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THE REGULATORY (MODERATING) ROLE OF COGNITIVE FLEXIBILITY ON THE RELATIONSHIP BETWEEN POSITIVE PSYCHOLOGICAL CAPITAL AND EMPLOYEE PERFORMANCE*

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Özet

Sürekli değişimin yaşandığı, yeniliklerin gerçekleştiği, rekabet içindeki bugünün iş dünyasında; çalışanların işyerinde performanslarının yükselmesi için çalışanların bireysel kaynaklarından en üst düzeyde faydalanılması gerekmektedir.

Bu çalışmada, çalışanların pozitif psikolojik sermayesi, bilişsel esneklik ve performansı arasındaki ilişkiler incelenmiştir. Özellikle değişim zamanlarında bilişsel esnekliğin olumlu etkisinin olabileceği ve çalışan performansını yükselteceği düşünülerek, düzenleyicilik etkisi incelenmiştir. Araştırma, Marmara Bölgesi'nde değişik endüstri ve iş kollarında görev yapan 454 beyaz yakalı çalışandan anket yöntemiyle toplanan verilerle gerçekleştirilmiştir. Araştırma modeli doğrultusunda geliştirilen hipotezlerin Yapısal Eşitlik Modeli (YEM)

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ve Hiyerarşik Regresyon Analizi (HRA) istatistiksel araçları kullanılarak analizleri yapılmış ve elde edilen sonuçlar literatür çerçevesinde yorumlanmıştır.

Araştırma sonucunda; çalışanların bilişsel esneklikleri ve bireysel performansları arasında ilişki görülememiştir. Ayrıca, çalışanların pozitif psikolojik sermayeleri ile performansları arasındaki ilişkide bilişsel esnekliğin kısmi düzenleyicilik (ılımlaştırıcılık) etkisi bulunmuştur. Bilişsel esneklik yükseldikçe, iyimserlik ve dayanıklılık değişkenlerinin çalışan performansı üzerindeki etkisinin arttığı gözlemlenmiştir. Fakat bilişsel esneklik yükseldikçe, özyeterlilik ile çalışan performansı arasındaki ilişkinin zayıfladığı sonucuna ulaşılmıştır.

Anahtar Kelimeler: Pozitif Psikolojik Sermaye, Bilişsel Esneklik, Çalışan Performansı, Performans.

Abstract

In today's business world where continuous changes are experienced, innovations are realized, and determined by competition and difficulties; In order to increase the performance of

employees in the workplace, it requires to benefit from the individual resources of the employees at the highest level.

In this paper, we investigate the relationships between employee's positive psychological capital, cognitive flexibility and employee performance. It is proposed that cognitive flexibility may have a

positive effect on this relationship, especially in situations of difficulty and change and accordingly employee performance is expected to be increased. In this respect, a model has been developed to examine the relationships and effects between these variables. The research was carried out with the data collected by the survey method from 454 white collar employees working in different industries and sectors in Marmara Region. The hypotheses in the research were analyzed by using Structural Equation Modeling, Hierarchical Regression and Correlation Analyzes and the findings were stated.

According to the results of the research, there was no relationship between cognitive flexibility and individual performance of the employees. There was a partial moderating effect of cognitive flexibility on the relationship between positive psychological capital and performance of employees. Here, as cognitive flexibility increases; the effect of optimism and resilience variables on employee performance is increasing. However, as cognitive flexibility increases, the relationship between self-efficacy and employee performance weakens. In addition, employee's perceived psychological safety have a partial mediating role in the relationship between positive psychological capital and employee performance.

Keywords: Positive Psychological Capital, Cognitive Flexibility, Psychological Safety, Employee Performance, Performance.

1. Introduction

In an environment of difficulties, uncertainties, changes and intense competition; a significant contribution of human resources in the business is needed in order for businesses to survive, continue their presence and reach their goals. Since individual employee performances direct the performance of the business; each employee's perspective on the business, their behavior in line with business goals, their attitude and their effort to reach the goal and ultimately their performance are critically important for the business. This perspective leads to conducting intensive researches on increasing the individual psychological resources of employees and their effects on their performance. Accordingly, the concept of positive psychological capital is being carried to the business world.

Peterson et al.,[1] propose psychological capital as a critical basic capacity in the context of an individual's motivation, cognitive process, striving for success and contributing to workplace performance in the workplace. Luthans et al.,[2] state that positive psychological capital offers a comprehensive and high-level conceptual framework for understanding and utilizing human resources as a firm asset in workplaces.

[1] Suzanna J. Peterson v.d., "Psychological Capital and Employee Performance: A Latent Growth Modeling Approach." *Personnel Psychology*, 64, (2011): 430.
[2] Fred Luthans, Carolyn M. Youssef and Bruce J. Avolio, *Psychological Capital and Beyond*. New York: Oxford University Press, (2015), 6.

With the increasing complexity of working conditions in the business world, it is seen that the range of behavior expected from employees is also expanding. This situation necessitates the investigation of other factors affecting the relationship between positive psychological resources and their performance, and benefiting from these factors in order for employees to exhibit superior performance.

In the literature research, it is seen that the relationships between positive psychological capital and employee performance and other variables have been investigated. While there is a large number of researches focused on examining psychological capital and different workplace outcomes, there has been relatively limited research on factors that might moderate (regulate) this relationship.[3] For example, Walumbwa et al.,[4] investigated the moderating effect of the service environment on the relationship between individual positive psychological capital and employee performance. Topaloglu and Ozer[5] studied the regulatory effect of managers' authentic leadership characteristics on the relationship between employees' psychological capital and job performance.

Also, it is seen that the concept of cognitive flexibility is not studied among the variables whose moderating effect is investigated between psychological capital and employee performance in the literature. In

[3] Alexander Newman v.d., "Psychological Capital: A Rewiew and Synthesis." *Journal of Organizational Behavior*, 35, (2014): 127.

[4] Fred O. Walumbwa, Bruce J. Avolio and Chad A. Hartnell, "An Investigation of The Relatinships among Leader and Follower Psychlogical Capital, Service Climate, And Job Performance." *Personnel Psychology*. 63, (2010): 956.

[5] Tayfun Topaloglu and Pınar Sural Ozer, "Psikolojik Sermaye ile Is Performansı Arasındaki Iliskiye Otantik Liderligin Duzenleyici Etkisi. "*Organizasyon ve Yönetim Bilimleri Dergisi*, 6,1, (2014): 168.

this context, the cognitive flexibility variable was added to this relationship to investigate its regulatory effect.

In this study, it is thought that cognitive flexibility will enable employees to best evaluate and manage the current situation in times of difficulties and changes. At the same time, it is predicted that it will support the employees' use of their psychological resources in the most appropriate way and as a result of increasing their performance.

In this direction, a model was created to see the factors affecting employee performance and the relationships between these factors and investigatedd to research these relations. Since there is no other study searching the relationships of these variables in the literature, this study will contribute to the literature as an original study in this field.

2. Theorical Framework

2.1. Positive Psychological Capital

The concept of psychological capital is under the umbrella of positive organizational behavior, that is defined as the researching and implementation of positively oriented human resource powers and psychological capacities that can be measured, developed and effectively managed for performance improvement in today's workplace.[6]

[6] James B. Avey v.d., "Meta-Analysis of the Impact of Positive Psychological Capital on Employee Attitudes, Behaviors, and Performance." *Human Resource Development Quarterly, 22, 2,* (2011): 129.

Positive psychological capital is conceptually defined by Luthans et al., (2007a: 3) is "(1) the individual's confidence to take and put in the necessary effort to succeed in difficult and challenging tasks (self-efficacy), (2) the individual's positive perception to be successful now and in the future (optimism), (3) persevering towards goals in order to achieve and the power to change the way to the goal when necessary (hope), (4) willpower that will enable him to recover and go further in order to be successful when faced with problems and obstacles (resilience)''.[7]

In order to provide a sustainable competitive advantage in workplaces, psychological capital enters the system in addition to the economic, human and social capitals in organizational structures. And at the same time, it contributes to the best optimization of all capital resources synergistically.[8]-[9]

Positive psychological capital self-efficacy belief; is specific to the analyzed area, higher in the experienced areas, and it is possible to develop it with education. Although it is influenced by the evaluations of others, it depends on personal knowledge, skills, abilities and environmental factors.[10] The concept of positive psychological capital hope; includes the ability to produce alternative ways.[11] It requires a

[7] Fred Luthans, Carolyn M. Youssef, Bruce J. Avolio, *Psychological Capital: Developing the Human Competitive Edge.* New York: Oxford University Press, 2007a, 3.
[8] Fred Luthans, Kyle W. Luthans, Brett C. Luthans, "Positive Psychological Capital: Beyond Human and Social Capital. "*Business Horizons*, 47, 1, (2004): 46.
[9] Luthans, Youssef, and Avolio, *Psychological Capital and Beyond*.
[10] Luthans, Youssef,and Avolio, *Psychological Capital: Developing the Human Competitive Edge.*
[11] Carolyn M. Youssef-Morgan and Fred Luthans, "Psychological Capital and Well-being." *Stress and Health*, 31, (2015): 181.

high level of willpower and a combination of alternative ways of thinking.[12] The concept of positive psychological capital optimism; is described both as a positive future expectation that is open to development (Carver and Scheier, 2002) and as an explanatory attributional style that connects positive events to personal, permanent and common causes and interprets negative events as external, temporary and situation-specific.[13]

2.2. Cognitive Flexibility

The concept of cognitive flexibility is defined by Martin and Rubin (1995: 623) as "a person's knowing that options and alternatives are available in any situation, being flexible and willing to adapt his behaviors according to the situation, and having a self-efficacy belief for flexibility".[14]

Canas et al., (2003: 482) define the concept of cognitive flexibility as "human ability to adapt cognitive process strategies to new situations in unexpected and changing situations in the environment".[15] Krems (1995: 210) defines cognitive flexibility as "one's ability to regulate

[12] James B. Avey, Fred Luthans and Susan M. Jensen, "Psycological Capital: A Positive Resource for Combaing Employee Stress and Turnover." *Human Resource Management*, 48,5, (2009): 681.
[13] Avey v.d., "Meta-Analysis of the Impact of Positive Psychological Capital on Employee Attitudes," 130.
[14] Matthew Martin and Rebecca Rubin, "A New Measure of Cognitive Flexibility." *Psychological Reports*. 76, (1995): 623.
[15] Jose J. Canas v.d., "Cognitive flexibility and Adaptability to Environmental Changes in Dynamic Complex Problem-Solving Tasks." *Ergonomics*, 46, 5, (2003): 482.

problem-solving when current task demands change".[16] In this context, it means the ability to select and/or modify existing problem-solving techniques, methods, strategies and adapt to new situations.

In complex problems where the information required to solve a problem is not given at the beginning of the problem-solving process,[17] cognitive flexibility depends significantly on attention processes and information representation. In this case, the person needs to correctly perceive the conditions that may interfere with the current situation; to cancel the automatic response from previous experiences, restructure their knowledge in order to interpret the new situation and task effectively, plan alternatives and adapt their behavior to new conditions. When environmental conditions change, the previously well-performing strategy may not be appropriate for this time. Persistent use of this inappropriate strategy results in "cognitive rigidity" and causes individuals to exhibit less cognitive flexibility.[18]

2.3. Employee Performance

Campbell and Wiernek (2015: 48) define the concept of employee (individual) performance as "the individual actions and behaviors of employees that directly affect the achievement of the goals of the

[16] Josef F. Krems v.d., "Cognitive Flexibility and Complex Problem Solving." Edited by Peter A. Frensch and Joachim Funke, In The *European Perspective. New York and London:* Psychology Press Taylor and Francis Group, (2014): 210.
[17] Ronny Scherer, "Is It Time For a New Measurement Approach? A Closer Look At The Assessment Of Cognitive Adaptability In Complex Problem Solving." *Frontiers in Psychology*, 6, 1664, (2015): 2.
[18] Jose J. Canas v.d., "Cognitive Inflexibility and the Development and use of Startegies for Solving Complex Dynamic Problems: Effects of Different Types of Training." *Theoretical Issues in Ergonomcs Science*, 9, (2004): 2.

business".[19] Borman and Motowidlo (1993) state the concept of employee performance in two different ways as task performance (technical information, materials, services, activities required for the continuity of business activities) and contextual performance (the work that the employee does voluntarily for the completion of the job, apart from the main task).[20]

3. Hypothesis Development

3.1. Relationships Between Positive Psychological Capital and Employee Performance

It is seen that the mechanisms in the positive psychological capital components activate the individual motivation and effort to be successful, and consequently increase the performance.[21] In the studies of Luthans et al., [22]-[23] and Walumbwa et al.,[24] that managerial evaluation as a performance criterion was considered statically, which are showing that employees' psychological capital is positively related

[19] John P. Campbell and Brenton M. Wiernik, "The Modeling And Assessment of Work Performance." *The Annual Review of Organizational Psychology and Organizational Behavior*, 2, (2015): 48.

[20] Walter C. Borman and Stephan J. Motowidlo. "Task Performance and Conceptual Performance: The Meaning of Personnel Selection Research." *Human Performance*, 10, 2, (1997): 100.

[21] Avey v.d., Meta-Analysis of the Impact of Positive Psychological Capital on Employee Attitudes," 134.

[22] Luthans, Youssef and Avolio, *Psychological Capital: Developing the Human Competitive Edge.*

[23] Fred Luthans v.d., "Positive Psychological Capital: Measurement and Relationship with Performance and Satisfaction." *Personnel Psychology*, 60, (2007b): 541–572.

[24] Walumbwa, Avelio and Hartnell "An Investigation of The Relatinships among Leader and Follower," 937-963.

to their performance. In the studies of Peterson et al.,[25] the dynamic relationship between psychological capital and performance was discussed. Other studies have also shown that many performance measures, including managerial ratings and objective sales performance, are positively related to employees' positive psychological capital.[26]

Employees with high positive psychological capital self-efficacy beliefs make more effort towards the goals that they believe will be successful individually. These people are able to produce more than one solution to the problems with their willpower (hope). By making internal positive attributions, they are able to motivate themselves to be successful with positive expectations about results (optimism). When faced with difficulties, they do not give up, but make more effort to return to the starting point and move forward with perseverance (resilience). In the light of this information, the following hypothesis (H_1) is proposed:

H_1: There is a positive relationship between positive psychological capital and employee performance.

3.2. Relationships Between Positive Psychological Capital and Cognitive Flexibility

Self-efficacy belief, which is a sub-component of positive psychological capital is accepted as a part of cognitive flexibility and it

[25]Suzanna J. Peterson v.d., "Psychological Capital and Employee Performance," 432.
[26] Suzanna J. Peterson v.d., Psychological Capital and Employee Performance," 444.

is seen that the most basic relationship arises from this component[27]-[28]. Employees with high positive psychological capital hope levels have higher capacity to think and plan success-oriented alternative ways to reach their goals. For this reason, these people are also considered to be cognitively flexible thinkers.[29] It is seen that the innovative decision-making and problem-solving skills of these employees are more developed. It is observed that people with high cognitive flexibility have low anxiety levels, are open to new and different ideas[30] and are willing to consider their options and see alternatives.[31] With these aspects, cognitive flexibility contributes to the optimism levels of the employees.

Cognitively flexible people are expected to show goal-oriented behavior as being aware of alternatives in the face of difficulties and acting towards a solution by returning to the beginning point without giving up (resilience), with positive expectations (optimism),

[27] Matthew M. Martin, Carolyn M. Anderson and Katherine S. Thweat, "Aggressive Communication Traits and Their Relationships with the Cognitive Flexibility Scale and the Communication Flexibility Scale*." Journal of Social Behavior and Personality*, 13, 3, (1998): 532.

[28] Matthew M. Martin and Carolyn M. Anderson, "The cognitive flexibility scale: Three validity studies." *Communication Reports*, 11, 1, (1998): 2.

[29]Charles R. Snyder, "Hope Theory: Rainbows in the Mind." *Psychological Inquiry*. 13.4, (2002): 251.

[30] Matthew M. Martin, Sydney M. Staggers and Carolyn M. Anderson. "The Relationship Between Cognitive Flexibility with Dogmatism, Intellectual Flexibility, Preference for Consistency and Self-Compassion." *Communication Research Report,* 28, 3, (2011): 279.

[31] Matthew M. Martin and Carolyn M. Anderson, "The Relationship between Cognitive Flexibility And Affinity-Seeking Strategies." *Advances in Psychological Research*, 4. (2001): 97.

evaluating alternatives towards the target (hope) and believing their success in future (self-efficacy).

Accordingly, the following hypothesis (H_2) is proposed:

H_2*: There is a positive relationship between positive psychological capital and cognitive flexibility.*

3.3. Relationships Between Cognitive Flexibility and Employee Performance

In the literature review, no study has been found that explain the relationship between cognitive flexibility and employee performance. This study is expected to show the relationship between these variables by searching and at the same time contribute to the literature in this field.

People with high cognitive flexibility believe in the existence of alternative options when they encounter problems and are open to new ideas.[32] These people can produce more than one strategy at the same time[33] and they can focus on alternatives by controlling themselves.[34] In line with this information they have obtained, they can create relevant mental models and adapt their behaviors to the new situation.[35]

In the event that environmental factors change while fulfilling his duties and responsibilities at the workplace, it is expected that the cognitive flexibility of the employee will affect his behavior in accordance with

[32] Martin, Staggers and Anderson, "The Relationship Between Cognitive Flexibility with Dogmatism," 279.
[33] Canas v.d., "Cognitive flexibility and Adaptability," 486.
[34] Martin and Anderson, "The Relationship between Cognitive Flexibility And Affinity-Seeking Strategies," 97.
[35] Scherer, "Is It Time For a New Measurement Approach?" 2.

the new situation and to be successful by using his energy to achieve his task. Accordingly, the employee's performance will be increased.In line with this information, the following hypothesis (H_3) is proposed:

H_3: There is a positive relationship between cognitive flexibility and employee performance.

3.4. The Regulatory (Mediator) Effect of Cognitive Flexibility on the Relationship Between Positive Psychological Capital and Employee Performance

In this study, the role of cognitive flexibility in the effect of positive psychological capital components which are self-efficacy, optimism, hope and resilience on employee performance is investigating separately.

3.4.1. Self-efficacy and Cognitive Flexibility

According to Bandura (1982), the individual who make an effort to reach the targets to be cognitively flexible in order to know that there are alternatives in the face of difficulties and to turn to one of them.[36] Bandura (1997) emphasizes that cognitively flexible people believe on their ability to act effectively. For this reason, self-efficacy belief is accepted as a part of cognitive flexibility.[37] At the same time, self-efficacy awareness is required in order for the person to show the

[36] Martin, Anderson, and Thweatt, "Aggressive Communication Traits," 532.
[37] Martin and Anderson, "The cognitive flexibility scale," 2.

necessary behaviors to reach the target.[38]-[39]-[40] Cognitively flexible person's self efficiacy ability increase their efforts double towards goal achievement.[41]-[42] Therefore, it is expected that these people will achieve positive results and increase their performance.

3.4.2. Optimism and Cognitive Flexibility

It is seen that as the employee's cognitive flexibility increase, their understanding of current conditions of situation, related participants they interact with and the short and long-term relational goals are increasing. So, their level of choosing the most appropriate strategy and adapting their behavior according to the situations by evaluating the relevant options also increase.[43]

The people with a high level of optimism can improve their abilities and skills by taking advantage of the opportunities offered by their current situation, thus increasing their chances of success and performance in the future.[44] The willingness of cognitively flexible people to communicate better[45] contributes to the development of social

[38] Martin, Anderson and Thweatt, "Aggressive Communication Traits*,"* 532.
[39] Martin and Anderson. "The cognitive flexibility scale," 2.
[40] Luthans, Youssef and Avolio, "*Psychological Capital: Developing the Human Competitive Edge."* 133.
[41] Albert Bandura, "On the Functional Properties of Perceived Self-Efficacy Revisited," *Journal of Management*, 38, 1, (2012): 13.
[42] Albert Bandura, "Cultivate Self-efficacy for Personal and Organizational Effectiveness" In E.A. Locke (Ed.), *Handbook of Principles of Oganizational Behaviour*. New York: Wiley, (2009): 180-181.
[43] Martin and Anderson, "The Relationship between Cognitive Flexibility," 98.
[44] Luthans, Youssef and Avolio, "*Psychological Capital: Developing the Human Competitive Edge."* 95-96.
[45] Martin and Anderson, "The Relationship between Cognitive Flexibility And Affinity-Seeking Strategies." 94.

networks in the workplace and accelerates the optimism development process.

With the increase in the level of cognitive flexibility of the employee, their level of their taking more risks and making more efforts towards the goal by evaluating the current situation objectively, reviewing their abilities, strategies, and behaviors increases as mentioned in the optimism criterion.

3.4.3. Hope and Cognitive Flexibility

Employees with high levels of positive psychological capital hope are considered accepted the cognitive flexible thinkers as they have higher capacity to think and plan success-oriented alternative ways to reach their goals.[46] The increasing on cognitive flexibility enables people to see alternatives for solutions.[47] Cognitive flexibility enables changing mental sets, generating multiple ideas or considering alternatives.[48] By this way, it is seen that the desired workplace results are affected and the performance increases through the employees' making target-oriented choices.[49]

As the level of cognitive flexibility increases, it is expected that the level of employee's thinking about alternative solutions in challenging

[46] Snyder, C.R. "Hope Theory," 251.
[47] Martin and Anderson, "The Relationship between Cognitive Flexibility And Affinity-Seeking Strategies," 97.
[48] Arianne D. Stevens, "Social Problem-Solving and Cognitive Flexibility: Relations to Social Skills and Problem Behavior of At-Risk Young Children." In Clinical Psychology Seattle Pacific University School of Psychology, Family ve Community Doctoral Thesis, (2009): 36.
[49] Luthans, Youssef and Avolio, "*Psychological Capital: Developing the Human Competitive Edge,"* 79.

situations, seeing options, evaluating them, moved their energy towards target, that means hopeful thinking level will also increase. Thus, it is expected that employees will be successful and their performance will increase by making more efforts to reach workplace goals.

3.4.4. Resilience and Cognitive Flexibility

A high level of cognitive flexibility encourages new attempts as well as solving existing problems in the workplace.[50] Positive psychological capital raises the level of resilience by overcoming the situations in which complex problems occur and ensuring that the risks are defined and managed correctly. This, in turn, supports the employee to discover new areas where success can be achieved, to further develop his existing talents and strengths, and to increase his success and performance. A high level of cognitive flexibility ensures a better interpersonal interaction and communication network, which is one of the assets that provide resilience.[51] It supports the increase of resilience level by helping to establish open communication, reliability and teamwork among employees.[52]

Accordingly, the following hypothesis (H_4) is proposed:

H_4: Cognitive flexibility has a regulatory (moderating) effect on the relationship between positive psychological capital and employee performance.

Figure.1. illustrates the theorethical framework.

[50] Stevens, "Social Problem-Solving and Cognitive Flexibility," 36.
[51] Martin and Anderson, "The cognitive flexibility scale," 538.
[52] Luthans, Youssef and Avolio, "*Psychological Capital: Developing the Human Competitive Edge*," 125.

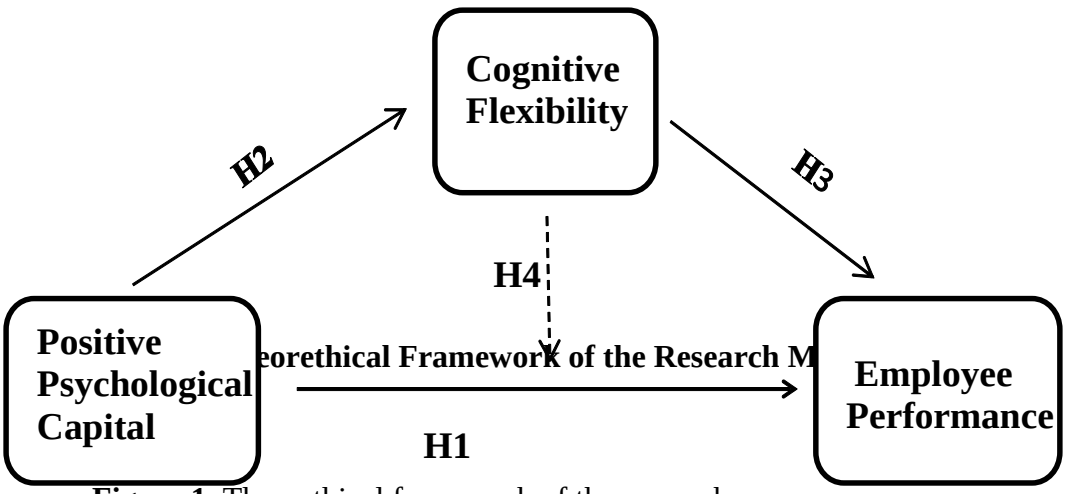


Figure 1. Theorethical framework of the research

4. Research Method

In line with the theoretical framework, the aim of this study is to investigate the moderating role of cognitive flexibility levels in the effect of employees' positive psychological capital on their performance in the workplace by revealing the relationships between individual positive psychological capital, cognitive flexibility and employee performance.

In order to see the effect of these variables the evaluation of the regulatory variable cognitive flexibility relations added to our model is also included in the aim of the study. The model constructed in the study is an original model since it has not been discussed in the literature before thus increases the originality of the study.

The fact that the data collected in the study is obtained from white-collar employees working in different sectors instead of a single sector or industry indicates the importance of the research in terms of the inclusiveness of the sector and sample size.

4.1. Participants, Sample Data Collection, Limitations

The data of the research consists of white-collar employees working in the private and public sectors operating in the Marmara Region. This region was chosen for the study as the Marmara Region is Turkey's leader in terms of economy and the sector distribution is more diverse than other regions. In the research, convenience sampling method is used.

The fact that the research was carried out only in enterprises in the Marmara region in Turkey and not cover other regions so limits the research. Although the measurement tools used in the research are valid and reliable, it is accepted that there may be errors that may arise from the measurement tools, sampling and research method. It is assumed that the statements of the employees who answered the survey questions are correct, and the self-evaluation of the person is another limit. The results of the study should be interpreted with care of considering these issues.

Questionnaire data collection technique was used in this study. Some of the survey data was collected by creating a google survey link through Google Forms, and some of it was collected through face-to-face interviews. A total of 500 questionnaires were distributed, and as

a result of the evaluations, 46 questionnaires were excluded. In this direction, the analysis of the study was evaluated on a total of 454 data.

Table 1 includes the socio-democraphic information of survey participants according to the type of industry they work, their departments and educational status.

Table.1. Socio-demographic Characteristics of Participants.

Industry type	Number of employees
Manufacturing/Production	96
Service	285
Business	73
Total	454

Department of Labour	Number of employees	Ratio
Management Department	87	19,16%
Production Department	20	4,41%
Marketing Department	60	13,22%
Human Resources Department	20	4,41%
Accounting/Finance Department	53	11,67%
R&D Department	13	2,86%
Public Relations Department	7	1,54%
Other Departments	193	42,73%

Education	Number of employees	Ratio
Primary School	2	0.44%
Secondary School	2	0.44%
High School	70	15.42%
University	288	63.44%
Postgraduate/Doctorate	92	20.26%

4.2. Measures of the Research

The scale questions used in the study were translated from English to Turkish and then translated back to English to check whether the statements were understandable. Accordingly, necessary arrangements have been made to improve the cultural conformity and Turkish intelligibility of the expressions. Afterwards, the questionnaire was applied to 25 white-collar employees to confirm that the statements were clear and understandable. After the approval of the questionnaire expressions from these people was obtained, the questionnaire forms started to be distributed. Information about the scales used in this study is briefly stated below.

Psychological Capital Questionnaire (PCQ); developed from well-known and published self-efficacy (Parker, 1998), hope (Synder et al., 1996), optimism (Scheier and Carver, 1985) and resilience (Wagnild & Young, 1993) scales.[53]

It consists of 24 statements developed by Luthans et al.,[54] in accordance with the workplace, taking into account the studies of the researchers in question.

[53] Luthans, Youssef and Avolio, "*Psychological Capital: Developing the Human Competitive Edge,"* 211.
[54] Luthans, Youssef and Avolio, "*Psychological Capital: Developing the Human Competitive Edge."* 211.

Cognitive Flexibility Scale; consists of 12 statements, developed by Martin and Rubin[55], focusing on cognitive awareness that acknowledges the existence of communication alternatives.

Employee Performance Scale; consists of 4 expressions (individual) developed by Rego v.d..[56]

4.3. Data Analysis

In this study, data purification and testing process was applied before analysis. Variables were subjected to Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) using the SPSS software program. In this context questions about self-efficacy, hope, optimism, resilience, cognitive flexibility and employee performance in the model were included in the exploratory factor analysis (EFA).

In this study, first of all, Kaiser-Meyer-Olkin (KMO) Sample Adequacy Measurement and Bartlett Sphericity test were conducted to test the suitability of the data for factor analysis.

KMO value of 0.95>0.5 indicates that the inputs in the study are homogeneous and our variables are suitable for factor analysis. Bartlett test x2/df=10,086.38/990, p value 0.000<0.05; indicate that the variables used are significant and there is sufficient correlation between the expressions in the scale.[57]

Table.2. KMO ve Barlett Test Values

[55] Martin and Rubin, "A New Measure of Cognitive Flexibility," 623.
[56] Armenio Rego v.d., "Psychological capital and performance of Portuguese civil servants: exploring neutralizers in the context of an appraisal system." *The International Journal of Human Resource Management,* 21, 9, (2010): 1540.
[57] Sadi Can Saruhan ve Ata Ozdemirci, *Bilim, Felsefe ve Metodoloji* (Istanbul: Beta Yayınları, 2018), 226.

Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO)		0,950
Bartlett's Test of Sphericity	Approx. Chi-Square	10,086.38
	Df	990
	Sig	0,000

Exploratory Factor Analysis (EFA)

In this analysis, the factors with a low variance value as 0.05 and the expressions that were the only ones under the factor and had factor loads close to each other were excluded from the analysis and the analysis was repeated. Table.3. shows the final EFA results of the model variables.

Table.3. The Result of Exploratory Factor Analysis for Model Variables

Variables	Questions	Factor 1	Factor 2	Factor 3	Factor 4	Factor 5
Self-efficiacy	PS1	0,60				
	PS2	0,72				
	PS3	0,65				
	PS4	0,67				
	PS5	0,72				
	PS6	0,70				
As can	PS7	0,56				
	PS8	0,56				
be	PS10		0,55			
	PS11		0,59			
	PS12		0,67			
Resilience	PS13		0,71			
	PS14		0,68			
seen in	PS17		0,62			
	PS18		0,56			
Optimism	PS20			0,74		
	PS21			0,57		
	PS22			0,51		
	PS23			0,65		
Cognitive Flexibility	CF1				0,66	
	CF5				0,57	
	CF7				0.61	
	CF8				0,61	
	CF9				0,75	
	CF11				0,55	
	CF12				0,64	
Employee Performance	EP1					0,58
	EP2					0,71
	EP3					0,77
	EP4					0,80
Eigenvalue		**12,04**	**2,10**	**1,48**	**1,35**	**1,01**
Explained % variance		**37,61**	**6,55**	**4,63**	**4,22**	**3,17**

Table 3, it is seen that the variables are collected under a total of 5 factors. The psychological capital scale was collected in 3 factors under the variables of self-efficacy, resilience and optimism. Cognitive flexibility and employee performance scales were also collected under one factor each.

The first factor explains 37.61% of the total variance, the second factor explains 6.55%, the third factor explains 4.63%, the fourth factor explains 4.22%, and the fifth factor explains 3.17%. These six factors explain 56.18% of the total variance explained for the scale. Since the total variance value of 56.18% is greater than 50% the level of explanation is considered sufficient.

Confirmatory Factor Analysis (CFA)

After the questions that make up the factors are determined by the EFA process, Confirmatory Factor Analysis (CFA) is performed to evaluate whether the variables affecting the factors as a result of EFA are adequately represented by these factors. After the EFA procedure, the questions remaining in the research scales were included in the confirmatory factor analysis. In the CFA using AMOS 20.0, the low-loading questions were re-evaluated or dropped to the test. Table 4 illustrates the final results of confirmatory factor analysis with all model variables.

Tablo.4. Confirmatory Factor Analysis for Model Variables

Variables	Questions
Self-efficiacy	PS1, PS2, PS4, PS5, PS6, PS7, PS8
Resilience	PS10, PS11, PS12, PS13, PS14, PS17, PS18
Optimism	PS21, PS22, PS23
Cognitive Flexibility	CF1, CF5, CF8, CF9, CF11, CF12
Employee Performance	EP1, EP2, EP3, EP4
	$c^2_{(362)}$= 784.51, CFI= 0.93, IFI= 0.93 ve RMSEA= 0.05

As seen in Table 4., the fit index values of this model structure were found as χ 2 (362) = 784.51, χ 2 /sd= 2.167, CFI= 0.93, IFI= 0.93 and RMSEA= 0.05. The fit values here are acceptable, thus showing that the fit of the model is acceptable.

The EFA results in the study and the CFA results are consistent with each other, and the CFA results seem to confirm this. Accordingly, the psychological capital scale consists of three factors (self-efficacy, resilience and optimism), while the cognitive flexibility and employee performance scales consist of one factor each.

Discriminant Validity

After the CFA analysis, the 2-factor model test proposed by Bagozzi, Yi, and Phillips[58] was applied to test the discriminant validity. The chi-

[58] Richard P. Bagozzi, Youjae Yi and Lynn W. Phillips, "Assessing Construct Validity in Organizational Research." *Administrative Science Quarterly*, 36, 3, (1991): 421-458.

square differences of the constrained and unconstrained models were determined and it was seen that the chi-square difference was 3.84. Table 5 illustrates the discriminant validity results.

Table.5. Discriminant Validity Results for Variables

Relationships between variables	**Unconstrained (χ^2/d.f.)**	**Constrained (χ^2/d.f.)**	$\Delta\chi^2$
Self-efficiacy and Resilience	435.32/77	229.14/76	206.18
Self-efficiacy and Optimism	267.49/35	59.70/34	207.79
Self-efficiacy and Employee Performance	324.93/44	117.76/43	207.17
Self-efficiacy and Cognitive Flexibility	334.49/65	126.53/64	207.96
Resilience and Optimism	340.46/35	142.68/34	197.78
Resilience and Cognitive Flexibility	435.34/65	238.02/64	197.32
Resilience and Employee Performance	400.22/44	208.14/43	192.08
Optimism and Cognitive Flexibility	92.78/27	51.95/26	40.83
Optimism and Employee Performance	99.59/14	49.12/13	50.47
Cognitive Flexibility and Employee Performance	220.39/35	105.35/34	115.04

After the data purification process, the average of the questions belonging to each variable was taken and the value of that variable was

created. These average values reflect that variable. Besides this test, Croncbach's Alpha test was performed. It was determined that the Cronbach's alpha values of the scales used in this study were greater than 0.70. The correlation table of the variables, the mean and standard deviation of the variables and the Cronbach alpha value of the variables are shown in Table 6.

As seen in Table 6, there is a moderate correlation between the variables, the standard deviations are below 1 and the reliability values are above the acceptable limits.

In order to check whether the expressions constituting each factor in the structure of the model are related to each other and measure a single conceptual structure, the average variance extracted values and composite reliability values (convergent validity) were examined. When the AVE value is above 0.5 and the CR value is above 0.7, it is possible to say that the validity and reliability of the relevant factor is ensured.[59] In addition, the AMOS-based average variance extracted and composite reliability are close to or above the limit.[60] With all these analyzes, it was determined that the validity and reliability of all factors were at the desired level.

Table.6. Correlation and Descriptive Statistics

[59] Richard P. Bagozzi and Youjae Yi, "On the Evaluation of Structural Equation Models. *Journal of the Academy of Marketing Sciences*, 16, (1988): 74-94.
[60] Claes Fornell and David F. Larcker, "Evaluating Structural Equation Models with Unobservable Variables and Measurement Error." *Journal of Marketing Research,* 15, 2, (1981): 39-50.

Avarage	Standard Deviation		Variables	1	2	3	4	5	6
4,44	0.49	1	Self-efficiacy	(0.73)					
4,26	0.53	2	Resilience	0.68***	(0.72)				
3,58	0.76	3	Optimism	0.42***	.56***	(0.67)			
4,01	0.57	4	Cognitive Flexibility	0.55***	0.62***	0.51***	(0.69)		
4,30	0.60	6	Employee Performance	0.60***	0.62***	0.46***	0.51***	0.56***	(0.77)
Cronbach value				0.86	0.88	0.71	0.81	0.82	0.86
Composite Reliability				0.89	0.88	0.71	0.82	0.82	0.86
Average Variance Extracted				0.54	0.51	0.45	0.42	0.69	0.60

*p <.1, **p < .05, ***p < .01

Parenthesis values are the square root of the Average Variance Extracted.

With the correlation analysis seen in Table 6., the relationship between the variables was examined. In social sciences, a correlation coefficient between r=0-0.3 is considered to indicate a low level of relationship between variables, between r=0.3-0.7 indicates of a medium level of relationship and r=0.7 to 1 indicates a high level of relationship.[61]

In Table 6, it is seen that the relationship between all variables in the model is positive. In this case, an increase or decrease in one of the variables is seen in the other variable in the same direction.

It is seen that, there is a high level of correlation between self-efficiency and resilience variables (r=0,68, p<0,01) and between employee performance and resilience variables (r=0,62, p<0,01). Whereas, there

[61] Saruhan and Özdemirci, "*Bilim, Felsefe ve Metodoloji,*" 248.

is a medium level of relationship between optimism and employee performance (r=0,46, p<0,01).

4.4. Hypothesis Tests and Findings

Structural Equation Model (SEM) and Hierarchical Regression Analysis (HRA) statistical tools were used to test the research hypotheses.

First of all, SEM was tested for the test of the model, and the concept of positive psychological capital in the model was handled as a structure, in line with the theoretical discussions. Positive psychological capital is a second level structure and consists of 3 variables. These variables are self-efficacy, resilience and optimism.

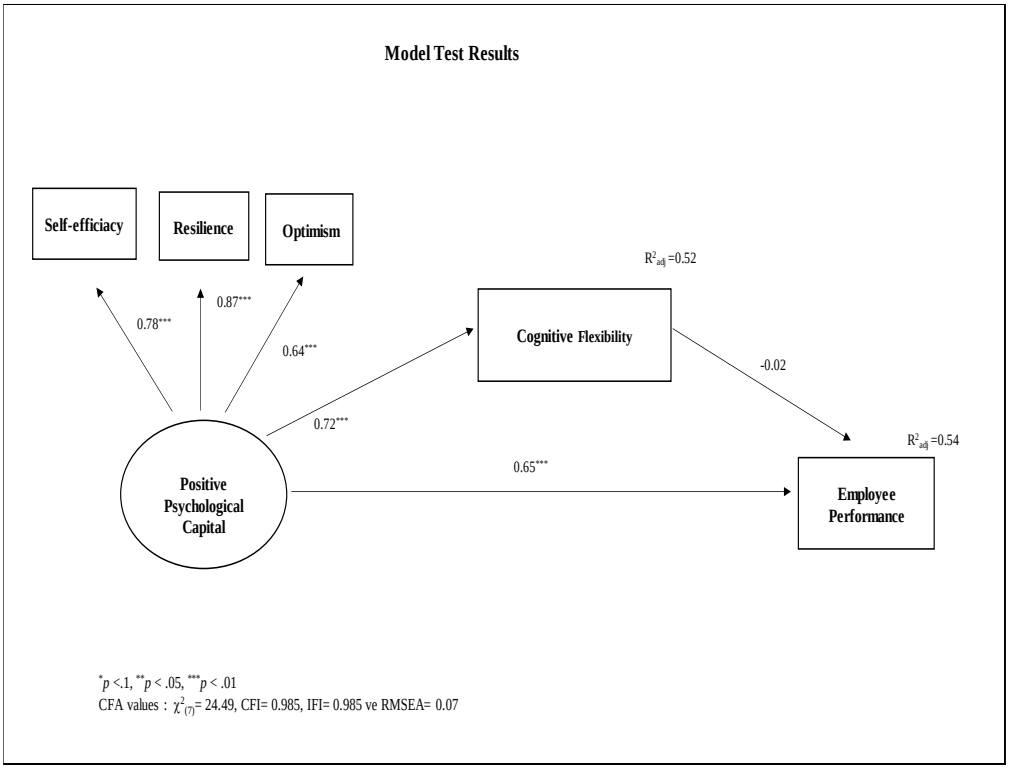


Figure.2. Model Test Results

Tests of Hypotheses with Direct Relationships Between Variables and Findings

The results of the hypotheses testing the direct relationships between positive psychological capital, cognitive flexibility and employee performance are presented below.

As seen in Figure.2, there is a positive statistical relationship between positive psychological capital (β=0.65, p<0.01) and employee performance, and between positive psychological capital and cognitive

flexibility (β=0.72, p<0.01). Therefore, H_1 and H_2 are supported. However, no statistical relationship was found between cognitive flexibility and employee performance (β= -0.02, p >0.1). For this reason, H_3 is not supported.

In Table 7, the results of the hypotheses that are directly related to the variables are seen.

Table.7. Results of Hypotheses with Direct Relationships Between Variables

HYPOTHESIS				Coefficient (β)	p	Results
H1	H1: There is a positive relationship between positive psychological capital and employee performance.	Positive Psychological Capital	Employee Performance	0,65	P<0,01	Supported.
H2	H2: There is a positive relationship between positive psychological capital and cognitive flexibility.	Positive Psychological Capital	Cognitive Flexibility	0,72	P<0,01	Supported.
H3	H3: There is a positive relationship between cognitive flexibility and employee performance.	Cognitive Flexibility	Employee Performance	-0.02	p>0.1	Not supported.

Hypothesis Testing Based on Regulatory Relationship and Findings

H_4: Cognitive flexibility has a moderating effect on the relationship between positive psychological capital and employee performance.

In order to analyze the regulatory (moderating) effect of a third variable on the relationship between any two variables, the effect of the interaction of the regulator and the independent variable on the dependent variable should be looked at.[62] Hierarchical regression analysis was used to test the regulatory (moderating) role of cognitive flexibility.[63]

In the test of the moderating effect of cognitive flexibility between positive psychological capital and employee performance, more information was tried to be obtained by considering all sub-dimension variables of positive psychological capital one by one. During the test, the main effect and the interaction effect were included in the regression analysis and the moderating effect was determined by looking at whether the change in R^2 was significant. In addition, the variables were standardized using the average-centered method by subtracting the variables from their mean values so that the interaction effect was not affected by the correlation.

Table 8. shows the regulatory (moderating) role of cognitive flexibility between positive psychological capital and employee performance.

Tablo.8. Regulatory (Moderating) Effect of Cognitive Flexibility

[62] Saruhan and Özdemirci, "*Bilim, Felsefe ve Metodoloji*," 272.

[63] Julie R. Irwin and Gary H McClelland, "Misleading Heuristics And Moderated Multiple Regression Models." Journal of Marketing Research, 38, (2001): 100-109.

Employee Performance		
	Model 1	Model 2
Main Effects		
Self Efficiacy	0.29***	0.19***
Resilience	0.27***	0.35***
Optimism	0.13***	0.12***
Cognitive Flexibility	0.11**	0.11**
Interactions		
Self Efficiacy*Cognitive Flexibility		-0.28***
Resielence*Cognitive Flexibility		0.11*
Optimism*Cognitive Flexibility		0.14**
R^2	0.46	0.49
R^2_{adj}	0.456	0.489
ΔR^2	-	0.03***
F	95.81***	61.41***

*p <.1, **p < .05, ***p < .01
Values are standardized.

According to the regression analysis, the entry of cognitive flexibility in the model differentiates the relationship between psychological capital and employee performance. In the study, the product of self-efficacy and cognitive flexibility, resilience and cognitive flexibility, optimism and cognitive flexibility were included in the model to analyze the effect of the regulatory variable, and the model was found to be significant ($p<0.01$).

As shown in Table 8, while the interaction between cognitive flexibility and resilience (β=0.11, p<0.1) and optimism (β=0.14, p< 0.05) creates positive effects, the interaction between cognitive flexibility and self-efficacy creates a reverse effect (β=-0.28, p<0.01). The explanatory value (ΔR^2=0.03, p<0.01) of the cognitive flexibility variable, whose regulatory effect was investigated, on employee performance is increased.

As cognitive flexibility increases, the effects of resilience (β=0.11, p< 0.1) and optimism (β=0.14, p<0.05) variables on employee performance increase.

However, as cognitive flexibility increases, the relationship between self-efficacy and employee performance (β =-0.28, p< 0.01) weakens. Therefore, H_4 is partially supported.

Table 9 illustrates the results of all research hypotheses.

Table.9. Results of the Research Hypotheses

HYPOTHESIS				Coefficient (β)	p	Results
H1	H1: There is a positive relationship between positive psychological capital and employee performance.	Positive Psychological Capital	Employee Performance	0,65	P<0,01	Supported.
H2	H2: There is a positive relationship between positive psychological capital and cognitive flexibility.	Positive Psychological Capital	Cognitive Flexibility	0,72	P<0,01	Supported.
H3	H3: There is a positive relationship between cognitive flexibility and employee performance.	Cognitive Flexibility	Employee Performance	-0.02	p>0.1	Not supported.
H4	H4: H4: Cognitive flexibility has a regulatory (moderating) effect on the relationship between positive psychological capital and employee performance.	Cognitive Flexibility	Resilience	0,11	P<0,1	H4 is partially supported
		Cognitive Flexibility	Optimism	0,14	P<0,05	
		Cognitive Flexibility	Self Efficiacy	-0,28	P<0,01	

5) Discussion and Recommendations

Within the framework of competition conditions in the business world, constant changes and uncertainties in environmental factors, the survival, success and preservation of success of businesses seem to depend on the performance of their employees. For this reason, it is critically important to identify and develop the factors that affect employee performance. It is necessary to invest in the most appropriate way defining the resources of the employees in the companies and evaluating the effect of these resources on the performance by correctly.

Accordingly, in this study, the relationships between the factors affecting individual performance were examined. As a result of the study, it is seen that positive psychological capital significantly affected cognitive flexibility and employee performance. However, no statistical

relationship is found between cognitive flexibility and employee performance. It has been understood that cognitive flexibility has a partial moderating effect on the relationship between positive psychological capital and employee performance.

In the literature, the effect of positive psychological capital on performance has been studied in many performance types such as innovative tasks, sales, referrals, production quality, quantity, and in different sampling planes[64]-[65] and it has seen that positive psychological capitals are positively related with these variables.[66] The research results of this study also support the literature. The results of the analysis illustrates that the improvements made in positive psychological sources have a positive effect on performance, supporting the improvable structure of psychological capital.

When the literature studies are examined, it is seen that there are different studies that deal with the relationship between positive psychological capital and cognitive flexibility. One component of the concept of cognitive flexibility is the belief in self-efficacy in communication abilities.[67] Positive psychological capital resilience component helps to show positive adaptation to change and develop cognitive flexibility in order to solve problems and be successful in

[64] Luthans, Youssef,and Avolio, "*Psychological Capital: Developing the Human Competitive Edge".*

[65] Walumbwa, Avolio and Hartnell, "An Investigation of The Relatinships among Leader and Follower,"937-963.

[66] Avey v.d., "Meta-Analysis of the Impact of Positive Psychological Capital on Employee Attitudes," 134.

[67] Martin and Rubin, "A New Measure of Cognitive Flexibility," 623.

challenging situations.[68] The results of this study also support the information in the literature. The positive psychological capital of the employees makes it easier for people to act without hesitation in the face of difficulties, by evaluating alternative solutions for the target, and to adapt to change by increasing their belief and motivation of being successful. Thus, the cognitive flexibility levels of the employees increase.

People with high cognitive flexibility believe in the existence of alternative options when they encounter problems and are open to new ideas.[69] However, it is important to make the right choices as well as having many alternatives for the solution.[70] Cognitive flexibility enables employees to adapt to the new situation, but this adaptation is not always sufficient to improve their performance. Here, other factors that affect performance also come into play. In this area, Campel and Wiernek[71] mention the existence of individual difference determinants that affect performance. In this context, adapting to the new situation alone does not result in performance success.

When the relationship between positive psychological capital, self-efficacy, resilience, optimism and cognitive flexibility variables and the employee performance variable is examined one by one, it is seen that the relationships are positive. In this direction, the independent increase

[68] Daniella D. King, Alexander Newman and Fred Luthans, "Not if, but when we need resilience in the workplace." *Journal of Organizational Behavior*, 37, (2016), 783.
[69] Martin, Staggers and Anderson, "The Relationship Between Cognitive Flexibility with Dogmatism," 279.
[70] Krems, "Cognitive Flexibility And Complex Problem Solving," 208-224.
[71] Campbell and Wiernik, "The Modeling And Assessment of Work Performance," 47-74.

in these resources of the employees ultimately increases the employee performance.

Considering the regulatory (moderating) role of cognitive flexibility in this network of relationships, it is seen that the outcome effects were different from each other. With the introduction of cognitive flexibility, the direction and strength of interaction have changed. According to the findings, as cognitive flexibility increases, the effects of resilience and optimism variables on employee performance increase. However, increasing cognitive flexibility weakens the effect of self-efficacy on employee performance.

a) *Self-efficacy, Cognitive Flexibility and Employee Performance*

When the studies in the literature were examined, no study is found in which the variables of self-efficacy, cognitive flexibility and employee performance were evaluated together.

In this study, it was observed that the relationship between individuals' self-efficacy and performance decreased with the increase in cognitive flexibility. Some remarks can be made about the reasons for this.

In the literature, it is stated that self-efficacy belief can be developed through four specific methods. These are (a) experiencing success, (b) indirect learning, (c) social persuasion/positive feedback, (d) psychological and physiological well-being methods.[72]-[73]

(a1) Experiencing success: Successfully repeating tasks and experiencing success frequently (as the only antecedent providing direct performance information) improves one's self-efficacy belief. But the level of performance

[72] Alexander Stajkovic and Fred Luthans, "Social Cognitive Theory and Self-Efficacy: Going Beyond Traditional Motivational and Behavioral Approaches." *Organizational Dynamics,* 26, 4, (1998): 70.

[73] Luthans and Avolio, "*Psychological Capital: Developing the Human Competitive Edge."* 43.

does not equal the level of self-efficacy, because the estimation of personal effectiveness is a cognitive process involving more factors (perception of environment and ability) than the action performed.[74]

In this context, the person's experience of success while performing their tasks depends on how they use the diagnostic information resulting from this performance in previous tasks. It can be said that using actions that have brought success in the past for new tasks, not being able to produce different strategies, may cause cognitive rigidity instead of cognitive flexibility. Likewise, as cognitive flexibility increases, the ability of individuals to adapt to new situations increases, but it can be said that this does not contribute to the development of self-efficacy. This case supports the result of the study.

(a2) Indirect learning: By observing competent individuals who perform a similar task at the workplace and with high performance, employees' beliefs about their ability to successfully carry out that job in the future, that is, their self-efficacy increases.[75]-[76] However, the increase in cognitive flexibility is not related to indirect learning as cognitive flexibility requires employees to evaluate people and behaviors by understanding that each situation is special and different from another. Accordingly, the result of the study is supported.

(a3) Social persuasion/positive feedback: The employee's self-efficacy belief improves as getting feedback from people who accepted as competent about the job, other workers trust that the person will be successful in job and also positive suggestions from others.[77]-[78] The people with high cognitive flexibility are aware of the need for variability and flexibility in strategies and roles so they turn to theories that promote individual difference, flexibility

[74] Stajkovic and Luthans, "Social Cognitive Theory and Self-Efficacy," 69-70.
[75] Stajkovic and Luthans, "Social Cognitive Theory and Self-Efficacy," 72.
[76] Luthans and Youssef and Avolio, "*Psychological Capital: Developing the Human Competitive Edge,"* 44.
[77] Stajkovic and Luthans, "Social Cognitive Theory and Self-Efficacy," 72.
[78] Luthans, Youssef and Avolio, "*Psychological Capital: Developing the Human Competitive Edge,"* 45.

and openness.[79] In this context, it can be said that the increase in cognitive flexibility does not affect self-efficacy. The result of the study is also supported in this context.

(a4) Psychological and physiological well-being: A positive psychological state, feeling good, being in good physical condition or being sick, under extreme stress affects the level of self-efficacy beliefs.[80]-[81] Cognitive flexibility enables the individual to adapt to new situations rather than incompatibility especially when faced with stressful life events.[82] In this context, there is no link between self-efficacy and cognitive flexibility. As cognitive flexibility increases it cannot be said that self-efficacy improves. This supports our analysis result.

b) Resilience, Cognitive Flexibility and Employee Performance

As the cognitive flexibility levels of the employees increase, they quickly provide the necessary information for problem solving in challenging and unknown situations.[83] By responding correctly and effectively to the new situations[84] improve their ability of cope with changing and adapting, accordingly their psychological capital resilience level increase. The results of the study show parallelism with

[79] Mary Stager and Kenneth A. Leithwood. "Cognitive Flexibility and Inflexibility in Principals' Problem Solving," *Annual Meeting of the American Educational Research Association Conference Paper*. 5.9, (1998): 13.
[80] Stajkovic and Luthans, "Social Cognitive Theory and Self-Efficacy," 72.
[81] Luthans, Youssef and Avolio, "*Psychological Capital: Developing the Human Competitive Edge."* 48.
[82] John P. Dennis And Jillion S. Vander Wal, "The Cognitive Flexibility Inventory: Instrument Development and Estimates of Reliability and Validity." *Cognitive Therapy and Research,* 34, (2010): 243.
[83] Krems, J.F., "Complex Problem Solving," 209.
[84] Dina R. Dajani and Lucina Q. Uddin, "Demystifying Cognitive Flexibility: Implications For Clinical And Developmental Neuroscience." *Trends in Neurosciences*, 38, 9, (2015): 576.

this information in the literature. In the workplace, when the employees use their cognitive flexibility in order to achieve success from challenging situations, the resilience factor of the employee increases. In this way, employees can recover by evaluating themselves, their location and all other factors, and even increase their performance by finding the strength in themselves to reach a higher level and making more effort towards the goal.

c) Optimism, Cognitive Flexibility and Employee Performance

The increase of cognitive flexibility enables people to access new information from their past experiences and mistakes; also supports these people to evaluate the areas where they can be successful and unsuccessful[85] that is by seeing their real capacities direct their energies to the right processes. People with higher level positive psychological capital optimism are taking advantage of the opportunities presented by the current situation[86] improve their abilities and skills and thus increase their chances of future success.[87]

In this context, when cognitive flexibility increases, people's impartial evaluation of current situation conditions and taking actions for the future increase the level of optimism in accordance with the optimism development strategies.

[85] Lei Huang and Fred Luthans, "Toward Better Understanding of the Learning Goal Orientation–Creativity Rel "ationship: The Role of Positive Psychological Capital." *Applied Psychology Rewiew,* 64, 2, (2015): 450.
[86] Stager and Leithwood, "Cognitive Flexibility and Inflexibility in Principals' Problem Solving," 13.
[87] Luthans, Youssef and Avolio, "*Psychological Capital: Developing the Human Competitive Edge,"* 95-96.

People who are cognitively flexible are confident in their ability to communicate effectively. They prone to group work and support open relationships.[88] They also contribute to the establishment of strong social networks. Accordingly, increasing the level of cognitive flexibility helps to break the vicious circle of pessimism with an effective social network and support in the workplace and accelerates the process of developing optimism. At the same time, cognitive flexibility increases employees' optimism intrinsic motivation by improving their communication activities. In this way, people, by gaining strength from internal motivation for success, spend more effort towards the goal in the long run and ultimately increase their performance. The results of the research in this area support the literature.

In this study, the research data were collected only from white-collar workers. This study can be done on the same model by changing the target audience to blue-collar employees. Thus, by comparing and evaluating the results obtained from the data of blue-collar and white-collar employees, valuable data can be obtained to increase performance and contributions to the literature can be made.

The results of this research show the importance of investing in the individual resources of employees in order to increase employee performance in the workplace. In this direction, managers should take into account the individual resources of the employees in the stages of

[88] Stager and Leithwood, "Cognitive Flexibility and Inflexibility in Principals' Problem Solving," 13.

hiring, placement and development in line with the requirements of the job, in order to benefit from the human resources in the business efficiently and to develop the employees.

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