Management Strategies and Engineering Sciences 2024; 6(2):173-185

Designing a Model of Professional Ethics for Managers in Small and Medium Enterprises

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Received: 2024-06-13 **Reviewed:** 2024-06-29 **Revised:** 2024-07-27 **Accepted:** 2024-08-28 **Published:** 2024-09-10

Abstract

This study aims to design and validate a comprehensive model of professional ethics for managers in small and medium enterprises (SMEs) in Tehran. The research explores how professional ethics influence various organizational dimensions, including structural, contextual, environmental, and individual factors, to enhance organizational performance and leadership effectiveness. The study employed a quantitative research design using the Delphi method to gather expert opinions and refine the model through three iterative rounds. The sample included 380 active managers from SMEs in Tehran, selected through stratified random sampling based on Krejcie and Morgan's table. Data were collected using a validated Likert-scale questionnaire developed from expert insights and tested for reliability and validity using Cronbach's alpha, Spearman correlation, and composite reliability. Structural equation modeling (SEM) and confirmatory factor analysis (CFA) were conducted using SPSS version 25 and PLS version 3 to evaluate the model's fit and significance. The results demonstrated that professional ethics significantly influence all examined organizational dimensions. The model exhibited strong predictive power, with adjusted R^2 values of 0.794 and a Goodness of Fit (Gof) index of 0.59, indicating very strong model quality. Path coefficients showed that ethics had substantial impacts on organizational factors (0.877), environmental factors (0.938), contextual factors (0.948), structural factors (0.946), and individual factors (0.955), with all relationships being statistically significant. These findings align with existing literature, emphasizing the crucial role of ethics in enhancing organizational stability, trust, and performance. The study highlights the pivotal role of professional ethics in shaping organizational behavior and performance in SMEs. The validated model underscores the importance of embedding ethical practices in leadership and organizational culture to achieve sustainable success. Future research should explore the model's applicability across different cultural contexts and industries and examine the long-term effects of ethical behavior.

Keywords: *Professional ethics, small and medium enterprises, organizational performance, leadership*.

How to cite this article:

Roozitalab A, Rabiee Mandejin M, Safarzadeh H, Momeni M. (2024). Designing a Model of Professional Ethics for Managers in Small and Medium Enterprises. Management Strategies and Engineering Sciences, 6(2), 173-185.

1. Introduction

Today, the significance of professional ethics has become more pronounced, particularly in small and medium enterprises (SMEs) that form the backbone of economic activity. Professional ethics, defined as a set of moral principles guiding behavior in a professional context, influences various aspects of organizational performance, interpersonal relationships, and the overall corporate culture. The role of ethics extends beyond compliance with legal and organizational rules, embedding itself in the values that drive organizational decision-making and stakeholder engagement [1, 2].

The influence of professional ethics on different organizational outcomes has been extensively studied across sectors. Alizadegan, SamadiLargani, and Imeni (2022) explored how personality type and professional ethics impact auditors' ability to detect fraud, revealing that ethical principles significantly bolster professional skepticism [3]. Similarly, Bagherinia et al. (2022) highlighted the critical relationship between professional ethics and adherence to patients' rights among nurses and midwives, emphasizing that ethical behavior fosters trust and patient satisfaction [4].

One prominent aspect of professional ethics is its impact on managerial competencies. Astereki, Mehrdad, and Ghobadian (2022) identified essential components of professional competencies for educational managers, advocating for a comprehensive model that aligns ethical principles with effective leadership [5]. These competencies are vital for maintaining a high level of organizational performance and ensuring that ethical considerations are integrated into managerial practices [6]. The banking sector has also witnessed efforts to measure and enhance professional ethics, with Kalantari and Bassijeh (2021) examining ethical practices from the perspective of bank employees, revealing significant gaps and opportunities for improvement [7].

Furthermore, ethics in education plays a critical role in shaping the professional behavior of future leaders and decision-makers. The work of Kabirian (2024) in midwifery education underscores the importance of ethical training, suggesting that a well-developed curriculum can profoundly influence students' moral decision-making abilities [8]. Miri Rami, Delgoshaei, and Mahmoudi (2022) also emphasized the strategic role of ethical leadership in the education sector, advocating for models that prioritize ethical and strategic intelligence. These insights point to the necessity of embedding ethical education and training in organizational settings to prepare competent and responsible professionals [9].

In the corporate sector, the impact of professional ethics on organizational governance and performance has been a focal point of research. Gholipor, Hassan Gholipour Yasoori, and Taghavi (2020) developed a paradigm model of corporate governance maturity, emphasizing the interplay between ethical governance and organizational success [10]. In line with this, Talebi and Seifi Kamar Safli (2019) examined the relationship between professional ethics, social responsibility, and organizational performance, highlighting the mediating role of environmental performance in economic and financial affairs [11]. These studies suggest that ethical principles are not only a moral obligation but also a strategic necessity for organizational sustainability and success.

The ethical dimensions of leadership have also been explored extensively. Shirvani and Zohrehvandian (2021) examined the relationship between the professional ethics of sports coaches and their self-efficacy, underscoring the mediating role of competence [12]. Their findings illustrate that ethical behavior among leaders significantly influences their effectiveness and the performance of their teams. Jamali, Manshaee, and Nadi (2023) proposed a model for professional ethics in higher education, emphasizing the role of ethical leadership in shaping a culture of integrity and accountability [13].

Ethical education and awareness are crucial for developing professionals who can navigate complex moral dilemmas. Wang (2024) provided insights into ethical concepts from the Tao Te Ching and their relevance to professional ethics education, addressing the challenges and opportunities in teaching value-based ethics. The study by Snieder and Zhu (2020) also focused on value-based professional ethics, advocating for a heart-centered approach that resonates deeply with individuals' intrinsic values [14]. The effectiveness of ethical education is further supported by Pasek, Julianto, and Dharmayasa (2021), who demonstrated the positive impact of ethics education on accounting students' ethical behavior, driven by spiritual and emotional intelligence [15].

The relationship between ethics and organizational trust is also well-documented. Taheri et al. (2019) analyzed the mediating role of ethical climate in the relationship between professional ethics, job performance, and organizational trust, revealing that a strong ethical climate enhances organizational outcomes. The banking industry has particularly emphasized ethical governance, with research

by Kaffashpoor, Samanian, and Rahmdel (2021) and Rahmdel, Samanian, and Kaffashpoor (2019) illustrating the development of professional ethics models for bank managers, grounded in ethical theories and practices [16, 17].

Additionally, the intersection of ethics and social responsibility has been explored in various contexts. Juliana et al. (2021) discussed the importance of ethical training in hospitality and tourism, emphasizing the role of social responsibility in enhancing service quality and customer trust [18]. Nurhayati and Khairas (2020) examined ethical violations in the banking sector, shedding light on the consequences of unethical behavior and the need for stringent ethical standards [19]. These studies collectively underscore the multifaceted nature of professional ethics and its far-reaching implications.

Therefore, this study seeks to provide a comprehensive understanding of the ethical frameworks that drive sustainable and effective management practices.

2. Methodology

The present study is quantitative and employs the Delphi method to gather and analyze expert opinions. Initially, a Delphi questionnaire was designed to identify the critical components of professional ethics in managers. The Delphi method was carried out over three rounds, refining the elements until a consensus among experts was achieved. At the end of these iterations, the finalized components formed the basis of the research questionnaire, which was then tested for validity and reliability to assess the model's overall fit.

The target population consisted of all active managers in small and medium enterprises (SMEs) in Tehran, totaling 38,371 individuals. Using Krejcie and Morgan’s sampling table, a stratified random sample of 380 managers was selected.

For data collection, we utilized expert interviews and thematic analysis to derive initial concepts and components. These were categorized in a preliminary framework, and a Likert-scale questionnaire was developed. Experts reviewed this list of dimensions, components, and indicators, providing feedback and suggesting additions or removals as needed. They were asked to indicate the importance of unlisted variables they deemed influential in designing the professional ethics model or to suggest modifications to existing items. This feedback process was repeated across three Delphi rounds, incorporating necessary revisions at each stage until a comprehensive consensus was reached.

Data analysis included assessing the validity and reliability of the research instrument. Homogeneous, convergent, and divergent validity tests were conducted, while reliability was assessed using Cronbach's alpha and composite reliability coefficients. Confirmatory factor analysis (CFA) and structural equation modeling (SEM) were employed to verify the model's structure. These analyses were performed using SPSS version 25 and PLS version 3 software to ensure the robustness and accuracy of the results.

3. Findings

The quantitative sample of this study included 380 active managers from small and medium enterprises in Tehran, of which 75% were male and 25% female. The majority, representing 49.5% of the participants, were aged between 41 and 50, while the smallest group, accounting for only 5.5%, were under 30 years old. Additionally, 21.8% of the managers were over 51 years old. In terms of education, 70.5% held a master’s degree or higher, while only 11.1% had a diploma or associate degree. Furthermore, 18.4% of the managers had a bachelor's degree. Regarding work experience, 36.3% had 16 to 20 years of service, followed by 27.6% with 11 to 15 years of experience. Notably, 78.7% of the managers had less than 20 years of job tenure in small and medium enterprises.

The findings from Table 1 demonstrate that all questionnaire items had factor loadings above the threshold of 0.4, indicating that all questions were retained in the final measurement model. The factor loadings were used to confirm the validity and reliability of the research variables in the model.

Table 1. Factor Loadings of Questions in the Measurement Model

Index	Dimensions	Question	Factor Loading	Result
Organizational Factors	Countering Organizational Self-Centeredness	1	0.808	Question Confirmed
		2	0.774	Question Confirmed
		3	0.659	Question Confirmed
	Organizational Culture	4	0.412	Question Confirmed
		5	0.836	Question Confirmed

		6	0.717	Question Confirmed
		7	0.834	Question Confirmed
		8	0.427	Question Confirmed
	Organizational Justice	9	0.764	Question Confirmed
		10	0.778	Question Confirmed
		11	0.781	Question Confirmed
		12	0.869	Question Confirmed
Environmental Factors	Policies and Procedures	13	0.823	Question Confirmed
		14	0.841	Question Confirmed
		15	0.744	Question Confirmed
		16	0.705	Question Confirmed
		17	0.854	Question Confirmed
	Physical, Psychological, Economic, and Social Environment	18	0.822	Question Confirmed
		19	0.879	Question Confirmed
		20	0.923	Question Confirmed
	Leadership and Management	21	0.882	Question Confirmed
		22	0.820	Question Confirmed
		23	0.876	Question Confirmed
Contextual Factors	Social and Political Environment	24	0.904	Question Confirmed
		25	0.915	Question Confirmed
		26	0.844	Question Confirmed
	Customer Orientation	27	0.867	Question Confirmed
		28	0.769	Question Confirmed
		29	0.877	Question Confirmed
	Beliefs and Training of Employees and Managers	30	0.811	Question Confirmed
		31	0.890	Question Confirmed
		32	0.893	Question Confirmed
		33	0.730	Question Confirmed
	Organizational Ethics	34	0.828	Question Confirmed
		35	0.823	Question Confirmed
		36	0.832	Question Confirmed
	Alignment with Organizational Principles	37	0.843	Question Confirmed
		38	0.858	Question Confirmed
		39	0.833	Question Confirmed
Structural Factors	Trust-Building in Interpersonal Relationships	40	0.846	Question Confirmed
		41	0.856	Question Confirmed
		42	0.821	Question Confirmed
		43	0.859	Question Confirmed
	Managerial Style	44	0.901	Question Confirmed
		45	0.861	Question Confirmed
		46	0.749	Question Confirmed
	Culture-Building and Process Improvement	47	0.517	Question Confirmed
		48	0.878	Question Confirmed
		49	0.872	Question Confirmed
Individual Factors	Cultural and Personal Traits	50	0.896	Question Confirmed
		51	0.885	Question Confirmed
		52	0.898	Question Confirmed
	Professional Performance and Suitable Leadership	53	0.764	Question Confirmed
		54	0.890	Question Confirmed
		55	0.879	Question Confirmed
		56	0.860	Question Confirmed
		57	0.874	Question Confirmed
	Commitment to Ethical Values	58	0.911	Question Confirmed
		59	0.866	Question Confirmed
		60	0.798	Question Confirmed
	Creating Job Satisfaction	61	0.851	Question Confirmed
		62	0.903	Question Confirmed
		63	0.859	Question Confirmed
	Motivation and Commitment	64	0.894	Question Confirmed
		65	0.877	Question Confirmed
		66	0.811	Question Confirmed

Specifically, for the organizational factors, items related to countering organizational self-centeredness showed loadings ranging from 0.659 to 0.808, while cultural dimensions had loadings between 0.412 and 0.836. Despite some lower values, such as 0.412 and 0.427, these items still met the criteria for inclusion. Organizational justice items had high loadings, from 0.764 to 0.869, reinforcing their significance in the model.

Environmental factors, which covered policies and practices as well as the physical, psychological, economic, and social environment, exhibited strong factor loadings, ranging from 0.705 to 0.923. Leadership and management elements also presented high loadings, from 0.823 to 0.882, indicating a robust contribution to the model.

Contextual factors, including social and political environments and customer orientation, demonstrated high factor loadings from 0.769 to 0.915, confirming their importance. Individual factors, such as inner cultural traits, professional performance, and commitment to ethical values, showed similarly strong loadings, with values ranging from 0.764 to 0.911. Structural elements, like trust-building and managerial styles, also exhibited loadings from 0.749 to 0.901.

Overall, the factor analysis confirmed that all items contributed significantly to their respective dimensions, and no questions needed to be removed from the model. Consequently, hypothesis testing and further analysis were conducted using this validated and reliable measurement framework.

The validity of the model was assessed using both convergent and divergent validity tests. Convergent validity was examined through the Average Variance Extracted (AVE) test, as well as a comparison of composite reliability coefficients and AVE values. Divergent validity was assessed using the Fornell and Larcker criterion. Table 2 presents the AVE values for each variable, which reflect the degree to which items within the same construct are correlated.

Table 2. Assessment of Convergent Validity in the Measurement Model

Variable	Average Variance Extracted (AVE)
Professional Ethics of Managers in SMEs	0.680
Organizational Ethics	0.685
Trust-Building in Interpersonal Relationships	0.715
Motivation and Commitment	0.743
Creating Job Satisfaction	0.760
Commitment to Ethical Values	0.739
Alignment with Organizational Principles	0.714
Leadership and Management	0.739
Managerial Style	0.705
Policies and Procedures	0.633
Organizational Justice	0.638
Beliefs and Training of Employees and Managers	0.695
Professional Performance and Suitable Leadership	0.730
Contextual Factors	0.513
Structural Factors	0.541
Organizational Factors	0.613
Individual Factors	0.636
Environmental Factors	0.594
Organizational Culture	0.519
Culture-Building and Process Improvement	0.511
Cultural and Personal Traits	0.798
Social and Political Environment	0.789
Physical, Psychological, Economic, and Social Environment	0.767
Customer Orientation	0.705
Countering Organizational Self-Centeredness	0.562

As shown, the AVE values for all variables, including dimensions with associated questions, were above the threshold of 0.5. This confirms the convergent validity of the measurement model, indicating that the items within each construct are sufficiently correlated. In other words, the questions designed to measure each variable are well-aligned and exhibit the necessary internal consistency to support their intended constructs.

The discriminant validity of the model was examined using the Fornell and Larcker criterion, as shown in Table 3

and the continuation in Table 4. This method evaluates whether each construct in the model is distinct from other constructs by comparing the square root of the Average Variance Extracted (AVE) for each construct with the correlation coefficients between the constructs.

Table 3 and Table 4 present the correlation matrix, with diagonal values representing the square root of the AVE for each construct. For adequate discriminant validity, the diagonal values should be greater than the correlation coefficients in the respective rows and columns. The findings indicate that this criterion was met for all constructs, confirming the model's discriminant validity.

Table 3. Correlation Matrix for Discriminant Validity (Part 1)

Variable	1	2	3	4	5	6	7	8	9	10	11	12
1. Professional Ethics of Managers in SMEs	0.825											
2. Organizational Ethics	0.774	0.828										
3. Trust-Building in Interpersonal Relationships	0.801	0.818	0.845									
4. Motivation and Commitment	0.854	0.718	0.764	0.862								
5. Creating Job Satisfaction	0.780	0.750	0.802	0.850	0.872							
6. Commitment to Ethical Values	0.777	0.785	0.789	0.749	0.801	0.859						
7. Alignment with Organizational Principles	0.828	0.777	0.777	0.686	0.695	0.762	0.845					
8. Leadership and Management	0.762	0.755	0.752	0.686	0.736	0.726	0.672	0.860				
9. Managerial Style	0.744	0.714	0.767	0.725	0.699	0.697	0.761	0.685	0.840			
10. Policies and Procedures	0.703	0.779	0.768	0.719	0.759	0.776	0.734	0.797	0.692	0.796		
11. Organizational Justice	0.724	0.699	0.676	0.677	0.691	0.654	0.703	0.700	0.678	0.725	0.799	
12. Beliefs and Training of Employees and Managers	0.777	0.592	0.669	0.687	0.668	0.584	0.612	0.658	0.721	0.649	0.625	0.834

Table 4. Correlation Matrix for Discriminant Validity (Part 2)

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13
1. Professional Performance and Suitable Leadership	0.855												
2. Contextual Factors	0.710	0.716											
3. Structural Factors	0.655	0.698	0.735										
4. Organizational Factors	0.698	0.765	0.752	0.783									
5. Individual Factors	0.753	0.759	0.784	0.779	0.798								
6. Environmental Factors	0.707	0.769	0.739	0.740	0.754	0.770							
7. Organizational Culture	0.634	0.705	0.700	0.700	0.707	0.638	0.720						
8. Culture-Building and Process Improvement	0.617	0.673	0.657	0.688	0.669	0.627	0.608	0.715					
9. Cultural and Personal Traits	0.837	0.773	0.833	0.720	0.804	0.785	0.651	0.737	0.893				
10. Social and Political Environment	0.560	0.830	0.686	0.659	0.625	0.696	0.601	0.650	0.585	0.888			
11. Physical, Psychological, Economic, and Social Environment	0.695	0.758	0.729	0.715	0.725	0.798	0.637	0.610	0.645	0.603	0.876		
12. Customer Orientation	0.716	0.745	0.732	0.616	0.724	0.744	0.539	0.599	0.638	0.591	0.655	0.839	
13. Countering Organizational Self-Centeredness	0.540	0.596	0.620	0.745	0.610	0.635	0.710	0.592	0.579	0.480	0.542	0.449	0.749

For instance, the square root of the AVE for "Professional Ethics of Managers in SMEs" was 0.825, which is higher than its correlations with other constructs, such as 0.774 with "Organizational Ethics" and 0.801 with "Trust-Building in Interpersonal Relationships." Similarly, "Motivation and Commitment" had a square root AVE value of 0.862, exceeding its correlations with other constructs, including 0.854 with "Professional Ethics of Managers in SMEs" and 0.718 with "Organizational Ethics."

These results indicate that each construct is distinct and not excessively correlated with others, demonstrating the model's strong discriminant validity. Consequently, the constructs can be considered reliable and valid for further hypothesis testing and structural model evaluation.

The reliability of the measurement model was evaluated using Cronbach's alpha, Spearman correlation, and composite reliability tests. Table 5 provides an overview of the reliability results for each variable in the study.

Table 5. Reliability Assessment of the Measurement Model

Variable	Cronbach's Alpha	Spearman Correlation	Composite Reliability
Professional Ethics of Managers in SMEs	0.982	0.985	0.983
Organizational Ethics	0.771	0.773	0.867
Trust-Building in Interpersonal Relationships	0.867	0.868	0.909
Motivation and Commitment	0.826	0.832	0.896
Creating Job Satisfaction	0.842	0.844	0.905
Commitment to Ethical Values	0.823	0.837	0.894
Alignment with Organizational Principles	0.800	0.801	0.882
Leadership and Management	0.823	0.825	0.895
Managerial Style	0.787	0.798	0.877
Policies and Procedures	0.853	0.860	0.896
Organizational Justice	0.810	0.816	0.876
Beliefs and Training of Employees and Managers	0.851	0.856	0.900
Professional Performance and Suitable Leadership	0.907	0.913	0.931
Contextual Factors	0.936	0.938	0.944
Structural Factors	0.886	0.918	0.913
Organizational Factors	0.853	0.887	0.884
Individual Factors	0.964	0.965	0.967
Environmental Factors	0.931	0.933	0.941
Organizational Culture	0.795	0.754	0.747
Culture-Building and Process Improvement	0.718	0.794	0.780
Cultural and Personal Traits	0.873	0.875	0.922
Social and Political Environment	0.866	0.869	0.918
Physical, Psychological, Economic, and Social Environment	0.847	0.848	0.908
Customer Orientation	0.789	0.797	0.877
Countering Organizational Self-Centeredness	0.807	0.719	0.792

Based on the results in Table 5, Cronbach's alpha values for all variables were greater than 0.7, indicating high internal consistency among the items. This confirms that the variables are reliable outside the measurement model. Spearman correlation coefficients, which assess the correlation between items within each variable, were also above 0.7. According to Henseler and colleagues (2009), given that Likert scales with fewer than seven options are ordinal, the use of this non-parametric test is appropriate to measure correlations within a five-point Likert scale.

Additionally, composite reliability values for all variables exceeded 0.7, further supporting the internal consistency of the items within the measurement model. Composite reliability reflects the degree to which items for each variable are correlated and ensures the robustness of the model. Furthermore, shared reliability, which indicates the extent to which each question can be generalized from one model to another, was confirmed, as all values were greater than 0.5. This comprehensive reliability assessment establishes the strength and stability of the measurement model.

The quality of the measurement model was assessed using the cross-validation index of shared reliability to evaluate the precision of variable measurement based on their associated questions. Table 6 provides an overview of the quality of the measurement model for each variable.

Table 6. Quality of the Measurement Model

Variable	Model Quality	Result
Organizational Factors	0.308	Strong
Environmental Factors	0.481	Very Strong
Contextual Factors	0.432	Very Strong
Structural Factors	0.423	Very Strong
Individual Factors	0.555	Very Strong

The values for each variable were assessed using thresholds of 0.02 (weak model quality), 0.15 (moderate model quality), and 0.35 (strong model quality). The analysis revealed that the model quality for organizational factors was strong, while the model quality for

environmental, contextual, structural, and individual factors was very strong.

Following the evaluation of the measurement model, the structural model's significance was analyzed. Table 7 presents the results of the significance test for the second research question.

Table 7. Significance Test for the Second Research Question

Relationships	Path Coefficient (Beta)	Standard Deviation	t-value	Significance Level	Result
Organizational Factors → Countering Organizational Self-Centeredness	0.845	0.026	32.363	0.001	Significant
Organizational Factors → Organizational Culture	0.900	0.016	54.965	0.001	Significant
Organizational Factors → Organizational Justice	0.899	0.015	61.868	0.001	Significant
Environmental Factors → Policies and Procedures	0.953	0.008	117.960	0.001	Significant
Environmental Factors → Physical, Psychological, Economic, and Social Environment	0.898	0.020	45.940	0.001	Significant
Environmental Factors → Leadership and Management	0.902	0.016	57.558	0.001	Significant
Contextual Factors → Social and Political Environment	0.830	0.023	36.068	0.001	Significant
Contextual Factors → Customer Orientation	0.845	0.028	29.661	0.001	Significant
Contextual Factors → Beliefs and Training of Employees and Managers	0.857	0.021	39.932	0.001	Significant
Contextual Factors → Organizational Ethics	0.849	0.022	38.688	0.001	Significant
Contextual Factors → Alignment with Organizational Principles	0.861	0.020	42.347	0.001	Significant
Structural Factors → Trust-Building in Interpersonal Relationships	0.941	0.009	100.475	0.001	Significant
Structural Factors → Managerial Style	0.912	0.015	59.001	0.001	Significant
Structural Factors → Culture-Building and Process Improvement	0.857	0.024	35.437	0.001	Significant
Individual Factors → Cultural and Personal Traits	0.904	0.017	54.261	0.001	Significant
Individual Factors → Professional Performance and Suitable Leadership	0.953	0.008	116.004	0.001	Significant
Individual Factors → Commitment to Ethical Values	0.913	0.015	59.941	0.001	Significant
Individual Factors → Creating Job Satisfaction	0.919	0.015	61.836	0.001	Significant
Individual Factors → Motivation and Commitment	0.892	0.022	41.403	0.001	Significant
Professional Ethics → Organizational Factors	0.877	0.020	42.953	0.001	Significant
Professional Ethics → Environmental Factors	0.938	0.015	62.996	0.001	Significant
Professional Ethics → Contextual Factors	0.948	0.009	106.596	0.001	Significant
Professional Ethics → Structural Factors	0.946	0.008	111.814	0.001	Significant
Professional Ethics → Individual Factors	0.955	0.010	92.094	0.001	Significant

The results in Table 7 indicate that all t-values were outside the range of -2.380 to 2.380, confirming that these relationships were significant at a 99% confidence level. Furthermore, the path coefficients (Beta values) reveal that professional ethics had a strong impact on organizational factors (88%), environmental factors (94%), contextual factors (95%), structural factors (95%), and individual factors (95%). Overall, the relationships among the dimensions, components, and indicators of the professional ethics model for managers in small and medium enterprises were significant, suggesting that these findings are likely to hold in a larger sample from the same population.

The model fit of the conceptual framework was assessed using various predictive power and model evaluation indices. Table 8 presents the results for the predictive power of the criterion variable in the third research question.

Table 8. Predictive Power of the Criterion Variable for the Third Research Question

Predictor Variables	Adjusted R^2	Result	Gof	Result	Stone-Geisser Q^2	Result
Professional Ethics of Managers	0.794	Very Strong	0.59	Very Strong	0.515	Very Strong
Organizational Factors						
Environmental Factors						
Contextual Factors						
Structural Factors						
Individual Factors						

Table 8 shows the adjusted R^2 values for the criterion variable, evaluated against benchmarks of 0.19 (weak predictive quality), 0.33 (moderate predictive quality), and 0.67 (strong predictive quality). The results indicate that the components of professional ethics, along with organizational, environmental, contextual, structural, and individual factors, collectively predict 79% of the criterion variable with very strong predictive power.

Additionally, the Goodness of Fit (Gof) index, a measure of model fit quality, was assessed against the standards of 0.01 (weak), 0.26 (moderate), and 0.36 (strong). The Gof value of 0.59 indicates that the model fit for evaluating the third research question is very strong.

The Stone-Geisser Q^2 index, which assesses the structural model's quality for the endogenous variable, was also measured. With benchmarks of 0.02 (weak), 0.15 (moderate), and 0.35 (strong), the Q^2 value of 0.515 confirms the very strong quality of the structural model for the third research question.

Figures below illustrate the measurement model in terms of coefficient estimates and the significance of the coefficients, respectively, providing visual representations of the model's robustness and the meaningful relationships among variables.

Figure 1. Measurement Model in the State of Coefficient Estimates

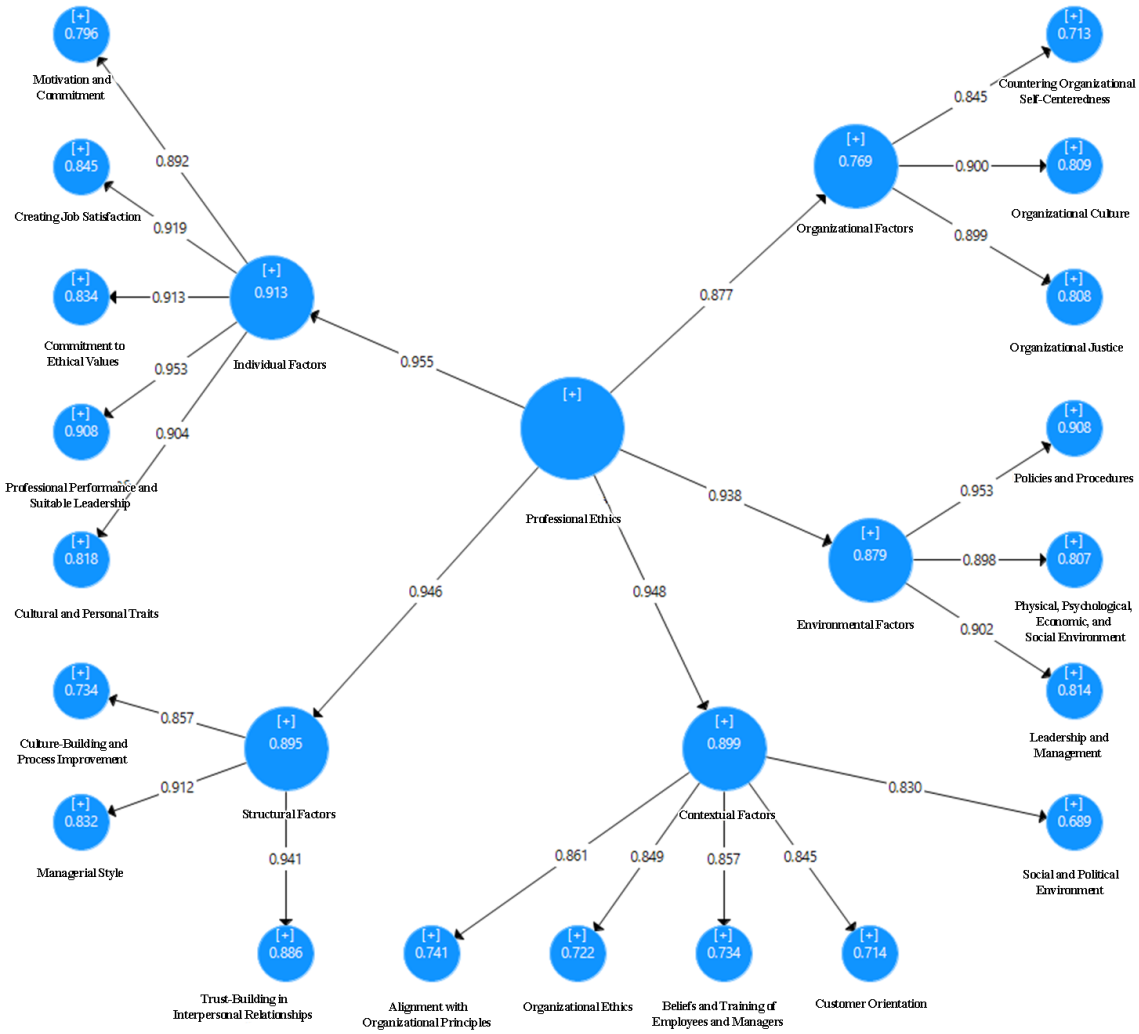

Figure 2. Measurement Model in the State of Coefficient Significance

4. Discussion and Conclusion

The results of this study reveal critical insights into the significance of professional ethics in shaping organizational behavior and performance in small and medium enterprises (SMEs). The conceptual model developed through this research shows strong predictive and structural validity, highlighting the importance of professional ethics in influencing various organizational factors, including leadership, structural dynamics, and environmental conditions. Specifically, the findings indicate that professional ethics significantly impacts organizational factors with a path coefficient of 0.877 and environmental factors with a path coefficient of 0.938. These relationships were statistically significant at the 0.001 level, with high t-values exceeding 40. This supports the notion that ethical behavior is a key determinant of organizational stability and efficiency, a result consistent with studies that emphasize the foundational role of ethics in governance and management (Gholipor, Hassan Gholipour Yasoori, & Taghavi, 2020; Talebi & Seifi Kamar Safli, 2019).

The findings align with previous research, such as the work by Momeni et al. (2022), which demonstrated the positive impact of ethical education and leadership on enhancing organizational performance in educational settings. Our study further corroborates that ethical principles are integral to effective organizational management. The strong relationship between ethics and leadership effectiveness echoes the findings of Shirvani and Zohrehvandian (2021), who showed that professional ethics in sports coaching significantly improves self-efficacy and competence. Similarly, the importance of ethical culture in promoting a cohesive organizational environment is supported by Bagherinia et al. (2022), who found that

adherence to ethical standards among healthcare professionals enhanced patient trust and satisfaction. These consistent findings across different fields underscore the universal applicability of ethical principles in organizational settings.

Our study also reveals that professional ethics have a substantial impact on individual factors, with a path coefficient of 0.955, reflecting that ethical behavior influences personal traits, motivation, and job satisfaction. This result is in line with the research by Hadian et al. (2023), who highlighted the role of ethics in improving responsibility and self-efficacy among individuals [20]. Moreover, Alizadegan, SamadiLargani, and Imeni (2022) also supported this conclusion, noting that ethical principles increase auditors' professional skepticism and capacity to detect fraud [3]. These studies illustrate the pervasive influence of professional ethics on individual performance, reinforcing our findings that ethics contribute to personal and organizational success.

The structural factors of organizations also showed significant relationships with professional ethics, indicated by a path coefficient of 0.946. This demonstrates that ethical leadership and trust-building are crucial for organizational coherence, a result supported by Kaffashpoor, Samanian, and Rahmdel (2021), who developed a professional ethics model for banking managers [16]. The importance of ethical climate in enhancing structural integrity is further validated by Taheri et al. (2019), who demonstrated that an ethical environment leads to better job performance and organizational trust [21]. The consistency between our study and these previous works highlights the role of ethics in creating a stable and well-structured organizational environment.

The environmental and contextual factors were also significantly influenced by professional ethics, with path coefficients of 0.938 and 0.948, respectively. The findings related to contextual factors align with Gholampour et al. (2020), who identified ethical components as vital in shaping professional behavior in educational contexts [22]. Additionally, Rahmdel, Samanian, and Kaffashpoor (2019) stressed the importance of ethical practices in corporate governance, a notion our research confirms by demonstrating that ethics influence the broader organizational context [17].

Overall, our findings emphasize that professional ethics are not only crucial for internal organizational dynamics but also extend to the external environment, influencing how organizations interact with and respond to societal expectations. The results also illustrate the comprehensive impact of ethical behavior, from enhancing leadership and management to promoting a supportive and collaborative culture within SMEs.

Despite the robust findings, this study has several limitations. First, the research was conducted within the context of SMEs in Tehran, limiting the generalizability of the results to other regions or countries. The cultural and regulatory environment in Tehran may differ significantly from those in other locations, potentially influencing the applicability of our findings. Second, the study used a quantitative approach, relying heavily on self-reported data collected through questionnaires. This method could introduce response bias, as participants may have provided socially desirable answers. Third, the cross-sectional design of the study restricts our ability to draw causal inferences. Longitudinal research would be necessary to examine the dynamic relationship between professional ethics and organizational outcomes over time.

Future research should address the limitations of this study by exploring the impact of professional ethics in a more diverse set of organizations and cultural contexts. Comparative studies across different regions or industries would provide a more comprehensive understanding of how ethical principles influence organizational behavior globally. Additionally, employing mixed-method approaches, combining quantitative data with qualitative interviews or case studies, could yield richer insights into the mechanisms underlying ethical behavior in organizations. Longitudinal studies are also recommended to capture the long-term effects of professional ethics on organizational performance and employee well-being. Finally, future research could investigate the role of emerging technologies, such as artificial intelligence, in shaping and enforcing ethical practices within organizations.

From a practical perspective, organizations, particularly SMEs, should prioritize the integration of professional ethics into their core values and everyday operations. Ethical training programs should be implemented to raise awareness and foster ethical decision-making among managers and employees. Leaders should act as role models, demonstrating ethical behavior and reinforcing a culture of integrity and accountability. Furthermore, organizations should establish clear ethical guidelines and mechanisms for addressing ethical dilemmas, ensuring that employees feel supported in making morally sound decisions. By embedding ethics into organizational structures and

processes, SMEs can build trust, improve performance, and ensure long-term sustainability.

Authors' Contributions

Authors equally contributed to this article.

Acknowledgments

Authors thank all participants who participate in this study.

Declaration of Interest

The authors report no conflict of interest.

Funding

According to the authors, this article has no financial support.

Ethical Considerations

All procedures performed in this study were under the ethical standards.

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