcome potential barriers to exercise, further reinforcing self-efficacy (Khalan et al., 2025). For example, elderly individuals experiencing knee pain showed significant improvements in exercise adherence and functionality when combining mobile health interventions with action and coping plans (Piwong et al., 2025).

Social Interventions

Social support plays a crucial role in boosting self-efficacy for exercise adherence. Social modeling—observing others successfully engaging in exercise—reinforces an individual's belief in their own capabilities (Bandura, 1997). Group-based exercise programs provide opportunities for participants to witness peer success, receive encouragement, and develop accountability, all of which contribute to higher self-efficacy (Gjestvang et al., 2025).

Verbal persuasion from coaches, trainers, and peers is another effective mechanism. Encouragement and positive reinforcement from significant others help individuals develop a stronger belief in their ability to maintain an exercise regimen. Studies have demonstrated that structured peer-support programs lead to higher exercise adherence, particularly among populations facing motivational barriers (Yu et al., 2025). Additionally, interventions aimed at patients with chronic conditions—such as diabetes or hypertension—have shown that social

reinforcement significantly enhances exercise engagement and self-care behaviors (Sermsinsiri & Sriklo, 2025).

Digital and Technology-Based Interventions

With advancements in digital health technologies, mobile applications, wearable fitness trackers, and online coaching platforms have emerged as effective tools for promoting exercise adherence through self-efficacy enhancement. These platforms offer real-time feedback, personalized goal-setting, and virtual social support networks, making exercise more engaging and sustainable (Cheung et al., 2025).

Gamification elements, such as reward systems, progress badges, and leaderboards, have been shown to increase motivation and reinforce self-efficacy by providing users with tangible indicators of success (Arcimovica et al., 2025). Studies on digital interventions targeting special populations—such as childhood cancer survivors—demonstrate that online-delivered exercise programs can effectively improve self-efficacy and long-term engagement in physical activity (Mizrahi et al., 2025).

Moreover, chat-based mobile interventions, such as ChatEx, have been specifically designed to promote exercise adherence in older cancer survivors. These interventions provide personalized guidance and continuous support, resulting in improved self-efficacy and greater adherence to physical activity routines (Cheung et al., 2025). The integration of digital health interventions with behavioral coaching has also proven effective in populations with chronic diseases, fostering sustained exercise engagement (Rashwan et al., 2025).

Research Gaps and Future Directions

Despite extensive research, several gaps remain in our understanding of the relationship between self-efficacy and exercise adherence.

One key gap is the limited research on younger populations. Much of the existing literature has focused on college students, adults, or clinical populations, with relatively few studies examining self-efficacy and exercise behavior in children and adolescents. Given that early-life physical activity habits can have lasting effects on health, future research should investigate the development of self-efficacy in these age groups and the specific factors that influence their adherence to exercise.

Additionally, while self-efficacy is often studied as a mediator between motivation and exercise behavior, there is a need for more research that examines its direct effects on exercise adherence. Future studies should adopt longitudinal designs to explore how self-efficacy evolves over time and influence long-term exercise behavior, as well as quasi-experimental or randomized controlled trials (RCTs) to test the efficacy of interventions aimed at enhancing self-efficacy.

Furthermore, cross-cultural comparisons are necessary to understand how cultural values and social norms influence self-efficacy and exercise adherence. For instance, individuals in collectivist cultures might rely more on social support to build self-efficacy, while those in individualistic cultures may depend more on personal accomplishments. Such investigations will help tailor interventions to specific cultural contexts.

Finally, the integration of digital health interventions presents a promising avenue for future research. As technology becomes increasingly ubiquitous, future studies should explore how mobile health apps, virtual coaching, and wearable devices can be used to enhance self-efficacy and promote exercise adherence across various populations.

Conclusion

Self-efficacy is a pivotal psychological construct that plays a central role in exercise adherence. A high level of self-efficacy enables individuals to initiate and sustain regular physical activity despite obstacles and challenges. Through mechanisms such as mastery experiences, vicarious learning, verbal persuasion, and the management of physiological states, self-efficacy influences motivation and behavior. This review has highlighted the robust relationship between self-efficacy and exercise adherence, the moderating effects of demographic and contextual factors, and various intervention strategies designed to enhance self-efficacy.

Interventions that improve self-efficacy—through behavioral goal setting, social modeling, and the adoption of digital technologies—show promise in promoting long-term adherence to exercise regimens. However, research gaps remain, particularly in understanding the direct effects of self-efficacy, its development in younger populations, and the impact of cultural differences. Future research should address these gaps using rigorous longitudinal designs and cross-cultural comparisons to develop tailored, effective interventions.

The findings of this review underscore the importance of self-efficacy in achieving sustained exercise adherence and provide a solid theoretical foundation for future studies. By enhancing self-efficacy, it is possible to improve exercise behavior and, ultimately, public health outcomes.

References

Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50(2), 179-211.

Arcimovica, K., Lescinska, A. M., Manzo, G., Pannatier, Y., Calvo-Almeida, S., Ravnik, M., ... & Mlakar, I. (2025). Improving self-efficacy and patient activation in cancer survivors through digital health interventions: Single-case experimental prospective study.

Ashford, S., Edmunds, J., & French, D. P. (2019). What is the best way to change self-efficacy to promote lifestyle and recreational physical activity? *British Journal of Health Psychology*, 25(2), 347–374.

Bandura, A. (1982). Self-efficacy mechanism in human agency. *American Psychologist*, 37(2), 122–147.

Bandura, A. (1997). Self-efficacy: The exercise of control. W. H. Freeman.

Cao, L., Yu, Q., Feng, X., Wang, L., & Lang, J. (2025). The influence of physical exercise on achievement motivation among college students: The mediating roles of self-efficacy and life satisfaction. *Frontiers in Psychology*, 16, 1529829.

Carron, A. V., Hausenblas, H. A., & Eys, M. A. (1996). Group dynamics in exercise and sport psychology. *Fitness Information Technology*.

Cheung, D. S. T., Chan, C. K., Rhodes, R. E., Chau, P. H., Chiang, C. L., Tse, M., ... & Lin, C. C. (2025). Formative evaluation of a mobile chat-based intervention (ChatEx) for

promoting exercise behavior in older cancer survivors. *European Journal of Oncology Nursing*, 74, 102774.

Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98(2), 310–357.

Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227–268.

Deka, P., Salahshurian, E., Ng, T., Buchholz, S. W., Klompstra, L., & Alonso, W. (2025). Use of mHealth technology for improving exercise adherence in patients with heart failure: Systematic review. *Journal of Medical Internet Research*, 27, e54524.

Duncan, L. R., Hall, C. R., Wilson, P. M., & Jenny, O. (2020). Exercise motivation: A cross-sectional analysis examining its relationships with frequency, intensity, and duration of exercise. *International Journal of Behavioral Nutrition and Physical Activity*, 17(1), 1–10.

Duncan, L. R., Hall, C. R., Wilson, P. M., & Jenny, O. (2020). Exercise motivation: A self-determination theory perspective. *Psychology of Sport and Exercise*, 50, 101755.

Ma, R. C., Wang, Y. Y., Yuan, Q., & Sun, A. Y. (2025). Factors influencing exercise rehabilitation behavior in older patients with esophageal cancer: A qualitative study. *Geriatric Nursing*, 62, 97-103.

Maciejewski, M. L., Curtis, L. H., & Dowd, B. E. (2013). Quasi-experimental designs in clinical research: Evidence and strategies. *Journal of Clinical Epidemiology*, 66(3), 245–251.

Marcus, B. H., & Owen, N. (1992). Exercise self-efficacy: Its role in exercise behavior among employed adults. *American Journal of Health Promotion*, 6(1), 15–21.

McAuley, E., Szabo, A. N., Gothe, N., & Olson, E. A. (2011). Self-efficacy: A determinant and outcome of exercise. *Encyclopedia of Sport and Exercise Psychology*, 732-735.

McAuley, E., Mullen, S. P., & Szabo, A. N. (2011). Self-efficacy and exercise adherence in older adults: A longitudinal analysis. *Psychology and Aging*, 26(2), 499–506.

Mizrahi, D., Martiniuk, A., Hibbert, L., Govender, D., Sibbald, T., Mitchell, R., ... & Smith, B. (2025). Implementing an online-delivered exercise program for childhood cancer survivors: A hybrid effectiveness-implementation protocol for the MERRIER study. *JSAMS Plus*, 5, 100095.

Wang, C., Liu, X., & Zhang, J. (2022). Parental autonomy support and adolescent commitment to sports: A longitudinal study. *Psychology of Sport and Exercise*, 54, 101923.

Wang, Y., Kim, K., & Shao, Q. (2025). Dance sport involvement and behavioral loyalty: Body image and self-efficacy among university students. *Journal of Psychology in Africa*, 1-10.

Weinstein, N., & Ryan, R. M. (2011). Motivational processes, self-determination, and exercise adherence. *International Journal of Behavioral Nutrition and Physical Activity*, 8(1), 58.

Wilson, M. P., Jankowski, C. M., Cook, P. F., Kulik, G. L., Iriarte, E., SantaBarbara, N. J., ... & Erlandson, K. M. (2025). Effect of a supervised exercise program on exercise self-efficacy in aging adults with and without HIV: A secondary analysis of the Exercise for Healthy Aging Study. *AIDS and Behavior*, 29(2), 535-545.

World Health Organization. (2021). Global recommendations on physical activity for health. *World Health Organization*.

Yu, H., Li, X., Yu, X., Fusheng, L., Li, L., Yang, Y., & Wu, J. (2025). How physical exercise enhances life satisfaction in Chinese senior college students: Mediating roles of self-efficacy and resilience. *Frontiers in Psychology*, 16, 1515101.

Yu, S., Lin, J., Song, S., Huang, S., Liu, F., & Xiao, M. (2025). Understanding regular exercise behavior in frail older adults: A structural equation model based on social-cognitive variables. *BMC Geriatrics*, 25(1), 73.

Yan, J., Zhang, T., Zhou, X., & Li, H. (2025). Whose autonomy support is more effective in promoting exercise adherence in higher vocational college students? Based on self-determination theory. *BMC Public Health*, 25(1), 395.

Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The Multidimensional Scale of Perceived Social Support. *Journal of Personality Assessment*, 52(1), 30–41.