

Original Article

Comparison of leadership orientations, self-leadership, and entrepreneurship characteristics according to the job workplace settings of occupational therapists: a proposed of a leadership framework

Comparação de orientações de liderança, autoliderança e características empreendedoras segundo o local de trabalho de terapeutas ocupacionais: um modelo proposto de liderança

Basak Cagla Arslan^a , Suzan Kaya Evsen^b , Gokcen Akyurek^b 

^aLokman Hekim University, Ankara, Turkey.

^bHacettepe University, Ankara, Turkey.

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Abstract

Introduction: Occupational therapists exhibit different leadership orientations, possess self-leadership skills, and show entrepreneurial traits while working in various workplace settings such as having their own practice, working in the private sector, providing services in public hospitals, or assuming academic positions. **Objective:** The aim of this study is to conduct a comparative analysis of leadership orientations, self-leadership and entrepreneurial traits of occupational therapists working in Turkey, focusing on their workplace settings. **Method:** The present study encompassed a sample of 109 occupational therapists, who were classified into four distinct occupational categories: business/entrepreneurs, clinicians in the private sector, clinicians in public hospitals, and academicians. The participants completed several assessment instruments, including the demographic information form, the Leadership Orientations Scale, the Self-Leadership Scale, and the Entrepreneurial Personality Characteristics Scale. **Results:** Private sector clinicians scored higher in political-transformational leadership orientation, while business/entrepreneurs scored higher in structural leadership orientation. Business/entrepreneurs and private sector clinicians scored higher in people-oriented and symbolic-charismatic leadership orientation than public hospital and academicians. In self-leadership traits, private sector clinicians scored higher in natural reward strategies and constructive

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thinking model strategies than public hospital clinicians. Business/entrepreneurs had higher risk-taking tendency, locus of control and self-confidence. **Conclusion:** Occupational therapists in various situations exhibit unique leadership, self-leadership, and entrepreneurial traits. The study provides practical implications for the practitioners and organizations by examining the impact of various job settings on leadership and self-leadership through a complete framework for occupational therapy candidates. This serves as a guide for OTs to actively explore leadership qualities and choose appropriate workplace settings.

Keywords: Entrepreneurship, Leadership, Occupational Therapy.

Resumo

Introdução: Terapeutas ocupacionais apresentam diferentes orientações de liderança, habilidades de autoliderança e traços empreendedores, conforme seus ambientes de trabalho, tais como prática em setor privado, hospitais públicos ou cargos acadêmicos. **Objetivo:** Este estudo tem como objetivo realizar uma análise comparativa das orientações de liderança, habilidades de autoliderança e características empreendedoras de terapeutas ocupacionais na Turquia, com foco em seus contextos laborais. **Método:** A pesquisa incluiu 109 terapeutas ocupacionais, classificados em quatro categorias ocupacionais: empreendedores, clínicos no setor privado, clínicos em hospitais públicos e acadêmicos. Os participantes completaram instrumentos de avaliação, incluindo um formulário demográfico, a Escala de Orientações de Liderança, a Escala de Autoliderança e a Escala de Características de Personalidade Empreendedora. **Resultados:** Clínicos do setor privado obtiveram maiores pontuações em liderança político-transformacional, enquanto empreendedores se destacaram em liderança estrutural. Ambos os grupos apresentaram melhores resultados em liderança orientada a pessoas e liderança simbólica-carismática em comparação com clínicos de hospitais públicos e acadêmicos. Em autoliderança, clínicos do setor privado pontuaram melhor em estratégias de recompensa natural e pensamento construtivo. Empreendedores destacaram-se em propensão ao risco, lócus de controle e autoconfiança. **Conclusão:** Terapeutas ocupacionais em diferentes ambientes laborais demonstram traços únicos de liderança, autoliderança e empreendedorismo. Este modelo fornece implicações práticas para profissionais e organizações, servindo como guia para futuros terapeutas ocupacionais explorarem qualidades de liderança e opções de trabalho.

Palavras-chave: Empreendedorismo, Liderança, Terapia Ocupacional.

Introduction

Occupational therapists possess the ability to shape the trajectory of their workplace settings, guide healthcare professionals, and make substantial contributions in addressing pressing healthcare service demands. They prioritize the promotion of health and well-being, as well as the efficient utilization of human resources and material assets, in the treatment of individuals (Reitz et al., 2020). Occupational therapists are prone to displaying unique leadership orientations, self-leadership abilities, and entrepreneurship characteristics as they navigate various work environments, including but not limited to

owning their own practice, working in the private sector, serving in state hospitals, or assuming academic roles (Abaoglu, 2021; Bissett et al., 2021; Freitas Moia et al., 2022; Gibson, 2020; Hitch et al., 2020).

Within the domain of occupational therapy practice, leadership orientations are of utmost significance as occupational therapists often take on leadership positions within their teams, advocating for the fundamental significance of occupation in enhancing health and well-being (Stewart, 2007; Townsend et al., 2011). Practitioners endeavor to promote consciousness of the positive benefits of engaging in meaningful work and the adverse outcomes associated with destructive employment, therefore exerting an influence on the direction and focus of their workplace settings activities (Townsend et al., 2011). By assuming leadership positions, occupational therapists have the opportunity to advocate for human and occupational rights at both local and global levels (Gibson, 2020; Pereira, 2017). Bolman & Deal's (1991) Multi-Framework Leadership Model provides four frameworks for understanding leadership behaviors: structural, people-oriented, political-transformational, and symbolic-charismatic. This model suggests that leadership roles are influenced not only by individual characteristics but also by the dynamics of the work environment. Structural leadership emphasizes systematic and strategic approaches to achieving goals, while people-centered leadership focuses on interpersonal relationships and team motivation. Political-transformational leadership addresses power dynamics, negotiation and organizational change, while symbolic-charismatic leadership emphasizes visionary and inspirational characteristics (Bolman & Deal, 1991). This study adapts these categories to assess occupational therapists' leadership orientations and examine their leadership behaviors in different work settings. It provides valuable insights to understand how occupational therapists' leadership styles in various roles such as treatment planning, team management, resource optimization, and professional advocacy differ in work settings such as private sector, public hospitals, entrepreneurship, and academia (Gibson, 2020; Rutschke & Fick, 2024).

Self-leadership is a process that denotes an individual's capacity to regulate their own behaviors, thoughts, and motives. This notion allows individuals to enhance their performance via tactics including goal planning, cultivating optimistic thinking, and identifying intrinsic incentives (Houghton & Neck, 2002). Souba's (2011) research highlights that leadership is a phenomenological concept centered on the individual's internal processes, elucidating the essential importance of self-management in leadership. For healthcare professionals, self-leadership enhances the management of intrinsic motivation, a crucial attribute that amplifies the ability to devise innovative and adaptable solutions to intricate challenges in the workplace, hence fostering improved performance (Souba, 2011, 2014).

In addition, self-leadership is a significant characteristic that plays a crucial role in the occupational therapy workplace settings. Occupational therapists who possess self-leadership skills are more inclined to demonstrate proactive, adaptable, and resilient behaviors in their practice. These individuals take personal ownership of their responsibilities and display a strong sense of duty towards their commitments. This enables them to effectively manage their time, prioritize tasks, and make informed decisions in their daily workplace settings activities (Abaoglu, 2021). These qualities are enhanced by the presence of entrepreneurial attributes, which are highly valuable in occupational therapists (Bissett et al., 2021). Occupational therapists with

entrepreneurial traits are more likely to embrace change, think creatively, and develop new approaches to meet the changing needs of their clients and organizations. They may explore innovative service delivery models, create inventive interventions, or establish independent practices to increase the availability of occupational therapy services (Anderson & Nelson, 2011; Freitas Moia et al., 2022; Townsend et al., 2011).

Since 2014, occupational therapy departments in Turkey have been conferring degrees to students, enabling them to pursue various career paths such as establishing their own consultancy centers, working in the private sector, being appointed to state hospitals, or pursuing academic positions (Abaoglu, 2021). To the best of our current understanding, there is a lack of research examining the leadership orientations, self-leadership, and entrepreneurial traits of occupational therapists employed in Turkey, as well as a dearth of studies comparing these attributes with their specific job circumstances. Through a comparative analysis of leadership orientations, self-leadership, and entrepreneurship traits within several job contexts, a holistic comprehension of the dynamics, strengths, and areas requiring enhancement within the workplace setting may be attained.

This study is designed to identify and compare the leadership orientations, self-leadership, and entrepreneurial skills of occupational therapists in various workplace settings. Therefore, answers to the following research questions were sought: What are the leadership orientations, self-leadership and entrepreneurial skills of occupational therapists working in Turkey? How do leadership orientations based on Bolman and Deal's Multi-frame Leadership Model, self-leadership, and entrepreneurial skills of occupational therapists differ according to their workplace settings? By highlighting the differences between work environments, this research aims to guide newly graduated occupational therapists in choosing a workplace that is compatible with their leadership and entrepreneurial skills, thus facilitating informed career choices and increasing professional satisfaction. This approach aims not only to categorize but also to explain the differences in professional qualities in different work settings, providing a basis for occupational therapists to use their skills effectively throughout their career journey.

Methods

This cross-sectional, descriptive and group comparative study was planned between October 2022 and February 2023.

Participants

The study extended invitations to occupational therapists who were registered members of the Turkish Occupational Therapy Association. According to personal correspondence, it has been ascertained that around 231 individuals who are registered with the Turkish Occupational Therapy Association hold various workplace settings, including business/entrepreneurs (BE), clinicians in the private sector (CPS), clinicians in public hospitals (CPH), and academicians. The necessary sample size for inclusion in the study was determined to be 24 samples per group, resulting in a total of 96 samples. This calculation was based on the objective of detecting a statistically significant difference among the four groups, with measurements at an effect size of 0.40, a power of 90%, and an error level of $\alpha = 0.05$. The researchers utilized electronic mail to send

invitations, while self-administered questionnaires were disseminated to people who willingly accepted to partake in the study.

The study was conducted in accordance with the ethical guidelines of the World Medical Association (Declaration of Helsinki) and the study was received approval from the Hacettepe University Ethics Committee before its commencement (File Number: 251-6891) in 2022. Written informed consent and permission were obtained from the participants and the original authors of the scales. Informed consent was obtained after all participants were given both verbal and written information about the study, guaranteeing a thorough understanding of their rights, including the right to withdraw from the study at any time without repercussions.

Measurement

The researchers designed a Demographic Information Form to gather data pertaining to various demographic characteristics of occupational therapists, including age, gender, marital status, education level, years of experience, workplace settings, income status, and employment type.

Due to the low number of occupational therapists working in Turkey and the fact that most of these occupational therapists work independently or are often the only occupational therapist in their workplace (Ercan Doğu et al., 2023), peer assessment could not be conducted in this study. Instead, the following assessment scales, which have Turkish validity and reliability, were used in this study to enable occupational therapists to self-assess themselves.

This study employed the Leadership Orientations Scale (Bolman & Deal, 1991) to evaluate the leadership orientations of occupational therapists. The scale comprises 32 items and encompasses four sub-dimensions: structural, people-oriented, political-transformational, and symbolic-charismatic leadership. It was translated into Turkish, and a reliability study was performed by Dereli (2003). The Cronbach's alpha values for the sub-dimensions range from 0.84 to 0.88.

The Self-Leadership Scale (Houghton & Neck, 2002) was utilized to assess self-leadership traits. The scale comprises three primary components and nine sub-dimensions, with the Turkish validity and reliability assessment completed by Tabak et al. (2013). The internal consistency coefficients for the sub-dimensions ranged from 0.64 to 0.87.

The Entrepreneurial Personality Traits Scale (Bozkurt, 2006; Koh, 1996) was utilized to evaluate entrepreneurial characteristics. The scale comprises five sub-dimensions and 36 elements. The reliability analysis indicates that the Cronbach's alpha values for the sub-dimensions range from 0.512 to 0.851. The measures of risk-taking tendency and uncertainty tolerance shown good reliability levels (Salik & Kaygın, 2016).

Detailed overview of the measurement scales used in the study is shown in Table 1.

Procedure

Demographic Information Form, The Leadership Orientations Scale, The Self-Leadership Scale, and The Entrepreneurial Personality Traits Scale were applied to the participants via Google Forms.

Table 1. Detailed Overview of the Measurement Scales: Sources, Subscales, Items, and Scoring Systems.

Scale Name	Source	Subscales (Subscale Items)	Total Items	Scoring
Leadership Orientations Scale	Bolman & Deal (1991)	Structural: 1, 5, 9, 13, 17, 21, 25, 29	32	1 (Never) - 5 (Always)
		Human Resource: 2, 6, 10, 14, 18, 22, 26, 30		
		Political-Transformational: 3, 7, 11, 15, 19, 23, 27, 31		
		Symbolic-Charismatic: 4, 8, 12, 16, 20, 24, 28, 32		
Self-Leadership Scale	Houghton & Neck (2002)	Behavior-Focused Strategies, Natural Reward Strategies, Constructive Thought Pattern Strategies	35	1 (Never) - 5 (Always)
Entrepreneurial Personality Traits Scale	Koh (1996)	Risk-Taking: Items 1-7	36	1 (Strongly Disagree) - 5 (Strongly Agree)
		Innovativeness: Items 8-10		
		Need for Achievement: Items 11-19		
		Focus of Control: Items 20-27		
		Uncertainty Tolerance: Items 28-36		

Statistical analysis

Statistical analyses were performed using the Statistical Package for the Social Sciences software (SPSS Inc., Chicago, Illinois) version 23.0. Descriptive statistics, such as frequency distribution (count, percentage) for categorical variables and descriptive statistics (mean, standard deviation, minimum, maximum) for numerical variables, were provided when evaluating the study data. Independent samples t-test was employed to examine the differences between two groups, while one-way analysis of variance (ANOVA) was used for comparisons among more than two groups. After conducting the one-way ANOVA, the Levene test was applied to assess the homogeneity of variances, and subsequently, the “multiple comparison test” (Bonferroni or Tamhane’s T2) was used to determine the specific group or groups responsible for the observed differences. The Bonferroni test was used for between-group comparisons when variance homogeneity was achieved, while the Tamhane’s T2 test was employed when variance homogeneity was not ensured. A significance level of $p < 0.05$ was considered statistically significant.

Results

One hundred-nine occupational therapists with a mean age of 26.16 ± 2.37 participated in this study, being female and 19 (17.4%) being male. The demographic characteristics of the participating occupational therapists are presented in Table 2.

There is a significant difference among the dimensions of structural, human-related, political, transformative, and symbolic charisma in terms of scores ($p < 0.05$). Business/entrepreneur occupational therapists have a significantly higher score in the structural dimension compared to occupational therapists in the public hospital or academic occupational therapists ($p = 0.005$). The human-related dimension score is significantly higher for business/entrepreneur occupational therapists and occupational therapists in the private sector compared to occupational therapists in the public hospital or academics ($p = 0.003$).

Table 2. The demographic characteristics of the Turkish occupational therapists (N=109).

		M ± SD (Min-Max)
Age (years)		26.16 ± 2.37 (22-31)
		n (%)
Gender	Female	90 (82.6)
	Male	19 (17.4)
Marital status	Single	78 (71.6)
	Married	31 (28.4)
Education status	Bachelor's degree	49 (45)
	Graduate student	24 (22)
	Master's degree	13 (11.9)
	PhD student	19 (17.4)
	PhD graduate	4 (3.7)
Graduate time	0-11 months	16 (14.7)
	1-2 years	29 (26.6)
	3-4 years	29 (26.6)
	5-6 years	20 (18.3)
	7 years and above	15 (13.8)
Income status (Turkish Liras)	0-5500	3 (2.8)
	5500-10000	19 (17.4)
	10001-15000	58 (53.2)
	15001-20000	13 (11.9)
	20001-30000	9 (8.3)
	30001-40000	4 (3.7)
	40001 and above	3 (2.8)
Job situations	Business/entrepreneur	24 (22)
	Occupational therapist – private sector	35 (32.1)
	Occupational therapist – public hospital	26 (23.9)
	Academician	24 (22)

N, n: number of people, M: mean, SD: standard deviation, Min: Minimum, Max: Maximum, %: percentage.

The political transformative dimension score is significantly higher for individuals working in the private sector compared to occupational therapists in the public hospital and academics ($p < 0.001$). The symbolic charismatic dimension score is significantly higher for business/entrepreneurs and occupational therapists in the private sector compared to occupational therapists in the public hospital ($p = 0.023$).

Regarding the sub-dimension scores of self-leadership skills, academicians have significantly higher scores in behavior-focused strategies compared to occupational therapists in the public hospital ($p = 0.047$). occupational therapists in the private sector have significantly higher scores in natural reward strategies ($p = 0.021$) and constructive thought pattern strategies ($p = 0.047$) compared to occupational therapists in the public hospital.

There is a significant difference among the work arrangements in terms of the sub-dimension scores of achievement need, risk-taking propensity, locus of control, innovativeness, and self-confidence ($p < 0.05$). Occupational therapists in the private sector have a significantly higher score in risk-taking propensity compared to

occupational therapists in the public hospital ($p = 0.019$). Business/entrepreneur occupational therapists have significantly higher scores in achievement need ($p = 0.021$) and locus of control ($p = 0.013$) sub-dimensions compared to occupational therapists in the public hospital. Occupational therapists in the public hospital have a significantly higher score in the innovativeness sub-dimension compared to business/entrepreneur occupational therapists and academics ($p < 0.001$). Business/entrepreneur occupational therapists have a significantly higher score in self-confidence sub-dimension compared to others ($p < 0.001$) (Table 3).

Table 3. Comparison of leadership, self-leadership, and entrepreneurship characteristics according to the job situations of occupational therapists.

Leadership Orientations	Business/Entrepreneurs (n=24) M \pm SD	Occupational therapists - private sector (n=35) M \pm SD	Occupational therapists - public hospital (n=26) M \pm SD	Academician (n=24) M \pm SD	F/p
Structural	34.08 \pm 2.84a	33.49 \pm 3.68	31.31 \pm 3.34b	31.25 \pm 4.01b	4.519/0.005*
Human resource	36.17 \pm 2.82a	35.63 \pm 3.12a	33.42 \pm 2.79b	33.71 \pm 3.78b	4.954/0.003*
Political-transformational	31.46 \pm 3.30	32.31 \pm 4.25a	27.58 \pm 4.56b	29.25 \pm 4.08b	7.787/0.000*
Symbolic-charismatic	32.33 \pm 3.42 a	32.00 \pm 4.5a	28.81 \pm 5.39b	30.17 \pm 5.21	3.308/0.023*
Self-leadership					
Behavior-focused	48.58 \pm 5.34	50.11 \pm 6.67	46.38 \pm 6.42b	50.75 \pm 5.21 a	2.736/0.047*
Natural reward	8.63 \pm 1.31	8.80 \pm 1.16 a	7.88 \pm 1.11b	8.17 \pm 1.31	3.388/0.021*
Constructive thought pattern	58.33 \pm 7.82	58.43 \pm 7.56a	53.54 \pm 6.98b	55.96 \pm 6.84	2.738/0.047*
Entrepreneur					
Uncertainty tolerance	35.71 \pm 3.04	34.77 \pm 4.95	33.50 \pm 3.05	35.29 \pm 2.37	1.728/0.166
Need for achievement	25.79 \pm 2.28	26.00 \pm 3.20a	24.15 \pm 1.57b	24.75 \pm 2.38	3.392/0.021*
Risk-taking	25.96 \pm 2.85a	23.77 \pm 4.68	23.12 \pm 2.20b	23.92 \pm 1.89	3.476/0.019*
Focus of control	13.88 \pm 2.05a	13.49 \pm 1.54	12.62 \pm 1.36b	13.96 \pm 1.40	3.736/0.013*
Innovativeness	9.92 \pm 1.06b	10.14 \pm 1.46	10.92 \pm 1.02a	9.46 \pm 0.88b	6.974/0.000*
Self-confidence	15.75 \pm 1.78a	11.60 \pm 1.80	13.15 \pm 1.41b	13.75 \pm 1.39b	31.646/0.000*

Independent sample t test, ANOVA test*, n: number of people, M: mean, SD: standard deviation, a,b: shows mean differences between groups (a: highest average), F: One-way ANOVA test, *: $p < 0.05$.

Discussion

Our study was conducted to compare leadership orientations, self-leadership, and entrepreneurial characteristics of occupational therapists in Turkey based on their workplace settings. According to the findings, structural leadership characteristics were more prominent among BEs, while human-related leadership and symbolic-charismatic leadership characteristics were more evident among business/entrepreneur occupational therapists and occupational therapists in the private sectors. Furthermore, political-transformative leadership characteristics were more pronounced among occupational

therapists in the private sectors. In terms of self-leadership characteristics of the participating occupational therapists, behavior-focused strategies were more commonly used by academics, whereas natural reward strategies and constructive thought pattern strategies were more prevalent among occupational therapists in the private sectors. When examining entrepreneurial characteristics based on the job situations of occupational therapists, it was found that occupational therapists in the private sectors had higher levels of achievement needed compared to occupational therapist in the public hospitals, while risk-taking propensity and locus of control characteristics were more prominent among business/entrepreneur occupational therapists compared to occupational therapist in the public hospitals. Additionally, self-confidence characteristics were higher among business/entrepreneur occupational therapists compared to academics and occupational therapists in the private sectors, and occupational therapist in the public hospitals exhibited higher levels of innovativeness compared to business/entrepreneur occupational therapists.

Occupational therapists who are entrepreneurial in the business world score high on structural leadership traits, enabling these groups to manage their own practices by using their strategic skills effectively. These findings are in line with the entrepreneurial skills, strategic planning, and legal compliance requirements necessary to open one's own practice as outlined by Steel et al. (2017). These therapists increase their strategic influence in more autonomous and flexible working environments (Steel et al., 2017).

The enhanced humanistic and symbolic charisma observed among business/entrepreneurial and occupational therapists in the private sector indicates that interpersonal and representational skills are fostered in private practice settings where client relationships and market positioning are critical. The insights on the importance of adopting a profession-focused approach covered by Fisher (2014) emphasize these variations and how they affect occupational therapists' professional identities.

High political transformative charisma scores among private sector therapists signal the need to effectively manage the dynamic and market-driven aspects of healthcare. The study by Hitch et al. (2020) suggests that organizational culture has a significant impact on the development of effective leadership styles in health ecosystems, suggesting that leadership perceptions may be influenced by service setting rather than career stage.

The widespread use of behavior-focused strategies among academics reflects an environment focused on structured research and educational outcomes. The emphasis of the academic environment on detailed planning and disciplined execution discussed by Tomori et al. (2012) supports this finding. Private sector therapists' tendency toward natural reward strategies and constructive thought model strategies may stem from the need to maintain a positive outlook and motivation in competitive work environments, underscoring the influence of work environments on skill development discussed by Hui et al. (2022).

Our study found that occupational therapist in the private sector had higher levels of need for achievement than occupational therapists working in public hospital and that risk-taking tendency and locus of control traits were more pronounced among business/entrepreneurs. Moreover, business/entrepreneurs had higher levels of self-confidence compared to other groups, while occupational therapists working in public hospital had higher levels of innovativeness. This may be explained by the fact that they are usually newly employed in public hospitals and have more opportunities to

collaborate with other health professionals working in these hospitals and participate in innovative practices (Ercan Doğu et al., 2023; Ned et al., 2020).

This study shows that various work environments have a significant impact on leadership, self-leadership and entrepreneurial traits of occupational therapists. Our argument posits that individuals make choices regarding employment based on their personal traits and leadership orientations that align with their values. The present study offers a comprehensive framework that enables occupational therapy candidates to actively examine their leadership attributes and make informed choices on suitable workplace settings.

Occupational therapists exhibit inherent entrepreneurial capabilities, necessitating the implementation of strategies such as social assistance to effectively harness their entrepreneurial potential within their workplace settings. To effectively implement these techniques, it is crucial to consider the provision of support for occupational therapists by their families and colleagues. In addition, the practice of entrepreneurship plays a crucial role in facilitating career advancement within the occupational therapy field and contributes to therapists' ability to effectively address the changing demands of their clientele. Consequently, it is imperative to embrace entrepreneurship to ensure the future competitiveness of the occupational therapy workplace settings (Bissett et al., 2021). Hence, there is a need to promote the cultivation of entrepreneurial attributes among occupational therapists as well.

The results of this study endorse the applicability of Bolman and Deal's Multi-Framework Leadership Model to the field of occupational therapy. People-oriented leadership qualities are essential in the relationships between occupational therapists, patients, and team members (Brown et al., 2014). Occupational therapists in the commercial sector demonstrated political-transformational leadership traits more often, aligning with the dynamic and competitive characteristics of this sector (Ashby et al., 2012). The structural leadership framework highlights the strategic planning and resource management competencies of entrepreneurial occupational therapists (Rutschke & Fick, 2024). The relevance of each leadership framework in various work environments may enhance occupational therapists' abilities to perform their professional duties more efficiently (Ashby et al., 2012; Lecours & Therriault, 2018; Rutschke & Fick, 2024). The implementation of the model in occupational therapy could facilitate a more holistic approach to leadership training within professional development programs (Brown et al., 2014). Focusing on people-oriented and symbolic-charismatic leadership qualities may enhance occupational therapists' ability to elevate patient satisfaction and embody professional principles (Brown et al., 2014). This approach can provide direction to graduate occupational therapists in cultivating their leadership qualities throughout career planning (Ashby et al., 2012; Brown et al., 2014; Lachter & Ruland, 2018; Rutschke & Fick, 2024).

This study has several important features that enhance the existing literature on leadership, self-leadership, and entrepreneurship in relation to occupational therapists' work contexts. The comprehensive inclusion of all domains within a specific cohort of workplace settings in the study design provides important insights. The study provides practical implications for practitioners and organizations by examining the impact of various work environments on leadership and self-leadership and entrepreneurship. This study contributes to the existing literature by providing insights into the leadership and

entrepreneurial traits exhibited by occupational therapists as well as their relationship with work conditions. Although our findings suggest that workplace settings have a significant influence on leadership qualities among occupational therapists, we emphasize that these results should not be interpreted as cause-and-effect relationships. Further longitudinal studies are needed to establish causalities. Further research is recommended to examine the impact of workplace setting and other factors on leadership, self-leadership, and entrepreneurial qualities in occupational therapists.

The majority of occupational therapists in Turkey prefer to work in the private sector. One of the main reasons for this is that opening one's own consulting center requires high costs and is not easy for everyone. The private sector often offers occupational therapists a more dynamic and changing working environment, forcing them to constantly face and adapt to new situations. This contributes to reinforcing critical skills such as leadership, self-leadership and entrepreneurship. In addition, the obligation to take certain exams required to pursue an academic career and the competition in this field also contribute to occupational therapists' preference for the private sector. Since the Public Personnel Selection Examination (KPSS) is required to work in the public sector and the government has a limited number of vacancies each year, many occupational therapists prefer to work in the private sector on a salaried basis in order to earn a stable income and take advantage of more job opportunities. This situation makes it imperative for occupational therapists to consider economic factors and job opportunities in their career choices, while at the same time providing an environment that allows them to develop their professional skills.

Limitations and future directions

Our research was subject to several limitations. Initially, the investigation of gender differences was hindered due to the predominantly female composition of the participating occupational therapists in the study. One further drawback that should be acknowledged is the relatively small sample size. One potential limitation of this study is to the restricted sample selection, as only occupational therapists who are affiliated with the Turkish Occupational Therapy Association were invited to partake. In subsequent investigations, it is recommended that assessments be carried out with a more equitable gender distribution and a more extensive cohort of occupational therapists. Furthermore, due to the low number of studies on leadership, self-leadership and entrepreneurial skills of occupational therapists, we had to discuss the results of this study with studies involving other professional groups. The model's limitations must also be acknowledged. Bolman and Deal's paradigm may not entirely capture the complexities unique to occupational therapy. For instance, the impact of cultural influences on leadership and the dynamics of leadership across diverse teams necessitate additional investigation.

According to the aim of our study, we chose self-assessment tools because of their efficiency and accessibility. However, we acknowledge the limitations of self-report measures, such as potential biases, and discuss the rationale for their use over alternative methods such as peer review. In addition, one of the reasons for the lack of peer assessment in this study can be explained by the small number of occupational therapists in Turkey and the fact that most of them work as the only occupational therapist in

their workplace. Although our findings suggest that workplace environments have a significant relationship on leadership qualities among occupational therapists, we emphasize that these results should not be interpreted as cause of the relationships. Further longitudinal studies are needed to establish causalities.

Conclusion

This study reveals the leadership orientations, self-leadership and entrepreneurial characteristics of occupational therapists in Turkey according to their work environments. The findings suggest that occupational therapists working in different work environments adapt their leadership and entrepreneurial traits according to the professional demands of that environment, making their leadership orientations more specific. This study presents a complete leadership framework grounded in Bolman and Deal's Multi-Frame Leadership Model, offering significant insights into the utilization of leadership and entrepreneurial talents for professional advancement and workplace satisfaction. This research provides practical guidance for occupational therapists to connect their career decisions with their leadership styles, so enhancing the field of occupational therapy. Future study should investigate longitudinal studies to elucidate causal linkages and incorporate broader samples to enhance the generalizability of the findings.

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Author's Contributions

Basak Cagla Arslan conceived and designed the study, contributed data and analysis tools. Basak Cagla Arslan and Suzan Kaya Evsen collected the data and performed the analysis. Basak Cagla Arslan and Suzan Kaya Evsen wrote the manuscript. Gokcen Akyurek contributed the research design, analysis tools, and reviewed the paper. All authors reviewed and edited the manuscript and approved the final version of the manuscript.

Data Availability

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

Corresponding author

Basak Cagla Arslan
e-mail: ptbasakc@gmail.com

Section editor

Prof. Dr. Daniel Marinho Cezar da Cruz