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STRATEGIC PLAN PERCEPTION SCALE; A SCALE DEVELOPMENT STUDY*

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Abstract

This study provides a scale development with two sub dimensional for public institution employees to determine the employees' perceptions regarding the preparation, implementation, and evaluation of the strategic plan. In this study, a 21-item scale has been developed in three phases. In the first part, the scope of the scale has been defined, and the literature was reviewed in this context. Thoughts of experts in the field have been received then in the second step, an item pool for scale has been created. In the third stage, the final version of the scale was prepared by taking into account the grammar rules. The scale has been applied to employees working basically in public institutions and universities involved in the preparation or implementation processes of the strategic planning. The sample size has been determined as 216 employees according to the random sample method besides Cronbach's alpha coefficient has been calculated for reliability. Exploratory Factor Analysis and Confirmatory Factor Analysis have been applied for the validity test. Bartlett and Kaiser-Meyer-Olkin (KMO) tests have been used for sampling adequacy. The fit indices calculated in the confirmatory factor analysis were; RMSEA: 0.070, χ^2 : 1.846, SRMR: 0.039, NFI: 0.97, GFI: 0.85, CFI: 0.99. The findings have been shown that scale validity was achieved. Likewise, the reliability test result has been shown that the scale was two-dimensional and Cronbach's alpha coefficient was 0.97.

Anahtar Kelimeler: Strategic Management, Strategic Planning, Scale Development

JEL Kodları: M 19, P 41, M 59

STRATEJİK PLAN ALGI ÖLÇEĞİ; ÖLÇEK GELİŞTİRME ÇALIŞMASI

Öz

Bu makale, kamu kurumu çalışanlarının stratejik planın hazırlanması, uygulanması ve değerlendirilmesine ilişkin algılarını belirlemeye yönelik iki boyutlu bir ölçek geliştirme çalışması sunmaktadır. Çalışma kapsamında üç adımda 21 maddelik bir ölçek geliştirilmiştir. İlk adımda ölçeğin kapsamı belirlenmiş ve bu kapsamdaki literatür incelenmiştir. Alanında uzman kişilerin görüşleri alınmış ve ikinci adımda ölçek için madde havuzu oluşturulmuştur. Üçüncü aşamada ise gramer kuralları dikkate alınarak ölçeğin son hali hazırlanmıştır. Ölçek, stratejik planın hazırlanması veya uygulanması süreçlerinde yer alan kamu kurumları ve üniversitelerde temel olarak görev yapan çalışanlara uygulanmıştır. Örneklem büyüklüğü, tesadüfi örneklem yöntemine göre 216 çalışan olarak belirlenmiştir. Güvenirlilik için Cronbach's alpha katsayısı hesaplanmış, geçerlik testi için Açıklayıcı Faktör Analizi ve Doğrulamalı Faktör Analizi uygulanmıştır. Örneklem yeterliliği için Bartlett ve Kaiser-Meyer-Olkin (KMO) testleri kullanılmıştır. Doğrulamalı faktör analizinde hesaplanan uyum indeksleri; RMSEA: 0.070, χ^2 : 1.846, SRMR: 0.039, NFI: 0.97, GFI: 0.85, CFI: 0.99. Elde edilen bulgular ölçek geçerliğinin sağlandığını göstermiştir. Benzer şekilde güvenirlilik testi sonucu ölçeğin iki boyutlu olduğunu ve Cronbach alfa katsayısının 0.97 olduğunu göstermiştir.

Keywords: Stratejik Yönetim, Stratejik Planlama, Ölçek Geliştirme

JEL Codes: M 19, P 41, M 59

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Introduction

Technology which is in the 21st century requires organizations to be managed professionally to survive and adapt to rapid change in the world. Every organization has continued its activities for specific periods from the past to the present. However, developments in information technologies have carried the activities of organizations to the global level. Small-scale, short-term, or family-type management models have changed with post modern era. Instead of former management styles, strategic management approach includes long-term planning and are open to change and continuous improvement. Organizations should execute their activities by developing tactical plans and long-term strategies to gain a competitive advantage and survive longer. In addition, organizations should make decisions more strategic against the face of globalization. Developments in information technologies, emerging markets, changes in consumer demands, and an ever-increasing competitive environment owing to strategic planning being more critical than in the past (Demir & Yilmaz, 2010).

Strategic planning for government and private sector organizations which have based on the antecedent that managers of public and private sectors should have been influential strategists if these institutions accomplish their missions and responsibilities, satisfy their constituents, and create shared value in the current years. These managers should practice as much discretion as possible in the areas under their control; they need to develop effective strategies to tackle changed and changing situations, and they must develop a consistent and defensible basis for their decisions (Bryson J. , 2004). In addition, meetings should be held with stakeholders during the strategic plan preparation process. For the performing strategic plan effectively, the opinions and evaluations of the stakeholders and employees should be considered.

The concept of strategy is to achieve goals and gain without distinction of individual or organization (Grant, 2010). On the other hand, strategic thinking includes organizations adapting to their environment and developing and implementing tactics against their rivals. Making a difference and developing value-added products and services in a global world, where competition conditions are getting more complicated, will benefit the companies. Strategic planning is the process of planning, coordinating, and executing activities for this purpose. The employees can support the organizational goals by adopting the plan and carrying out works that can contribute to the plan. It can be achieved by ensuring the employees' high-level participation both in the preparation and implementation of the strategic plan and by making joint decisions for the company to achieve its long-term goals.

Although the strategic planning approach is considered as a study designed for the private sector, many authors think it can provide effective management due to its implementation in public organizations (Bryson & Roering, 1987). All organizations' preparation and implementation of strategic plans, regardless of the private and public sectors, can provide long-term benefits and enable organizations to be sustainable (Kriemadis & Theakou, 2007).

In this study, a scale has been developed to measure the employees' perception involved in the preparation, implementation and evaluation processes of strategic planning studies. The scale, which has been developed in two sub-dimensions to measure the preparation, implementation, and evaluation processes of the strategic plan, was primarily applied to the employees working in public organizations. Through using this scale, organizations will be able to measure the employees' perceptions of the strategic plan. According to the research results, they will also be able to direct the planning studies in the future. The best strategic plans are those that are prepared and implemented with the cooperation of the employees.

1. Literature Review

Strategic planning has started to be implemented by the private sector organizations for the first time in the 1960s, and public and non-profit organizations have also used it after the 1980s. Strategic planning activities go back to long-term planning that started to be implemented in the private sector after World War II. Long-term plans were to forecast the future in the light of current events rather than an analytical way of thinking at that time. In other words, it was an image of events extended to the future with statistical techniques. In the 1960s, with the analytical approach to long-term planning in organizations, events began to be analyzed rationally and analytically, and the future is shaped as a result of this analytical thinking system. By the 1980s, experts began to reorganize strategic planning to consider the relationships between the organization and its environment. Strategic planning became concerned with a competitive advantage in the private sector. Strategic planning process in public and non-profit organizations focused on evaluating the environment and thus identifying and satisfying the needs of target groups (Gürer, 2006). It can be defined as the plan is the way followed when doing a work or an activity.

A plan can consist of a single decision or a set of decisions. The characteristic of the decision or decisions include desired goals and objectives to be achieved or realized in the future periods. Therefore, the most general definition of the plan is the process of deciding where to reach and what to achieve in the future (Koçel, 1993). On the other hand, planning is to establish goals and select tools to help achieve these goals. Planning requires strong foresight for the design of activities. The evolution of foresight is the capacity to think ahead and the ability to interpret.

Planning is a concept defined by researchers in many ways, as it points to a different meaning for each discipline. According to Javidan (1984), planning refers to extensiveness; for Miller (1988), it refers to rationality analysis; Dyson and Foster (1982) have explained planning as effectiveness; for Powell, planning means comprehensiveness (Boyd & Reuning-Elliott, 1998). Although planning is defined as the steps to achieve goals and objectives, it includes different strategies unique to each institution or organization. The planning approaches of the researchers also vary according to the subject and sector.

Planning is the source of the strategic thinking process of conducting long-term activities of organizations according to a specific discipline. It is an essential tool for coordinating activities, division of labor, sectoral specialization, effective financial management and the best use of human resources. Therefore, it is considered by the researchers that strategic planning contributes to organizational performance. Especially after 1980, studies on this field gained intensity, and researches show that effective use of resources and preparing different tactical plans provide a competitive advantage. Strategic planning has benefits in solving and overcoming problems in case of uncertainty, setting goals specific to the organization, and deciding the best choice among alternatives (Dutton & Duncan, 1987; Robinson & Pearce, 1988; Kaplan & Beinhocker, 2003). The word strategy comes from the Greek word “stratego” a combination of Stratos and agos, meaning army and leader literally (O'Toole, 1987). Strategic planning hence began as the art of general and now has become the art of general manager. Sun Tzu, a Chinese warrior-philosopher, explained the strategy in his famous book “The Art of War” B.C. According to Tzu, understanding the surrounding circumstances and the power of the rival by setting up overwhelming strength and a suitable approach to the parties involved are the main components of strategy (Wittmann & Reuter, 2008). Strategy is a tactical process of activities designed to benefit from core competencies and attain a competitive advantage. Organizations decide on the best alternatives by considering the situation of their competitors while determining the strategy (Hitt, Ireland, & Hoskisson, 2017, s. 4). A strategy is an important tool that allows organizations to achieve their goals in different ways by determining what organizations are doing now and where they want to be in the future.

The strategic planning process evaluates the strengths and weaknesses and analyses opportunities and threats in the changing environmental conditions. For public and private sector organizations, the most basic way to survive for so long is to have skilled and competent human resources capacity and establish and implement long-term goals (Kriemadis & Theakou, 2007). In the strategic plan preparation process, the main lines of the plan are formed by determining the mission and vision. Suppose the mission and vision of the organization are determined with the joint participation of the employees. In that case, the strategic plan can be the basis of loyalty for all employees, and the employees will be able to make great efforts to reach the organization's goals.

2. Methodology and Research Methods

2.1. Research Model

In this study, it was developed a scale that measures Strategic Plan Perception of employees. The scale development process consists of three steps. In the first phase of scale development process, the scope of the scale was defined. Literature related to the subject was reviewed, and experts in the sector and academicians in the field were involved as external advisors.

In the second phase of scale development in which the scale item pool was created. At this phase, it is essential to keep the item pool as wide as possible and contain the complete area desired to measure. There are some opinions expressed in the literature regarding the width of the item pool. Although some studies claim that item pool size should be three or four times higher than scale item number (Slavec & Drnovsek, 2012, s. 55), it is recommended that at least 30 items (Nunnally, 1978) or 60 items should be included (Aguinis et al., 2009, s. 39). In this study, we developed an item pool with 84 statements, including two dimensions for the perception of the strategic plan.

In the third step, scale items were checked in terms of grammar by English interpreters, made necessary corrections in line with their recommendations, and finalized the items at this stage. 84 statements in the item pool were examined, and a draft scale form with 27 items was obtained. The draft scale form was submitted to expert opinions to determine the suitability of the items. As a result of the examination of the experts, a five-point Likert type (1-Totally Disagree, 2-Disagree, 3-No Opinion, 4-Agree, 5-Totally Agree) 21-item scale form was created.

In the final part of scale process, an application were made to Kastamonu University Social and Human Sciences Research and Publication Ethics Committee, and with the decision dated 02.07.2021 and numbered 30th, it was accepted that it complied with the Kastamonu University Social and Human Sciences Research and Publication Ethics Committee directive.

2.2. Sample

An online survey was delivered to the 216 participants that are public employees in the city of Kastamonu and Sinop. 42 forms were excluded from the study due to incomplete and incorrect answers to the questions. The remaining 174 forms were evaluated. Demographic information of the participants is given in Table 1 below:

Table 1: *Demographic Characteristics of Participants*

		Count	Percentages
Gender	Male	114	65.5%
	Female	60	34.5%
Age	2-30	23	13.2%
	31-40	93	53.4%
	41-50	51	29.3%
	51+	7	4.0%
Education	Elementary	6	3.4%
	Bachelor	142	81.6%
	Master's	26	14.9%
Job Status	Staff	150	86.2%
	Manager	24	13.8%
Institution	North Anatolian Development Agency	6	3.4%
	Provincial Health Department	6	3.4%
	Provincial Education Department	6	3.4%
	Provincial Agriculture Department	2	1.1%
	Municipality of Kastamonu	32	18.4%
	The provincial administration of Kastamonu	6	3.4%
	Kastamonu University	105	60.3%
	Boyabat Municipality	4	2.3%
	Municipality of Sinop	7	4.0%
Seniority	1-5 Years	29	16.7%
	6-10 Years	89	51.1%
	11+ Years	56	32.2%
Have you ever participated in the strategic planning preparation process?	Yes	60	34.5%
	No	114	65.5%

3. Results

3.1. Validity Tests

Cronbach's Alpha test was applied to test the reliability of the scale with data collected from 174 people in total. Reliability analysis is an analysis used to test the consistency of the answers given by the participants (Cronbach, 1951; Carey, 2001). The results for the Cronbach Alpha Coefficient are given in Table 2 below:

Table 2: *Validity Test Results*

Cronbach's Alpha	N of Items
.971	21

The result of the test indicated that the level of reliability is 97.1% (0.971). Generally, the lowest value accepted for the validity is 0.70 (Nunnally and Bernstein, 1994, s. 265). The Cronbach statistic is a test that measures the reliability of the scale by considering the correlation structure between the variables. According to these results, the scale has high-level reliability.

3.2. Explanatory Factor Analysis

Explanatory Factor Analysis (EFA) was performed to test whether the variables (questions/items) formed a structure according to the dimensions determined a priori. But first, item-total correlations were checked to test the construct validity and the results are given in Table 3 below:

Table 3: *Item-Total Correlations*

Items	Item-Total Correlation
s1	.788
s2	.753
s3	.826
s4	.805
s5	.803
s6	.798
s7	.439
s8	.718
s9	.760
s10	.813
s11	.845
s12	.794
s13	.614
s14	.754
s15	.836
s16	.808
s17	.852
s18	.833
s19	.841
s20	.837
s21	.812

When the item-total correlations are examined, the item-total correlation value for all items is greater than 0.2. After testing the conditions for validity, the KMO test was applied to test the adequacy of sample size and results given in Table 4 below:

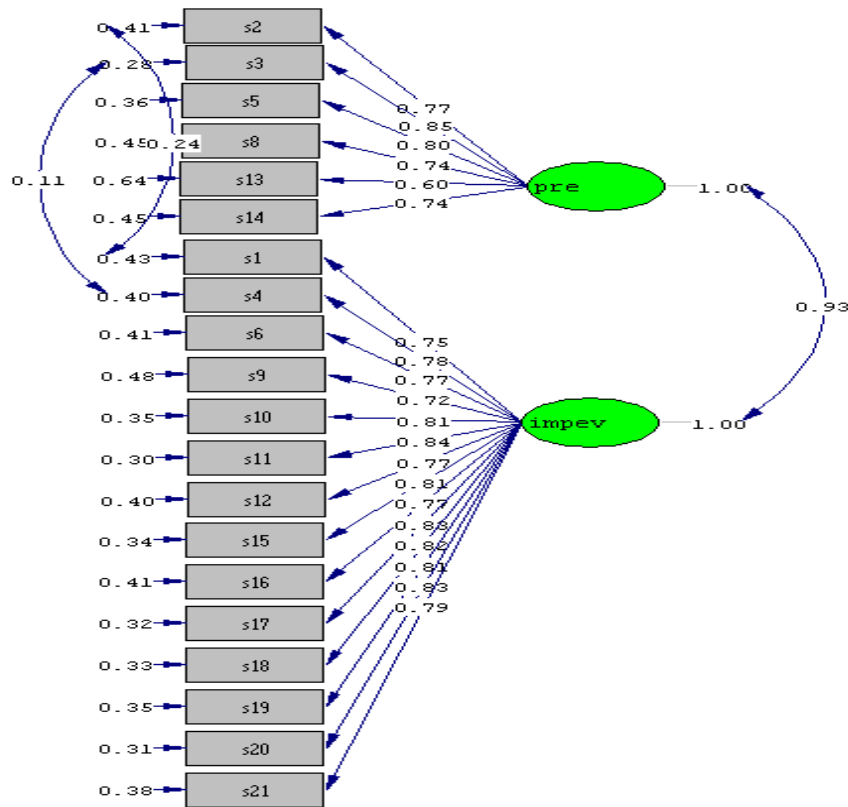
Table 4: *KMO and Bartlett's Test*

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.964
Bartlett's Test of Sphericity	Approx. Chi-Square	3464,140
	df	190
	Sig.	.000

The sample size of 174 participants is sufficient according to the Kaiser-Meyer-Olkin (KMO) sample size adequacy test. Therefore, the sample size is suitable for factor analysis. After that, EFA was applied and the results are given in Table 5 below:

Table 5: *Factor Scores*

As a result of the analysis, there is a two-factor structure. One of the items was removed from the scale because of not providing requirements in terms of factor loads (Factor load was lower than 0.3). The two-factor structure formed by the remaining 20 expressions could explain 71.46% of the Total Variance. Accordingly, a two-factor structure was decided. Confirmatory Factor Analysis (CFA) was applied with the Lisrel program to test the validity of this structure. The results are given in Figure 1 below.

Figure 1: *PATH Diagram*

According to Figure 1, all factor loads obtained as a result of CFA are greater than 0.3. Goodness-of-fit values for CFA are given in Table 6 below.

Table 6: *Goodness-of-fit Values for CFA*

Fit Indices	Statistics
RMSEA	0.070
SRMR	0.039
$\chi^2/\text{d.f}$	1.846
GFI	0.85
AGFI	0.81
CFI	0.99
NFI	0.97
RFI	0.97

$\chi^2=308,22$ d.f:167 %90 Confidence Interval for RMSEA = (0.058; 0.082)

According to the table, factor loads and goodness-of-fit values are within the acceptable levels. The result of the tests indicated that the developed scale was valid. Also, the variables are fit with the dimensions, which are determined a priori. The results of the reliability analysis for the new dimensions are given in Table 7:

Table 7: *Reliability Test for New Dimensions*

Dimension	Cronbach's Alpha	N of Items
Preparation	0.901	6
Implementation and Evaluation	0.970	14
All Scale	0.973	20

According to Table 7, the reliability condition is met for the scale and new dimensions. Also, when the item-total correlations were examined for validity, the values in items were greater than 0.2 for all items.

4. Conclusion

The study was conducted by research and publication ethics. The main purpose of this study was to develop a "Strategic Planning Perception Scale" with high reliability and validity that can be used for strategic planning. In the scale development study, firstly, a literature review was conducted. The item pool developed as a result of the studies was presented to the expert opinion. A 5-point Likert-type scale consisting of 21 items was developed. Explanatory and confirmatory factor analyses were applied to determine the validity of the scale.

The two-dimension can explain 71.46% of the total variance regarding the structure that needs to be explained. CFA was used to test the validity of the structure determined by Explanatory Factor Analysis. As a result of the analysis, it was determined as RMSEA: 0.070, χ^2 : 1.846, SRMR: 0.039, NFI: 0.97, GFI: 0.85, CFI: 0.99. The test results show that the scale is good or within acceptable levels. In addition, the validity and reliability scores of the scale are high-level. In addition, as a result of the tests performed, it was seen that the scale provided content and validity. Therefore, we can claim that the "Strategic Planning Perception Scale" can be used as a reliable and valid scale to evaluate the strategic planning activities performed by public institutions and organizations.

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Appendix

STRATEGIC PLAN PERCEPTION SCALE

	STRATEGIC PLANNING PERCEPTION SCALE	1)Strongly Disagree	2)Disagree	3)Neither Agree nor Disagree	4)Agree	5) Strongly Agree
1	The organization which I work for has a clear mission and vision					
2	The mission and vision of the organization are known by all employees					
3	The mission and vision of the organization are defined by the joint decision of the employees					
4	I believe that the organization which I work for has attainable goals					
5	The existing resources of the organization are sufficient to achieve the goals and objectives specified in the strategic plan					
6	The swot analysis was carried out during the strategic planning preparation process					
7*	The objectives of the organization are determined only by executive members.					
8	The objectives of the organization are determined with the participation of all employees					
9	Any work that I do in the organization contributes to the objectives of the organization.					
10	The current strategic plan of the organization is being carried out.					
11	There is compatibility between the annual work program and the strategic plan of the organization					
12	The strategic planning process is implemented according to official procedures.					
13	The organization that I work for has a strategic planning department or unit related to strategy					
14	Every employee has responsibilities related to the strategic plan.					
15	The strategic plan is put into practice immediately in the related period.					
16	The activities to achieve the goals and objectives of the organization in the strategic plan are a guide for employees and managers.					
17	During the implementation period of the strategic plan, it is periodically evaluated whether the employees fulfill their duties and responsibilities.					
18	Managers monitor the strategic planning process.					
19	It is controlled every year whether the objectives in the strategic plan have been achieved.					
20	Strategic plan practices and results are analyzed and evaluated					
21	At the end of the strategic planning period, the level of accomplishment of the mission is measured.					

*was obtained as a result of CFA