

## THE MEDIATING ROLE OF LEARNING ORGANIZATION IN THE IMPACT OF TRANSFORMATIONAL LEADERSHIP ON GREEN ORGANIZATIONAL BEHAVIOUR: THE CASE OF GROUND HANDLING SERVICE COMPANIES

DÖNÜŞÜMCÜ LİDERLİĞİN YEŞİL ÖRGÜTSEL DAVRANIŞ ÜZERİNDEKİ ETKİSİNDE ÖĞRENEN ÖRGÜTLERİN ARACI ROLÜ: YER HİZMETLERİ ŞİRKETLERİ ÖRNEĞİ

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### ABSTRACT

The aim of this study is to determine the effect of transformational leadership (TL) on green organizational behaviour (GOB) and to define the mediating role of learning organization (LO) in this effect. Today, environmental awareness, i.e., green business, is considered an important factor for all enterprises. Enterprises that use tools and equipment that may harm the environment are expected to be more sensitive to this issue. It is stated that GOB emerge through the efforts of transformational leaders in organizations and that this is possible when the organization has a culture of learning. The example of this research includes white-collar staff from ground handling companies that have been granted an A-type operating licence (shgm.gov.tr.2025b) and a green airport certificate (shgm.gov.tr.2025a) by the General Directorate. The participants' responses to the questionnaires were analyzed using SPSS v30 and IBM AMOS v24 software packages. The results of the analysis showed that TL has a positive effect on GOB. Furthermore, TL was found to have a positive effect on LO. Another finding was that LO have a positive effect on GOB. Finally, it was observed that the relationship between TL and GOB is mediated by LO.

**JEL Codes:** M10, M12, M54.

**Keywords:** Learning Organization, Organizational Behaviour, Transformational Leadership.

### ÖZET

Bu çalışmanın amacı, dönüşümcü liderliğin yeşil örgütsel davranış üzerindeki etkisini incelemek ve bu etkide öğrenen örgütlerin aracılık rolünü belirlemektir. Günümüzde, çevreye karşı duyarlı olmak yani yeşil işletme konusu tüm işletmeler için önemli bir unsur olarak değerlendirilmektedir. Özellikle çevreye zarar verebilecek araç ve ekipmanlar ile işlerini yürüten işletmelerin bu konuda daha hassas olması beklenmektedir. Yeşil örgütsel davranışların işletmelerin dönüşümcü liderlerinin çabaları ile ortaya çıkacağı ve örgütün öğrenmeye açık bir kültüre sahip olması ile mümkün olacağı ifade edilmektedir.

Bu çalışmanın örneklemini, Sivil Havacılık Genel Müdürlüğü tarafından verilen A tipi iş ruhsatı (shgm.gov.tr.2025b) ve yeşil havaalanı sertifikası (shgm.gov.tr.2025a) sahibi yer hizmetleri şirketlerinin beyaz yakalı çalışanlarından oluşmaktadır. Katılımcıların anketlere verdikleri yanıtlar SPSS v30 ve IBM AMOS v24 paket programları ile analiz edilmiştir. Elde edilen bulgular, dönüşümcü liderliğin yeşil örgütsel davranış üzerinde olumlu etkisi olduğunu göstermektedir. Ayrıca, dönüşümcü liderliğin öğrenen örgütler üzerinde olumlu etkisi olduğu görülmüştür. Diğer bir bulgu ise, öğrenen örgütlerin yeşil örgütsel davranış üzerinde olumlu etkisi olduğu görülmüştür. Son olarak, dönüşümcü liderlik ile yeşil örgütsel davranış arasındaki ilişkinin öğrenen örgütler tarafından aracılık edildiği görülmüştür. Son olarak, dönüşümcü liderlik ile yeşil örgütsel davranış arasındaki ilişkide öğrenen örgütlerin aracılık etkisi olduğu tespit edilmiştir.

**JEL Kodları:** M10, M12, M54.

**Anahtar Kelimeler:** Öğrenen Örgütler, Örgütsel Davranış, Dönüşümcü Liderlik.

## Introduction

Since the beginning of the existence of human life, they have tried to sustain their lives by using natural resources. During this period, the protection of resources has come to the agenda due to the decrease in natural resources. Especially after the industrial revolution, the increase in environmental pollution, the decrease in natural resources and the damage to the environment have caused the eyes to turn to the environment and natural resources. In this context, a new concept has emerged in the literature as GOB and this concept has started to be put on the agenda in all enterprises engaged in production. Ones and Dilchert (in press) define employee green behaviours as behaviours that are related to and promote environmental sustainability (Rana & Punia, 2014, p. 4). In a different definition, GOB could enhance the environmental status of enterprise and contribute to the competitive advantage of enterprise. In addition, green behaviour among employees enhance the environmental quality and contribute to the sustainable social development (Zhu, et al., 2021, p. 14). For this reason, GOB is also considered an important factor for enterprise to gain competitive advantage.

Enterprises conduct their production and service processes with the methods they have determined since their establishment. These methods may continue to be used for many years, but may need to be revised according to the conditions of the day. In this context, enterprises should transition to management and production methods that are suitable not only for increasing their revenues but also for internal and external environmental conditions. During this transformation, enterprise leaders should have the competences that can ensure transformation, overcome possible resistances and obstacles and motivate employees to transformation. These characteristics define the transformational leader. Transformational leaders transform people's personal values to support the vision and goals of the organization by fostering an environment where relationships can be built and by creating a climate of trust (Cetin & Kinik, 2015, p. 520). Transformational leaders create trust in their teams, motivate them and ensure that behaviours in line with the vision and mission of the enterprise are demonstrated. GOB requires the transformation of employees into a new behaviour. Therefore, it is thought that the transformational leader plays a critical role in this process.

Change and innovations require learning different subjects. Therefore, the start of a new process and the successful execution of this process requires knowing the details about that process. Employees and organizations should be open to learning if they are planning to change and innovate. Organizational learning is described as the change process that happens in an organization's knowledge base based on its past actions. It includes creating, keeping, and sharing knowledge (Odor, 2018, p. 3). LO are dynamic structures that are open to innovation, follow the agenda and can easily adapt all the changes in the environment to their own systems. This dynamism becomes a mission of the organization starting from its employees.

Within this context, in order to implement new behaviours such as GOB in organizations, organizations need employees who are open to learning new issues and transformational leaders who will lead this transformation. Transformational leaders exert a significant influence on the acceptance and adoption of new practices by employees within an organization. This effect can be further strengthened by the employees' willingness to learn new practices and the organization's mission of learning.

According to the above explanations and study results, it might be LO has a mediating role in the relationship between green organizational behavior and TL. Therefore, the basic aim of this study is to examine the effect of TL on GOB and to clarify the role of LO as a mediator among the variables.

### **The Concept of GOB**

In recent times, the human-induced effects of climate change, namely extreme weather events and ecosystem damage, have become increasingly apparent. In fact, since the 1980s, humanity's demand on the environment has greatly outstripped the biosphere's capacity to regenerate itself. Human actions, particularly industrial production, electricity generation, transportation, and agriculture, are causing the rapid exhaustion of resources, pollution, and loss of biological diversity, which in turn increasingly threaten the long-term survival of biological life. These trends are prompting countries around the world to commit to significant reductions in carbon emissions and ambitious targets for protecting biodiversity. In this context, ecological sustainability has also become an urgent strategic and ethical imperative for businesses - responsible custodians of the nature to ensure the continuation of the quality of life on earth. Green behaviour is defined in environmental psychology literature as 'behaviour that causes as little harm to the environment as possible and even benefits the environment'. Many organizations today integrate environmental sustainability goals into their strategies. Therefore, employee behaviour can be evaluated in relation to its contribution to these goals (Zacher et al., 2023, p. 466).

Norton et al. (2015) expanded the definition of organizational culture to include the practical and sensory aspects of conducting work with the aim of protecting and preserving the environment. There is general agreement that green organizational culture can be defined as a set of shared belief systems, norms, attitudes, values, and practices that enable organizational members to behave appropriately towards the external environment in their economic activities. Green organizational culture is a highly debated topic in society.

Due to globalization, different economies have realised the benefits of adopting green trends and integrating these practices into their corporate cultures. Many organizations are transforming their values and practices to adapt to new circumstances, such as environmental problems, environmental behaviour, and attitudes (Liu & Lin, 2020, p. 2). When an enterprise with a green organizational identity faces external pressure to deal with environmental issues, creative responses to this pressure generate new and useful ideas that further promote the organization's green creativity capability. In turn, these new and useful green ideas can contribute to green innovation (Song & Yu, 2018, p. 137).

Ones & Dilchert (2012) define GOB as the activities and attitudes of people that are related to and support environmental sustainability. Therefore, GOB consists of acts like turning off the lights at the end of the workday (i.e., save energy), teleconferencing instead of traveling to meetings (i.e., use resources efficiently), editing documents digitally instead of printing them (i.e., prevent waste), and using drafts on unused paper (Norton et al., 2017, p. 3). However, Ones and Dilchert (in press) describe workers' green behaviours in terms of actions that are connected to and enable environmental sustainability (Rana & Punia, 2014, p. 4). Green organizational citizen behaviour describes the willingness of people to engage in organizational management without receiving rewards in order to achieve environmental well-being (Meng et al., 2022, p. 4). GOB may enhance the environmental credibility of enterprises and assist them in gaining a competitive advantage.

In addition, green behavior of employees will improve the life environment and contribute to the sustainable growth of society (Zhu et al., 2021, p. 14).

Studies related to GOB can be found in the literature. For example, Song & Yu (2018, p. 146) found that green innovation strategies enable companies to gain a sustainably competitive advantage. Green innovation strategy, focusing on green corporate identity, helps enterprises to increase their awareness of green innovation. Aboramadan et al. (2022, p. 8) determined that green leaders have a significant positive impact on the organizational behaviour of their employees. Akbaba (2019, p. 654) found that, GOB is significantly affected by organizational justice. Cantor, Morrow, and Montabon (2012) find a positive relationship among perceptions of corporate support for the environment, participation in environmental management, and initiatives that encourage environmentally friendly behaviour. It is noted that incentives, resources, and changes in behaviour at the organizational level play important roles in promoting mandatory and voluntary GOB (Norton et al., 2015, p. 110). Zhu et al., (2021, p. 2) found that, green human resource management can significantly affect GOB in the workplace and that organizations can effectively enhance employees' environmental behaviors via human resource management by communicating the organization's green values.

Abdou and others (2023) identified that green inclusive leaders have a significant and positive effect on workers' green job commitment and green inclusive leadership, and that this leadership motivates workers to actively participate in green organizational citizenship behaviours. Additionally, green job commitment and green organizational identity play an important role in increasing employees' participation in green organizational citizenship behaviour. Specifically, green job commitment and green organizational identity emerge as important facilitators in the relationship among green leadership and green citizenship behaviour.

GOB is related to psychological capital, utilization of employee strengths, positive leadership and passion for work. Although there has been little emphasis on positive (organizational) psychology in the GOB literature, the "positive" concepts underlying positive psychology have been focused on the determinants of GOB. It is argued that exploring positive ways to promote GOB is a worthwhile endeavor (Meyers & Rutjens, 2022, p. 2). Depending on the psychological state, GOB emerges as voluntary and mandatory GOB. Voluntary green employee behavior is defined as behaviors that exceed the expectations of the organization and are based on the personal initiative of the employees. In this context, voluntary green behaviors in the workplace are behaviors that are not systematically included in job descriptions, and if they are performed, no reward is given to the employee. It is possible to define these behaviors as extra role behaviors. Mandatory green employee behavior is defined as green behavior that is part of the requirements and responsibilities of the job. This behavior is similar to task performance that contributes to the job. This behavior can be expressed as a compulsory behavior in order for employees to be more sensitive to the environment and to use resources more efficiently within the organization (Yiğit, 2017, p. 68). Research on green behavior in the workplace and home life has led to the general conceptualization of GOB as voluntary behavior. However, organizational psychologists suggest that not all GOB is voluntary. In this context, Ones & Dilchert (2012) present a five-category job performance-based categorization of GOB: (1) working sustainably, (2) conserving resources, (3) influencing others, (4) taking initiative, and (5) avoiding harm. These categories implicitly accept the existence of voluntary as well as mandatory behaviors, but allow a behavior to belong to more than one group (Norton et al., 2015, p. 105).

GOB can be evaluated in two steps. Firstly, it can be assessed by simply being asked to what extent employees fulfil their organizational roles and responsibilities in an environmentally friendly approach. Secondly, it can be evaluated by asking employees to what extent they perform certain pro-environmental behaviours, i.e. to what extent they recycle, avoid waste and conserve water, energies or resources (Norton et al., 2017, p. 5). Although GOB is implemented voluntarily and compulsorily and can even be measured, it requires enterprise to be LO.



In summary, organizations need to improve themselves and their employees by learning new situations and approaches. The best way of this development is to become LO. In recent years, organizations have actively adopted organizational learning strategies to improve environmental performance and promote sustainable business behaviour within employees. Green organizational learning calls for the knowledge and skills related to environmental sustainability to be acquired, disseminated and applied within an organization. Organizational learning requires the cumulative learning, dissemination and implementation of knowledge and understanding throughout the organization. When enterprises prioritise green organizational learning, they effectively develop a sustainable culture and provide forums where workers can share their views, experiences, and best practice related to environmental responsibility (Alhemimah et al., 2024, p. 1143). GOB is related to organizations being open to learning and having transformational leaders within the organization. TL is described as a leadership behaviour where the fundamental purpose of leadership is to provide staff with a clear sense of vision, inspiration and motivation, as well as supporting their development needs in order to achieve the organization's environmental goals (Imam & Astini, 2022, p. 3). In light of this information, the concepts of TL and LO are related to GOB. Therefore, for employees to voluntarily or mandatorily participate in GOB, they must learn about the subject, and transformational methods must be applied by the leader to facilitate the emergence of this new behaviour.

### **The Concept of TL**

In a rapidly moving world, organizational leadership is becoming increasingly important and recognised as a critical key success factor. Whatever their role, they must know how to affect them, motivate others to work, and take responsibility for results (Korejan & Shahbazi, 2016, p. 454). As a term, the word “transform” means to totally change the appearance or character of something or someone, especially to improve that thing or person. Transformational leaders create an environment where relationships can be established and trust can be built, thereby transforming people's personal values to support their organization's vision and goals (Cetin & Kinik, 2015, p. 520). TL not only increases followers' maturity and ideal levels but also enhances their efforts toward success, self-actualization, and the well-being of others, the organization, and society. When a leader helps followers become more innovative and creative, they exhibit intellectual stimulation behaviors. Leaders exhibit individualized evaluation when they pay attention to their followers' development needs, support their development, and provide coaching (Bass, 1999, p. 11).

Moreover, TL is associated with both followers' personal results and organizational results. Studies have also demonstrated that TL impacts organizational conditions. Due to its effect on both personal and organizational results, TL is essential in all organizations (Givens, 2008, p. 4). Although there are different definitions of TL, it gives the same results in terms of meaning. For example, TL describes leadership that attempts to generate ideas and new viewpoints to establish a new path of growth and prosperity for the organization. TL activities allow organizations to enhance their performance in a complex, unpredictable and tumultuous environment. TL factors can be a source of competitive advantage for a company when they complement other leadership practices (Korejan & Shahbazi, 2016, p. 455). Bass (1985) defined TL as a way of encouraging organizational employees to perform beyond expectations (Rafferty & Griffin, 2004, p. 331). Transformational leaders have also been described as visionaries who instill trust and respect in their followers. This vision of leadership has been a central concept in leadership studies and has stimulated leadership studies. As widely accepted, studies have shown that transformational leaders encourage their followers to achieve higher performance, make greater efforts, and show greater loyalty than other types of leaders (Popper et al., 2000, p. 268).

Rafferty & Griffin (2004, p. 347) stated that TL has five factors: vision, inspirational communication, intellectual stimulation, supportive leadership and personal recognition. Also Bass

(1985) analyzed TL by developing the Multifactor Leadership Questionnaire (MLQ). The MLQ includes four TL factors that measure the following effects of the transformational leader:

- Idealized effect: Idealized leaders place the needs of other people before their own personal interests, refrain from using force to achieve personal interests, demonstrate high morals, and establish challenging targets for their supporters. When these behaviors are combined, they make leaders role models for their supporters.
- Inspirational motivation: Refers to the ways in which transformational leaders motivate and inspire those around them, often by providing meaning and challenge.
- Personalised assessment: This represents the leader's sustained focus on seeing each person as an individual and acting as a coach and mentor who constantly strives to develop the potential of their followers.
- Intellectual encouragement: This refers to the leader's attempts to encourage their followers to be innovative and creative, and to encourage them to question assumptions, reframe problems, and develop new ways of thinking (Bass, 1999, p. 11).

They have the capacity to encourage commitment to a common goal, motivate, and inspire. Furthermore, experimental studies have suggested that transformational leaders are better at creating culture than other leaders (Givens, 2008, p. 6). In addition to the characteristics of transformational leaders mentioned above, they should provide the necessary information about GOB to the employees in order to create a GOB culture in the organization. In order for GOB to be implemented as a corporate culture, top level managers should also show TL behaviors. Changes are made to the day-to-day activities of the institution that are consistent with this message (Bass, 1999, p. 16). This leads to changes in the organizational culture. Similar to GOB, the concept of LO can be developed into a corporate culture by transformational leaders. In this context, transformational leaders play important roles for the emergence of GOB and LO. In addition, in order for new concepts to be implemented in businesses, the enterprise must have a culture that is open to learning. Enterprises that are closed to learning and innovation will have difficulty in changes in their working styles and organizational structures. Therefore, in order for new concepts to be implemented in enterprises, there must be a willingness to learn that starts with top management leaders. GOB is considered as a new concept. Therefore, for GOB to emerge in any enterprise, there must be transformational leaders and a corporate culture that is open to learning.

### The Concept of LO

The rapid developments caused by globalization have forced organizations to adapt to these rapid developments. Organizations, as open systems, are more affected by the environment and find themselves in a global competition. In an environment characterized by uncertainty and intense international competition, they have been forced to ensure a reliable flow of information and make the right decisions. In order to make correct and quick decisions, organizations must have a healthy and continuous learning ability. Continuous success in a changing and evolving world is possible not only by accepting and implementing changes in the environment, but also by creating new opportunities and developing the ability to learn by evaluating past successes and failures. Successful organizations are those that have succeeded in implementing the learning process continuously and dynamically (Öneren, 2012, p. 164). Organizational learning refers to all the methods, mechanisms, and processes used within an organization to achieve learning (Odor, 2018, p. 2). For example, learning and development systems may focus on more formal programs or day-to-day work experiences, team meetings and short-term assignments. Other methods include encouraging motivation among employees to learn and share knowledge, developing learning competencies, creating opportunities for informal sharing and fostering a supportive learning culture (Darwin, 2017, p. 60). Organizational learning comes in the form of single-loop, double-loop and triple-loop learning. Single-loop learning, which consists of becoming better at something you are already able to do. Double loop learning is learning that results in a change in values,

strategies and assumptions. Triple loop learning is impossible to learn in a given context. It implies the creation or acceptance of new values in the theory used as well as new strategies in the learning process (Jensen, 2005, p. 56). Organizational learning start with individuals learning within the organization. However, there are differences between individual learning and organizational learning. Organizational learning requires exploring complex and difficult issues from multiple perspectives. In individual learning, assumptions are suspended and a single perspective is used instead of multiple perspectives. In this context, individual learning contributes to the learning of the whole organization but does not fully serve this purpose (Örtenblad, 2001, p. 130). There are some important features that distinguish LO from other organizations. For example, in LO, the learning function is seen as an integral part of every job that employees do. Learning is recognized as a process rather than an instantaneous event. However, it is believed that individuals will change their organizations while improving themselves. The LO also learns from itself, and employees educate the organization about innovations. In LO, it is accepted that individuals are creative and that they will restructure the organization (Erigüç & Balçık, 2007, p. 83).

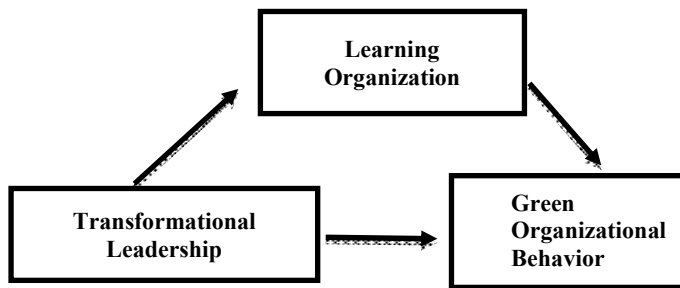
Some definitions of LO are as follows. According to G. Calvert, M. Sandra and L. Marshal, LO are organizations that are implementers of different learning strategies and tactical ideas. According to E. C. Nevis, A. J. Dibella and J. M. Gould, LO are the process or capacity to improve or rebuild performance in organizations on the basis of experience (Öneren, 2012, p. 166). Senge et al. (1999) define organizational learning as a system that includes activities such as new management ideas, innovations in infrastructure, and creating new methods and tools to change the manner in which jobs are done (Rowley & Gibbs, 2008, p. 366).

According to both the literature review on the concept and the inferences from the definition of the concept, we can summarize the disciplines that constitute LO as follows.

- Systems Thinking: Seen as a complementary discipline that brings together the other four disciplines.
- Personal Mastery: The discipline of clarifying and deepening our personal views, aligning our energy, and not losing sight of reality.
- Mental Models: A set of assumptions and generalizations that influence how an individual understands and makes sense of an organization.
- Creating a shared vision: Working together towards a common goal to paint a picture of the future.
- Team learning: Recognises teams as the basic unit of learning. It refers to learning and collective thinking that occurs within teams through dialogue and discussion.

GOB in enterprises emerges with changes to be done in the organizational culture and learning new things with these changes. Learning something new occurs when organizations and individuals are open to learning. In this context, a leader is needed for the organization and individuals to learn. This leader should have the necessary skills to transform the organization. The roles of leaders in organizations as designers, teachers and managers are essential elements of LO. As designers, leaders are responsible for creating a foundation for core values and organizational goals. The second role of leaders is that of teachers. In a LO, the leader serves as a coach to help people in the organization uncover their mental models, identify underlying assumptions and develop thinking approaches to problem solving. Leaders are managers of their mission. They are responsible for upholding the mission and ensuring that institutional values are understood and practiced (Giesecke & Mcneil, 2004, p. 66).

According to the above explanations and study results, it might be LO has a mediating role in the relationship between green organizational behavior and TL. Within this framework, the basic aim of the current study is to determine the effect of TL on GOB and the mediating role of LO among the variables. The study hypotheses and the research model are as below.



**Figure 1.** *Research Model*

**H1:** TL positively impact GOB.

**H2:** TL positively impact the LO.

**H3:** LO positively impact GOB.

**H4:** LO mediate the relationship between TL and GOB.

### Material and Methods

This study was conducted using quantitative research design. Data were collected through an online survey and analysed using the Structural Equation Modelling (SEM) approach (Little et al., 2007, p. 212). For data analysis, SPSS v30 software was used for pre-tests and descriptive statistics, while IBM AMOS v24 software was employed for SEM and CFA analyses.

### Study Population, Sample and Ethical Permissions

The data for this research was collected from employees of ground handling companies that have Type A operating licences (shgm.gov.tr.2025b) and green airport certificates (shgm.gov.tr.2025a) issued by the Turkish Civil Aviation Authority. The population of this study consists of white-collar employees in ground handling companies operating in the aviation sector and having a green enterprise certificate. Simple random sampling method will be used in the research. The purpose of this method is to include everyone who wants to be part of the survey. The sample selection process keeps going until the sample size is reached. This method saves a lot of time and money (Ural & Kılıç, 2005). In order to determine the number of white-collar employees working at the stations of ground handling companies with green enterprise certificate, human resources managers of the companies were contacted. Seasonal, permanent and part-time working systems are applied in the related enterprises. In our research, the number of permanent white-collar employees was included. In the information received, it was calculated that the number of white-collar employees was 4800 people. If the population size is 4800 people, 357 participants should be achieved with a sampling error of  $p=0.5$  (Yazıcıoğlu & Erdoğan, 2004, p. 182). In this study, 362 participants were included in the analyses. Arel University Rectorate, Ethics Committee Decision was taken with the decision dated 24.01.2025, numbered 2025/02 of the Presidency of the Publication Ethics Committee.

### Data Collection Tools

**GOB Scale:** Single dimensional, ten-item scale developed by Boiral & Paillé (2012) and later used by Kuzgun (2022) in his doctoral thesis was used. (Although the original scale has 3 dimensions, it was considered a single dimension as a result of the analyses).

**TL Scale:** A seven-item, one-dimensional scale developed by Berger et al. (2012) and adopted by Çetin (2024) in his master's thesis was used.

**LO Scale:** Single dimensional, seven -item scale prepared by Watkins and Marsick (1997, 2003) and Marsick (2004) and finally used by Şeref (2022) in his doctoral thesis was used. All scale questions are based on a 5-point Likert scale (1 = Strongly Disagree, 5 = Strongly Agree).



## Findings

During the analysis stage, factor analysis, validation and reliable analysis were performed. Before proceeding to this stage, the normality of data distribution was examined. For this purpose, skewness and kurtosis values were examined and found to be between -1.5 and +1.5. Based on these findings, it was concluded that the data showed a normal distribution (Tabachnick & Fidell, 2007: 80-81). Content validity, construct validity, and reliability analyses were conducted for the validity and reliability analyses of the scale. In the analyses,  $p < 0.05$  was accepted as the level of statistical significance. The reliability test results of the scales are presented in Table 1. A Cronbach's Alpha value of  $0.80 \leq \alpha < 1.0$  indicates that the scale is considered to have high reliability (Terzi, 2019:13).

**Table 1: Reliability Analysis Results**

Scales	Cronbach's Alpha	Number of Items
GOB	0.949	10
TL	0.923	7
LO	0.946	7

Analyses of demographic variables are presented in Table 2. Most of the participants (62.2%) are male employees. In terms of age, it is seen that 31-40 age range (44.8%) is the majority. It was determined that 58.0% of the participants were married and 34.3% were university graduates. The number of employees working between 11-15 years was found to 31.8% in terms of working period.

**Table 2: Participant Information**

<b>Gender</b>	<b>Female</b>	<b>137</b>	<b>%37.8</b>
	Male	225	%62.2
<b>Age</b>	16-20	9	%2.5
	21-30	98	%27.1
	31-40	162	%44.8
	41-more than 41	93	%25.7
<b>Marital status</b>	Married	210	%58.0
	Single	152	%42.0
<b>Education</b>	High School	78	%21.5
	Associate Degree	104	%28.7
	University	124	%34.3
	Master's degree	52	%14.4
	Doctorate	4	%1.1
<b>Employment Period</b>	1-5	65	%18.0
	6 -10	92	%25.4
	11 -15	115	%31.8
	16 -20	80	%22.1
	21 and more than 21	10	%2.8

The data analysis followed a two-stage method as outlined by Anderson and Gerbing (1992). In the first stage, the data's prerequisites, such as common method bias and factor analysis, were assessed. Confirmatory Factor Analysis (CFA) was conducted before examining the structural validity of the scales. The goodness of fit indices derived from the CFA of the scales are presented in Table 3.

**Table 3: CFA Goodness of Fit Values of Scales**

	$\chi^2/df$ <5	AGFI >.85	GFI >.80	CFI>.90	NFI >.90	SRMR <.08	RMSEA <.08
<b>TL</b>	3.815	0.904	0.908	0.921	0.928	0.079	0.079
<b>LO</b>	3.541	0.896	0.899	0.905	0.911	0.078	0.077
<b>GOB</b>	2.956	0.915	0.905	0.925	0.931	0.079	0.078

To further assess discriminant validity in the research, the procedures recommended by Netemeyer et al., (1990) were followed. According to these guidelines, the root square of the Average Variance Extracted (AVE) for every variable should be bigger than the correlation coefficient between the variables. Furthermore, for convergent validity, AVE, factor loadings and composite reliability (CR) coefficients were assessed to ensure that they met the agreed thresholds recommended by Fornell and Larcker (1981) (AVE and Factor loadings should be greater than 0.50 and CR should be greater than 0.70). The outcomes of these tests are given in Tables 4 and 5.

**Table 4: Measurement Model Results**

Variables	Items	Factor Loadings	CR	Alpha	AVE
TL	TL1	0.651	0.877	0.865	0.507
	TL2	0.544			
	TL3	0.728			
	TL4	0.695			
	TL5	0.744			
	TL6	0.782			
	TL7	0.808			
LO	OG1	0.505	0.900	0.886	0.568
	OG2	0.786			
	OG3	0.881			
	OG4	0.864			
	OG5	0.765			
	OG6	0.715			
	OG7	0.698			
GOB	GOB1	0.515	0.910	0.844	0.509
	GOB2	0.641			
	GOB3	0.734			
	GOB4	0.598			
	GOB5	0.635			
	GOB6	0.840			
	GOB7	0.753			
	GOB8	0.620			
	GOB9	0.892			
	GOB10	0.813			

As shown in the table above, the values satisfy the criteria set by Fornell & Larcker (1981). The correlation coefficients and other descriptive statistics for the variables are provided in Table 5.

**Table 5: Correlation Analysis Results**

Variables	SD.	Mean	1	2	3
1.TL	0.899	3.454	<b>(0.712)</b>		
2.LO	0.951	2.895	0.318***	<b>(0.754)</b>	
3. GOB	1.018	3.251	0.215**	0.184**	<b>(0.713)</b>

\*\*\* $p < 0,001$ ; \*\* $p < 0,01$ ; Bold values in parentheses =  $\sqrt{\text{AVE}}$

The correlation analysis results revealed that TL has a positive relationship with both LO ( $r = 0.318$ ;  $p < 0.001$ ) and GOB ( $r = 0.215$ ;  $p < 0.01$ ). Additionally, positive relationship was found between LO and GOB ( $r = 0.184$ ;  $p < 0.01$ ). Furthermore, the  $\sqrt{\text{AVE}}$  values were found to exceed the correlation coefficients between variables. Based on these findings, it can be summarised that the study fulfils the full criteria for convergent and discriminant validity. Therefore, it is clear that the data successfully fulfils the two-step approach proposed by Anderson and Gerbing (1992).

### Hypothesis Tests

Research hypotheses were tested according to the model results generated by the AMOS v24 statistical programme. The goodness of fit values for the model were as follows: CMIN/df = 2.965; AGFI = 0.905; GFI = 0.912; CFI = 0.921; RMSEA = 0.078; SRMR = 0.079. These values indicate that the main model exhibited good goodness of fit (Hinkin, 1988; Groskurth, Bluemke, & Lechner, 2024). The results are presented in Table 6.

**Table 6: Hypothesis Test Results**

Path Analysis	$\beta$	Critical Ratio	Significance
TL $\rightarrow$ GOB	0.285	5.283	0.000
TL $\rightarrow$ LO	0.328	6.120	0.000
LO $\rightarrow$ GOB	0.185	4.852	0.008

The hypothesis test findings show that TL has a positive and significant impact on both GOB ( $\beta = 0.285$ ;  $p < 0.001$ ) and LO ( $\beta = 0.328$ ;  $p < 0.001$ ). Additionally, LO has a positive and significant effect on GOB ( $\beta = 0.185$ ;  $p < 0.01$ ). Based on these findings, the following hypotheses were accepted: “H1: TL positively impact GOB,” “H2: TL positively impact LO,” and “H3: LO positively impact GOB.”

The bootstrapping method was used to evaluate the mediation effect in this study. The results of the mediation effect analysis conducted using the bootstrapping method are presented in Table 7.

**Table 7: Mediating Analysis Results**

Path Analysis	Direct Effect	Indirect Effect	Total Effect
TL $\rightarrow$ LO $\rightarrow$ GOB	0.285***	0.061*	0.346***

\*\*\* $p < 0,001$ ; \* $p < 0.05$ ; Bootstrapping sampling = 5000

As shown in Table 7, the indirect effect parameter in the analysis performed with the bootstrapping method for the TL  $\rightarrow$  LO  $\rightarrow$  GOB path ( $\beta = 0.061$ ;  $p < 0.05$ ). According to these results, it was determined that LO mediates the relationship between TL and GOB. Accordingly “H4: LO mediate the relationship between TL and GOB” hypotheses was accepted.

## Result

This research investigates the effect of the TL on GOB and the mediation effect of LO in this relationship. The sample of this study includes workers from ground handling companies that have Type A operating licences (shgm.gov.tr.2025b) and green airport certificates (shgm.gov.tr.2025a) issued by the Turkish Civil Aviation Authority. The population of this study consists of white-collar employees in ground handling companies operating in the aviation sector and having a green enterprise certificate. Simple random sampling method will be used in the research. In order to determine the number of white-collar employees working at the stations of ground handling companies with green enterprise certificate, human resources managers of the companies were contacted. Seasonal, permanent and part-time working systems are applied in the related enterprises. In our research, the number of permanent white-collar employees was included. In this study, 362 participants were included in the analyses. This study was conducted with quantitative research method. The responses were obtained through an electronic survey and analysed using structural equation modelling. Structural equation modelling was chosen due to its ability to test multivariables together and produce more effective results in mediation analysis (Little et al., 2007, p. 212). In addition, SPSS v30 software was utilised for pre-tests and the determination of descriptive statistics, while IBM AMOS v24 software was used to conduct SEM and CFA analyses. As a outcome of the analyses conducted with the obtained data, the following findings were identified.

The roles of leaders in organizations as designers, teachers and managers are essential elements of LO. As designers, leaders are responsible for creating a foundation for core values and organizational goals. The second role of leaders is that of teachers. In a LO, the leader serves as a coach to help people in the organization uncover their mental models, identify underlying assumptions and develop thinking approaches to problem solving. Leaders are managers of their mission. They are responsible for upholding the mission and ensuring that institutional values are understood and practiced (Giesecke & Mcneil, 2004, p. 66). According to the support from the literature, hypothesis 1 “TL positively impacts GOB” was accepted. According to this result, it is concluded that leaders play important roles in the formation and emergence of GOB in enterprises. Also, hypothesis 2 “TL positively impacts the LO” was accepted. The results of hypothesis 1 and 2 are consistent with the literature.

The concept of a LO can focus on more formal programmes or daily work experiences, team meetings and short-term assignments. It also includes fostering motivation to learn and share knowledge among employees, improving their learning competences, creating opportunities for informal sharing, and promoting a supportive learning culture (Darwin, 2017, p. 60). According to the support from the literature, hypothesis 3 “LO positively impacts GOB” was accepted. The results of hypothesis 3 is consistent with the literature.

In the literature, no study has been reported to determine that LO mediate the relationship between TL and GOB. In order to contribute to the literature, hypothesis 4 ‘LO mediates the relationship between TL and GOB’ was formulated and accepted.

## Discussion Conclusion and Recommendations

Depending on the results of the analysis, TL is critical in the creation, acceptance, and implementation of all new processes within the organization. GOB is very popular today and is seen as a factor that increases the competitiveness of enterprises. This approach, which emerged with the aim of protecting the environment and nature, also reduces the financial burdens of enterprises. Therefore, GOB both increases competitiveness and ensures that expenses are kept under control. In this context, GOB is accepted as a new management style for enterprises.

Transformational leaders have important roles to perform in the implementation of GOB. Innovations and changes within the organization may be met with resistance from employees. It is possible to eliminate this resistance with transformational leaders. Transformational leaders are



individuals who are trusted by their followers and set an excellent example through their actions. Therefore, transformational leaders must play an active role to ensure that changes and innovations do not cause fear and anxiety among employees.

Companies that want to change must be open to learning new things and willing to reflect what they learn in their practices. If there is no learning target in the corporate culture, change and development are not possible in that enterprise. Therefore, the enterprise must be open to learning in order to adapt to change or new ways of doing business. In summary, it can be said that transformational leaders play an important role in the implementation of new ideas and methods and that LO support this role.

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