

Predicting Health-Oriented Leadership from Mental Health: The Mediating Role of Basic Psychological Needs

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Abstract

Introduction:

The concept of health-oriented leadership has emerged as a framework integrating leadership behaviors with employee health promotion. However, less is known about the psychological mechanisms through which leaders' mental health influences their leadership style. This study aimed to predict health-oriented leadership based on employees' mental health, with a focus on the mediating role of basic psychological needs (autonomy, competence, and relatedness) among managers and staff of a medical sciences university in Iran.

Methods

A descriptive-correlational design using structural equation modeling was employed. The statistical population included all managers and staff of Khomein University of Medical Sciences (N = 996). Using G*Power software, a sample of 172 participants was estimated; after excluding incomplete responses, 174 individuals (52.9% female, mean age = 42.5 years) were included via convenience sampling. Participants completed validated Persian versions of the Health-Oriented Leadership Scale, the Mental Health Continuum Short Form, and the Psychological Needs at Work Scale. Data were analyzed using descriptive statistics, Pearson correlation, and structural equation modeling with SPSS and AMOS 24.

Results

The proposed structural model demonstrated good fit with the data ($\chi^2/df = 2.30$, CFI = 0.92, TLI = 0.93, RMSEA = 0.069, GFI = 0.92). Mental health had a significant direct positive effect on health-oriented leadership ($\beta = 0.51$, $p < 0.001$) and on psychological needs ($\beta = 0.20$, $p < 0.01$). Psychological needs also significantly predicted health-oriented leadership ($\beta = 0.57$, $p < 0.001$). Furthermore, the indirect effect of mental health on leadership through psychological needs was significant ($\beta = 0.112$, $p < 0.05$, 95% CI [0.016, 0.239]), confirming the mediating role. The model explained 49% of the variance in health-oriented leadership.

Discussion and Conclusion:

These findings highlight that mental health and basic psychological needs are key predictors of health-oriented leadership. Leaders with better mental health are more likely to experience need satisfaction, which facilitates the adoption of health-promoting leadership behaviors. Organizations, particularly in healthcare and educational settings, should invest in mental health promotion programs and create conditions that support autonomy, competence, and relatedness. Future research should employ longitudinal designs and explore additional mediators and moderators.

Introduction

The role of leaders in shaping organizational health and employee well-being has become a central concern in contemporary management and occupational health psychology. In recent years, the concept of "health-oriented leadership" has emerged as a promising framework that integrates leadership behaviors with the promotion of physical and psychological health among employees (Franke et al., 2014). This approach recognizes that leaders are not merely task-oriented managers but also key agents in creating supportive work environments that foster well-being, reduce stress, and enhance overall organizational performance (Pischel et al., 2025). Health-oriented leadership is defined as a multidimensional process in which leaders actively prioritize and promote the mental, physical, and psychological well-being of their employees through role modeling, supportive practices, and fostering a health-conscious organizational culture (Hämel et al., 2026).

The significance of health-oriented leadership has been particularly underscored in healthcare settings, where employees face high levels of occupational stress, emotional demands, and exposure to traumatic events (Jimenez and Dunkl, 2017). Healthcare professionals, including physicians, nurses, and administrative staff, are at elevated risk for burnout, anxiety, and depression, which not only impair their personal well-being but also compromise the quality of patient care and organizational effectiveness (Shanafelt et al., 2012). In this context, leaders who adopt health-oriented behaviors—such as demonstrating awareness of employee health needs, valuing health as an organizational priority, and engaging in self-care practices—can serve as protective factors against the deleterious effects of occupational stress (Kaluza et al., 2020). Studies have shown that health-oriented leadership is positively associated with employee job satisfaction, organizational commitment, and reduced turnover intentions (Nielsen et al., 2009).

Among the various factors that may predict health-oriented leadership, leaders' own mental health has emerged as a critical determinant. Mental health, defined as a state of well-being in which individuals recognize their abilities, cope with normal life stresses, work productively, and contribute to their communities (Organization, 2022), encompasses emotional, psychological, and social dimensions that influence how leaders think, feel, and behave in organizational settings (Keyes, 2002). Leaders with optimal mental health are better equipped to manage their emotions, regulate stress, maintain positive interpersonal relationships, and make sound decisions—capacities that are essential for implementing health-promoting leadership behaviors (Klug et al., 2022). Conversely, leaders experiencing psychological distress, burnout, or emotional exhaustion may struggle to attend to the needs of their employees, adopt punitive or neglectful leadership styles, and inadvertently contribute to a toxic work environment (Ahumada et al., 2025).

However, the relationship between mental health and leadership style is unlikely to be simple or unmediated. Drawing on the theoretical framework of Self-Determination Theory (SDT) (Ryan and Deci, 2000), it can be argued that the effect of mental health on health-oriented leadership is transmitted, at least in part, through the satisfaction of basic psychological needs. SDT posits that all humans have

three innate psychological needs—autonomy, competence, and relatedness—that must be satisfied for optimal functioning, well-being, and intrinsic motivation (Deci and Ryan, 2000). Autonomy refers to the experience of volition and choice in one's actions; competence involves feeling effective and capable in one's pursuits; and relatedness concerns the sense of belonging and meaningful connection with others (Vansteenkiste et al., 2020). When these needs are met, individuals experience greater vitality, engagement, and psychological flourishing; when thwarted, they are prone to maladjustment, demotivation, and psychological distress (Baard et al., 2004).

There is substantial evidence linking mental health to the satisfaction of basic psychological needs. Individuals with higher levels of mental health typically experience greater autonomy, competence, and relatedness in their daily lives (Wang et al., 2025). Conversely, mental health problems such as depression, anxiety, and burnout are associated with lower need satisfaction and higher need frustration (Alizadeh et al., 2017). In organizational contexts, employees who report better mental health also report higher levels of need satisfaction at work, which in turn enhances their motivation, engagement, and performance (Van den Broeck et al., 2008). For leaders, the experience of need satisfaction may be particularly consequential, as it shapes their capacity to lead effectively, support others, and create a positive organizational climate.

Furthermore, the satisfaction of psychological needs has been directly linked to leadership behaviors and styles. Leaders whose needs for autonomy, competence, and relatedness are met are more likely to adopt empowering, ethical, and people-centered leadership approaches (Hamzavi et al., 2023). They demonstrate greater emotional availability, empathy, and willingness to invest in employee development and well-being (Torres-Moya et al., 2026). In contrast, leaders experiencing need frustration may exhibit controlling, distant, or even abusive leadership behaviors.

Despite growing interest in health-oriented leadership, several gaps remain in the literature. First, most studies have focused on the effects of leadership on employee health outcomes, with comparatively less attention given to the antecedents of health-oriented leadership itself (Kaluza et al., 2020, Bauer and Hämmig, 2013). Second, although mental health and psychological needs have been studied independently in relation to leadership, their combined role—particularly the mediating function of needs in the mental health-leadership link—has not been systematically examined. Third, the majority of research on these topics has been conducted in Western organizational contexts, with limited representation from Middle Eastern countries, including Iran (Safarmohammadluo et al., 2022). Considering cultural variations in leadership expectations, workplace norms, and healthcare systems, there is a pressing need for empirical investigations that explore these relationships within diverse national and cultural settings. The present study aims to address these gaps by investigating the mediating role of basic psychological needs in the relationship between employees' mental health and health-oriented leadership style among managers and staff of a medical sciences university in Iran.

Materials and Methods

Study Design and Setting

This study employed a descriptive-correlational design using structural equation modeling (SEM) to examine the relationships among mental health, basic psychological needs, and health-oriented leadership. The research was conducted at Khomein University of Medical Sciences, a public higher education institution affiliated with the Iranian medical sciences education system, located in Markazi Province, Iran. The university provides both educational and healthcare services, employing a diverse workforce including academic staff, administrative personnel, and clinical support staff.

Participants and Sampling

The statistical population comprised all managers and employees at Khomein University of Medical Sciences during the 2025–2026 academic year ($N = 996$). Sample size was determined using G*Power software ($f^2=0.15$, $\alpha = 0.05$, power = 0.95), yielding a minimum of 172 participants. After data cleaning, the final sample comprised 174 participants (response rate: 95.3%). Participants were selected using convenience sampling. Inclusion criteria were: at least five years of continuous work experience, voluntary consent, and ability to read Persian. Exclusion criteria were: history of severe physical disorders affecting the central nervous system, history of major psychiatric disorders prior to employment, or current treatment for severe mental health conditions.

Measures

Demographic Questionnaire

A researcher-developed demographic form was used to collect participants' characteristics, including gender, age, marital status, educational level, and years of work experience. Additionally, two screening items assessed history of psychiatric hospitalization and major physical health conditions affecting the central nervous system, which were used to apply exclusion criteria.

Health-Oriented Leadership Scale (HoL)

The Health-Oriented Leadership Scale, originally developed and validated by Franke, Felfe, and Pundt (Franke et al., 2014), was used to assess participants' health-oriented leadership style. The instrument is grounded in the theoretical framework of occupational health psychology and conceptualizes health-oriented leadership as comprising two overarching dimensions: StaffCare (16 items) and SelfCare (12 items). Each dimension encompasses three subdimensions: health awareness (awareness of health risks and stressors), health value (appreciation and prioritization of health), and health behavior (concrete actions to promote health). The 28 items are rated on a 5-point Likert scale ranging from 1 ("strongly disagree") to 5 ("strongly agree"). Higher total scores indicate higher levels of health-oriented leadership. The Persian version of the scale was previously validated in the Iranian context by Sarabi et al., who reported Cronbach's alpha coefficients ranging from 0.78 to 0.93 for the subscales. In the present study, the Cronbach's alpha for the total scale was 0.95, indicating excellent internal consistency.

Mental Health Continuum Short Form (MHC-SF)

Mental health was assessed using the 14-item Mental Health Continuum Short Form (MHC-SF) developed by Keyes (Keyes, 2002), measuring emotional, psychological, and social well-being on a 6-point Likert scale (0="never" to 5="every day"). The Persian version was validated by Yousefi et al. (Yousefi et al., 2020), with reported Cronbach's alpha coefficients of 0.77, 0.88, and 0.72 for emotional, psychological, and social well-being, respectively. In the current study, Cronbach's alpha for the total scale was 0.82.

Psychological Needs at Work Scale

Psychological needs were assessed using the 34-item Psychological Needs at Work Scale developed by Soltanzadeh, Amrahi, and Esmā-Hosseini for Iranian academic and healthcare employees, measuring eight dimensions on a 5-point Likert scale. The developers reported adequate validity and Cronbach's alpha coefficients for subscales ranging from 0.70 to 0.90. Ghanbari et al. reported a total scale Cronbach's alpha of 0.90. In the present study, the Cronbach's alpha for the total scale was 0.86.

Procedure

Ethical approval

was obtained from the Institutional Review Board of Islamic Azad University, Arak Branch (Ethics Code: IR.IAU.ARAK.REC.1404.245), and permission was secured from Khomein University of Medical Sciences administration. The researcher visited the University in person, provided eligible employees with information about the study objectives, voluntary participation, confidentiality, and their rights, and obtained informed consent. Questionnaires were distributed in paper-and-pencil format and completed in approximately 20–25 minutes, with the researcher present to address questions. Completed questionnaires were collected immediately to ensure confidentiality.

Data Analysis

Data were analyzed using SPSS and AMOS version 24.0. Descriptive statistics (means, standard deviations, minimum and maximum scores) were computed for demographic characteristics and main variables. Normality was assessed using skewness and kurtosis (acceptable range: -2 to + 2) (George, 2011), multivariate normality using Mardia's coefficient (± 2.58), and multicollinearity using VIF (< 5) and tolerance (> 0.20) (Black and Babin, 2019). Linearity was examined via scatterplots, and residual independence via Durbin-Watson (1.5–2.5). Pearson correlations and structural equation modeling with maximum likelihood estimation were used to test the mediation model. Model fit was assessed using χ^2/df , CFI, TLI, NFI, IFI, GFI, AGFI, PGFI, and RMSEA, with acceptable thresholds of $\chi^2/df < 5$, CFI/TLI/NFI/IFI/GFI/AGFI ≥ 0.90 , PGFI ≥ 0.70 , and RMSEA ≤ 0.08 . The mediating role was tested using bootstrapping with 5,000 resamples and bias-corrected 95% confidence intervals (31). All tests were two-tailed with $\alpha = 0.05$ (Preacher and Hayes, 2008). All tests were two-tailed with $\alpha = 0.05$.

Results

Descriptive Statistics

The final sample consisted of 174 participants (52.9% female, 47.1% male). The majority of participants were married (62.6%), and the most common educational level was a bachelor's degree (47.1%), followed by master's degree (29.9%) and doctorate (23.0%). Regarding age distribution, 22.4% were aged 30–40 years, 38.5% were aged 41–50 years, 27.6% were aged 51–60 years, and 11.5% were over 60 years. In terms of work experience, 43.7% had 5–15 years, 33.3% had 16–25 years, and 23.0% had more than 25 years of experience.

Table 1 presents the descriptive statistics for the main study variables. The mean score for mental health was 48.11 (SD = 8.86), with scores ranging from 30 to 66. The mean score for psychological needs was 94.39 (SD = 11.27), ranging from 69 to 123. The mean score for health-oriented leadership was 90.03 (SD = 20.54), ranging from 50 to 134.

Table 1
Descriptive statistics of main variables (N = 174)

Variable	Mean	SD	Minimum	Maximum
Mental Health	48.11	8.86	30	66
Psychological Needs	94.39	11.27	69	123
Health-Oriented Leadership	90.03	20.54	50	134

Testing of Statistical Assumptions

Prior to conducting parametric analyses, several statistical assumptions were evaluated. First, boxplot analysis indicated the absence of univariate outliers in all three variables. Second, univariate normality was assessed using skewness and kurtosis indices, which fell within the acceptable range of -2 to + 2 for all variables (mental health: skewness=-0.002, kurtosis=-1.152; psychological needs: skewness = 0.206, kurtosis=-0.656; health-oriented leadership: skewness = 0.150, kurtosis=-0.703). Third, multivariate normality was confirmed using Mardia's coefficient with a critical ratio of 2.33, falling within the acceptable range of ± 2.58 . Fourth, multicollinearity was examined using Variance Inflation Factor (VIF) and tolerance statistics. VIF values were 1.12 for both predictors, and tolerance values were 0.90, indicating no problematic multicollinearity ($VIF < 5$, $tolerance > 0.20$). Fifth, scatterplots revealed linear relationships among the variables. Sixth, the Durbin-Watson statistic was 1.98, falling within the acceptable range of 1.5 to 2.5, confirming independence of residuals. These results collectively confirmed that all assumptions for parametric analyses and structural equation modeling were met.

Bivariate Correlations

Pearson correlation coefficients were computed to examine the bivariate relationships among the study variables (Table 2). Mental health showed a significant positive correlation with health-oriented

leadership ($r = 0.539, p < 0.001$), indicating that higher levels of mental health were associated with higher levels of health-oriented leadership. Psychological needs also demonstrated a significant positive correlation with health-oriented leadership ($r = 0.300, p < 0.001$), suggesting that greater satisfaction of psychological needs was associated with higher levels of health-oriented leadership. Additionally, mental health was significantly positively correlated with psychological needs ($r = 0.321, p < 0.001$).

Table 2
Pearson correlation matrix among main variables (N = 174)

Variable	1	2	3
1. Mental Health	1		
2. Psychological Needs	0.321***	1	
3. Health-Oriented Leadership	0.539***	0.300***	1

Note: *** $p < 0.001$

Structural Equation Modeling

Model Fit

The hypothesized structural model, in which psychological needs mediated the relationship between mental health and health-oriented leadership, was tested using structural equation modeling with maximum likelihood estimation. The model demonstrated good fit with the data across multiple indices (Table 3): $\chi^2/df = 2.30$, CFI = 0.92, TLI = 0.93, NFI = 0.94, IFI = 0.94, GFI = 0.92, AGFI = 0.91, PGFI = 0.76, and RMSEA = 0.069. All fit indices met or exceeded the established acceptance criteria, confirming that the proposed model adequately represented the relationships among the study variables.

Table 3
Goodness-of-fit indices for the structural model

Fit Index	Obtained Value	Acceptable Range	Result
χ^2/df	2.30	1–5	Good
CFI	0.92	≥ 0.90	Good
TLI	0.93	≥ 0.90	Good
NFI	0.94	≥ 0.90	Good
IFI	0.94	≥ 0.90	Good
GFI	0.92	≥ 0.90	Good
AGFI	0.91	≥ 0.90	Good
PGFI	0.76	≥ 0.70	Good
RMSEA	0.069	≤ 0.08	Good

Model Coefficients and Hypothesis Testing

Figure 1 presents the final structural model with standardized path coefficients and significance levels. The model explained 49% of the variance ($R^2=0.49$) in health-oriented leadership, indicating that mental health and psychological needs together accounted for approximately half of the variance in the dependent variable. The factor loadings for all observed variables exceeded the minimum threshold of 0.30, confirming adequate convergent validity.

Direct Effects

Hypothesis 1

(H1): Mental health directly affects health-oriented leadership. As shown in Table 4, mental health had a significant positive direct effect on health-oriented leadership ($\beta = 0.510$, $p < 0.001$). This indicates that higher levels of mental health were associated with higher levels of health-oriented leadership, supporting H1.

Hypothesis 2

(H2): Mental health directly affects psychological needs. Mental health significantly predicted psychological needs ($\beta = 0.197$, $p = 0.005$), indicating that participants with better mental health reported greater satisfaction of psychological needs. This supports H2.

Hypothesis 3

(H3): Psychological needs directly affect health-oriented leadership. Psychological needs had a significant positive direct effect on health-oriented leadership ($\beta = 0.567$, $p < 0.001$), indicating that greater satisfaction of psychological needs was associated with higher levels of health-oriented leadership. This supports H3.

Table 4
Direct effects among study variables

Path	β (Standardized)	B (Unstandardized)	SE	t-value	p-value	Result
Mental Health → Health-Oriented Leadership	0.510	0.146	0.029	5.08	< 0.001	Supported
Mental Health → Psychological Needs	0.197	0.045	0.016	2.82	0.005	Supported
Psychological Needs → Health-Oriented Leadership	0.567	0.712	0.143	4.99	< 0.001	Supported

Indirect Effect (Mediation)

Hypothesis 4

(H4): Mental health indirectly affects health-oriented leadership through psychological needs. The indirect effect was tested using bootstrapping with 5,000 resamples and bias-corrected 95% confidence intervals. As presented in Table 5, the indirect effect of mental health on health-oriented leadership through psychological needs was significant ($\beta = 0.112$, $p = 0.028$, 95% CI [0.016, 0.239]). Since the confidence interval did not include zero, the mediating role of psychological needs was confirmed. This supports H4, indicating that psychological needs partially mediated the relationship between mental health and health-oriented leadership.

Table 5
Indirect effect of mental health on health-oriented leadership through psychological needs

Indirect Path	β (Standardized)	SE	Lower Bound (95% CI)	Upper Bound (95% CI)	p-value
Mental Health → Psychological Needs → Health-Oriented Leadership	0.112	0.055	0.016	0.239	0.028

Discussion

As hypothesized, mental health had a significant positive direct effect on health-oriented leadership ($\beta = 0.510$, $p < 0.001$), indicating that leaders and employees with better mental health were more likely to adopt health-oriented leadership behaviors. This finding is consistent with previous research demonstrating that psychological well-being is a critical resource for effective leadership (Franke et al., 2014, Vonderlin et al., 2021). Leaders who experience higher levels of emotional, psychological, and social well-being are better equipped to manage their emotions, regulate stress, maintain positive interpersonal relationships, and make sound decisions—capacities that are essential for implementing health-promoting leadership behaviors (Klug et al., 2022, Weiler and Strudwick, 2026).

This result can be understood through multiple theoretical lenses. From the perspective of positive psychology, mental health encompasses not merely the absence of psychopathology but the presence of positive functioning, including positive emotions, engagement, meaningful relationships, and a sense of purpose (Seligman and Csikszentmihalyi, 2014). Leaders who experience these positive psychological states are more likely to extend support, empathy, and care to their employees, creating a work environment that prioritizes well-being (Bakker and Demerouti, 2017). The broaden-and-build theory of positive emotions suggests that positive emotions expand individuals' thought-action repertoires, building enduring personal resources such as resilience, social connections, and coping strategies (Fredrickson, 2004). Leaders with greater psychological resources are better able to invest in employee development, provide constructive feedback, and create a psychologically safe climate—all hallmarks of health-oriented leadership (Edmondson, 1999).

The significant relationship between mental health and health-oriented leadership also has practical implications. Organizations should recognize that investing in leaders' mental health is not merely a matter of individual well-being but a strategic imperative that can enhance leadership quality and, consequently, employee outcomes. Mental health promotion programs, including stress management workshops, mindfulness training, and access to counseling services, may serve as effective interventions for fostering health-oriented leadership.

The finding that mental health significantly predicted psychological needs ($\beta = 0.197$, $p = 0.005$) is consistent with self-determination theory (SDT) and previous empirical research (Ryan and Deci, 2000, Wang et al., 2025). Individuals with better mental health reported greater satisfaction of their basic psychological needs for autonomy, competence, and relatedness. This relationship can be explained by the fact that mental health encompasses positive functioning across multiple life domains, including the capacity for self-directed behavior, feelings of efficacy, and the ability to form and maintain meaningful relationships.

Individuals with higher levels of mental health typically experience greater autonomy in their lives, feeling that their actions are self-endorsed and volitional rather than coerced or controlled. They also tend to perceive themselves as competent and effective in their pursuits, and they are more likely to report satisfying social connections. These experiences directly correspond to the three basic psychological

needs articulated in SDT (Ryan and Deci, 2000). Conversely, mental health difficulties such as depression, anxiety, or burnout are associated with feelings of helplessness, incompetence, and social isolation—the antithesis of need satisfaction (Van den Broeck et al., 2008).

This finding aligns with previous studies conducted in various populations. For instance, Alizadeh et al. (Alizadeh et al., 2017) found that basic psychological needs mediated the relationship between personality traits and marital satisfaction through mental health in mothers of gifted girls. Similarly, Arabzadeh et al. reported significant relationships between basic psychological needs and psychological health in elderly populations. In organizational contexts, Hamzavi et al. (Hamzavi et al., 2023) demonstrated that health-oriented leadership influenced employees' mental health through the satisfaction of psychological needs. These converging findings suggest that the mental health-needs relationship is robust across different populations and settings.

The significant relationship between mental health and psychological needs also underscores the importance of addressing mental health as a foundation for need satisfaction. Interventions aimed at improving mental health may have cascading effects on employees' experience of autonomy, competence, and relatedness at work, which in turn can enhance motivation, engagement, and well-being (Gagné and Deci, 2005). Organizations should therefore consider mental health promotion as a pathway to fostering psychological need satisfaction among their workforce.

Psychological needs had the strongest direct effect on health-oriented leadership among all paths in the model ($\beta = 0.567$, $p < 0.001$), suggesting that satisfaction of basic psychological needs is a powerful predictor of health-oriented leadership. This finding is consistent with SDT's proposition that need satisfaction facilitates optimal functioning, intrinsic motivation, and prosocial behavior (Deci and Ryan, 2008). Leaders whose needs for autonomy, competence, and relatedness are met are more likely to adopt leadership behaviors that are supportive, empowering, and health-promoting.

The finding that psychological needs had a stronger effect on health-oriented leadership than mental health did ($\beta = 0.567$ vs. $\beta = 0.510$) suggests that the satisfaction of basic psychological needs may be a more proximal and specific determinant of leadership behavior, while mental health provides a broader foundation of psychological resources. This pattern is consistent with SDT's proposition that need satisfaction is the primary mechanism through which environmental and individual factors influence outcomes (Ryan and Deci, 2021). Leaders may have good mental health, but without the experience of autonomy, competence, and relatedness in their work, they may still struggle to adopt health-oriented leadership behaviors.

This finding extends previous research that has linked psychological needs to leadership outcomes. Domingues et al. (Domingues et al., 2024) found that basic psychological needs mediated the relationship between coach leadership style and athlete well-being in adapted sports contexts. Torres-Moya et al. (Torres-Moya et al., 2026) reported similar mediating effects in the relationship between transformational leadership and adolescent burnout. In organizational settings, Hayavie et al. (Hayavi et al., 2022) demonstrated that psychological needs mediated the relationship between transformational

leadership and psychological growth at work. The present study contributes to this literature by specifically examining psychological needs as a predictor of health-oriented leadership, a relatively new and understudied leadership construct.

The significant indirect effect of mental health on health-oriented leadership through psychological needs ($\beta = 0.112$, $p = 0.028$, 95% CI [0.016, 0.239]) confirmed the mediating role of psychological needs. This finding indicates that mental health influences health-oriented leadership not only directly but also indirectly by enhancing the satisfaction of basic psychological needs. While the magnitude of the indirect effect was modest, it was statistically significant and provides important insights into the mechanisms linking mental health to leadership behavior.

The mediation finding is consistent with the theoretical framework of the study, which posited that mental health provides the psychological resources necessary for need satisfaction, and need satisfaction, in turn, enables the adoption of health-promoting leadership behaviors. This cascading effect aligns with SDT's proposition that contextual and individual factors influence outcomes through their effects on basic psychological needs (Deci and Ryan, 2008). Leaders with better mental health are more likely to experience autonomy, competence, and relatedness in their work, and these experiences of need satisfaction facilitate their capacity to lead in a health-oriented manner.

The proposed structural model demonstrated good fit across multiple indices ($\chi^2/df = 2.30$, CFI = 0.92, TLI = 0.93, RMSEA = 0.069), confirming that the hypothesized relationships among the variables adequately represented the empirical data. The model explained 49% of the variance in health-oriented leadership, indicating that mental health and psychological needs together account for a substantial portion of the variability in this leadership style. This level of explained variance is notable, as it suggests that these two constructs are among the key determinants of health-oriented leadership.

The good model fit and substantial explained variance provide support for the theoretical framework underpinning this study. The integration of SDT (Deci and Ryan, 2008) with health-oriented leadership theory (Franke et al., 2014) appears to be a viable approach for understanding the antecedents of this leadership style. The findings suggest that health-oriented leadership is not merely a set of behaviors that can be learned or trained, but is also shaped by leaders' psychological resources and experiences of need satisfaction. This underscores the importance of attending to leaders' psychological well-being and need satisfaction as part of leadership development initiatives.

Implications for Theory and Practice

The findings contribute to the theoretical literature on health-oriented leadership by identifying mental health and psychological needs as important antecedents, whereas most prior research has focused on outcomes rather than predictors (Rigotti, 2014). The study also demonstrates the utility of Self-Determination Theory, showing that psychological needs mediate the relationship between mental health and leadership behaviors. Additionally, the finding that mental health exerts both direct and indirect effects on health-oriented leadership highlights the existence of multiple pathways, underscoring the

need for theoretical models that capture this complexity. Practically, organizations should invest in mental health promotion programs for leaders and employees, create conditions that support autonomy, competence, and relatedness, and integrate both mental health and need-satisfaction components into leadership development programs. Organizations may also consider mental health and need satisfaction in leadership selection decisions. Finally, policymakers should prioritize health-oriented leadership as a strategic objective and foster organizational cultures that enable need satisfaction.

Limitations and Future Research

Several limitations should be acknowledged. First, the cross-sectional design precludes causal inferences, and future research should employ longitudinal designs to establish temporal precedence. Second, reliance on self-report measures may introduce common method and social desirability biases, and future studies should incorporate multiple data sources such as subordinate ratings or objective indicators. Third, the sample was drawn from a single medical sciences university in Iran, limiting generalizability; future research should test the model in diverse organizational and cultural contexts. Fourth, the study examined only one mediator and one outcome; future research could explore additional mediators such as emotional intelligence, self-efficacy, or resilience, as well as moderators like organizational culture or job resources. Fifth, the study used a self-report measure of positive mental health rather than clinical diagnostic interviews; future research could incorporate both positive and negative indicators of psychological functioning. Despite these limitations, the study makes valuable contributions by demonstrating the mediating role of psychological needs and providing evidence from a previously understudied cultural context.

Conclusion

This study investigated the mediating role of basic psychological needs in the relationship between mental health and health-oriented leadership among managers and employees of a medical sciences university in Iran. Findings indicated that mental health and psychological needs significantly predict health-oriented leadership, with psychological needs partially mediating this relationship. The model demonstrated good fit and explained 49% of the variance in health-oriented leadership. These results contribute to the theoretical understanding of health-oriented leadership by elucidating the psychological mechanisms through which leaders' mental health translates into health-promoting behaviors. Practically, investing in leaders' mental health, creating conditions that support basic psychological needs, and incorporating both components into leadership development programs may enhance health-oriented leadership. Future research should employ longitudinal designs, diverse samples, and multiple assessment methods to validate and extend these findings.

Declarations

Ethics approval and consent to participate

This study was conducted in accordance with the Declaration of Helsinki and approved by the Institutional Review Board of Islamic Azad University, Arak Branch (Ethics Code: IR.IAU.ARAK.REC.1404.245). All participants were provided with detailed information about the study objectives, the voluntary nature of participation, confidentiality assurances, and their rights as research participants. Written informed consent was obtained from all participants prior to data collection. Participants were informed that they could withdraw from the study at any time without any consequences.

Consent for publication

Not applicable. This manuscript does not contain any individual person's data in any form (including individual details, images, or videos).

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Author Contribution

S.A. and B.P. conceived and designed the study. S.A. supervised the research project. A.J. conducted the investigation, performed data collection, and curated the data. A.J. performed the formal analysis and statistical modeling. A.J. prepared the initial draft of the manuscript and created the figures and tables. B.P. and S.A. critically reviewed and edited the manuscript for important intellectual content. B.P. validated the methodology and analysis. S.A. managed project administration and coordination. All authors read, reviewed, and approved the final manuscript.

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Data Availability

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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Figures

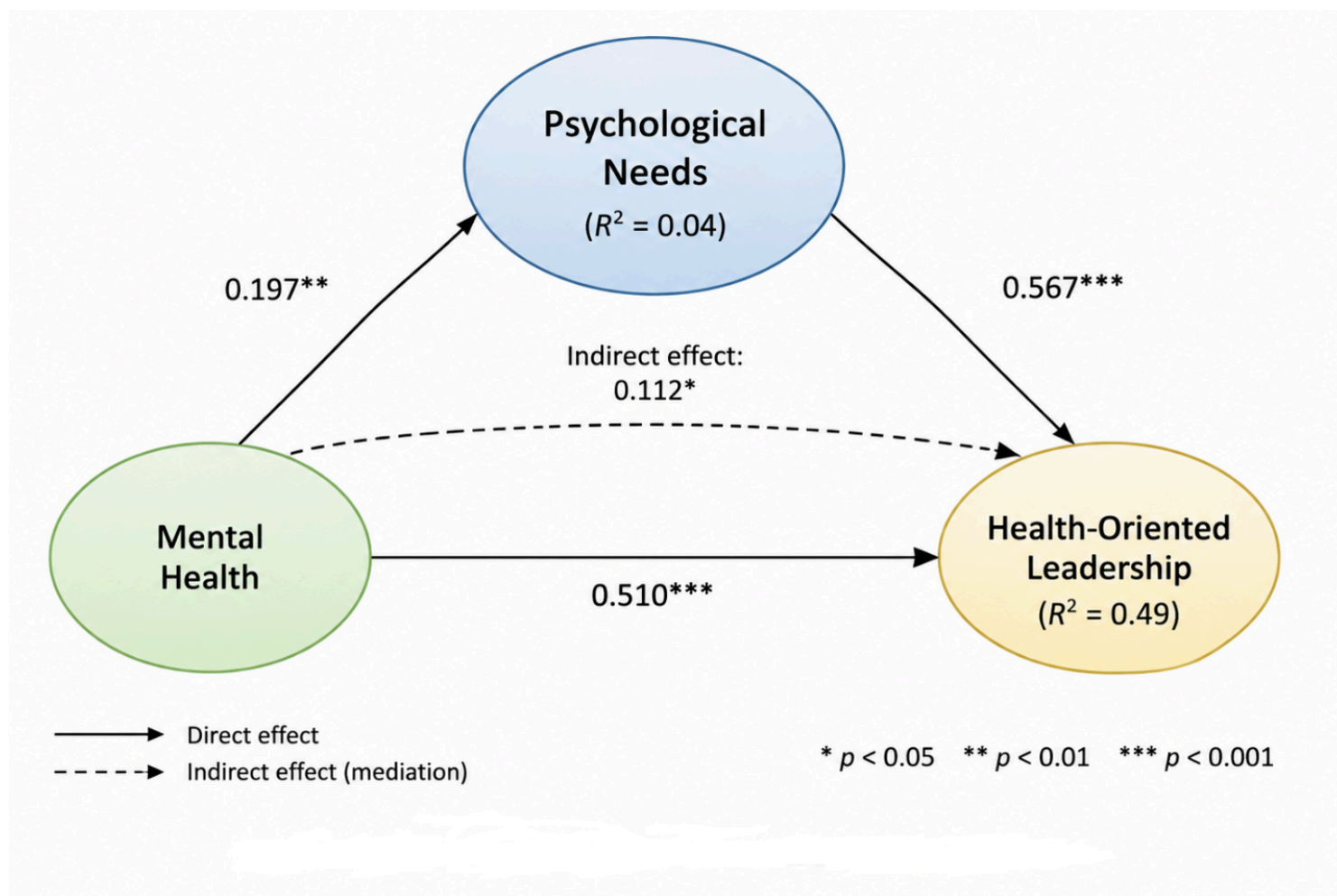


Figure 1

Final structural model with standardized path coefficients

*Note: Standardized path coefficients are reported. *** $p < 0.001$, ** $p < 0.01$. R^2 values are shown above the endogenous variables. The dashed line represents the indirect effect.*