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The Improving Role of Digital Leadership in the Impact of Social Loafing on Job Performance

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ABSTRACT

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Digital leadership, Social loafing, Job performance, Digital transformations

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It is possible to define digital leadership as a type of leadership that is informed about digital technologies that help the digital transformation of employees and businesses and is also fed by modern leadership theories. The concept of digital leadership has come to the fore, particularly with Industry 4.0. Digital leadership is seen as an element that positively affects organizational culture and helps the development of the organization. Following the Covid-19 pandemic, businesses have experienced a considerable digital transformation, and it has been realized that digital leadership is now inevitable for businesses. Digital transformation is expected to contribute to the productivity and production of enterprises. The present study focused on the ability of digital leadership to avoid social loafing, which is negative organizational behavior. In particular, the extent to which job performance losses caused by social loafing were moderated by digital leadership was measured. In this regard, questionnaire forms were prepared and sent to 308 people. The collected data were interpreted by means of the Smart PLS program, and the results were obtained. In this respect, it is found that digital leadership has a moderating impact on the effect of social loafing on job performance. It is thought that the source of this effect could be explained in accordance with Social Impact Theory, Upper Echelon Theory, and Strategic Action Area Theory.

Many countries and businesses had to take various precautions to reduce the contagiousness of the Covid-19 pandemic among people (Bazi et al., 2022), including reducing interpersonal interaction and distance (Grunkowski & Martinez, 2022). In this regard, it aimed to develop and use new methods for the remote management of businesses with digital methods. Although businesses used remote work to a certain extent before the pandemic, especially in the service sector, remote work became indispensable during the pandemic (Gomes & Lopes, 2022). Remote working and digital technologies have also increased the significance of digital leadership. The concept of digital leadership, formed and developed in accordance with Industry 4.0, has become the agenda of businesses during the pandemic. According to studies, the great majority of employees (77%) believe that new leaders are required for digital transformation in businesses (Abbu et al., 2022). In the report prepared by the European Union in 2015, it was realized that between 40.000 and 50.000 digital leaders are needed every year (Husing et al., 2015).

In studies carried upon digital leadership, it is observed that conceptual studies are predominant. Meanwhile, innovation, strategy, digital transformation, and sustainability come to the fore in studies (Benitez et al., 2022; Büyükbeşe et al., 2022; El Sawy et al., 2016; Erhan et al., 2022; Wang et al., 2022). Despite the fact that there are a great many studies in the literature on the contribution of digital leadership to the productivity and performance of enterprises, it is realized that there is no clear explanation as to how this will happen and which factors it will activate (Wasono & Furinto, 2018). Additionally, in many studies, it is observed that the explanations regarding the employees' perspective towards this situation are limited. In the studies conducted, it is seen that while especially the leaders constitute one of the most important factors in accepting innovative behaviors and their continuity as a business culture, the fact that the other important element is the employees (Erhan et al., 2022). Therefore, the present study involves employees rather than managers. The present study discusses the issue of social loafing, which greatly disrupts work efficiency and performance. Social loafing is a situation that is expected to decrease as a result of increasing follow-up of people due to digitalization. On the other hand, studies indicate that doing business through digitalization and digital teams do not reduce social loafing (Stieglitz et al., 2022). Thus, it is thought that digitalization alone cannot increase business performance by reducing social loafing and that the desired goal can be achieved with the help of the standards determined by the vision to be created by a leader by getting inspired by the Social Impact Theory (Latané, 1981). Social Impact Theory briefly expresses the inclination of individuals to change their behavior as a result of being influenced by each other's behavior. Social loafing is expected to decrease and business performance is expected to be increased with the help of the moderating effect of the digital leader's ability to use digital tools and leadership abilities.

Literature Review

Social Loafing

When employees participate in a working group, the fact that they spend less effort and work less than what they do individually is expressed as social loafing (Dai et al., 2020). This phenomenon was scientifically proven in the tug-of-war experiment by Maximilien Ringelmann in 1913 (Gavala-González et al., 2020). It was observed that the ratio of the power applied per person decreased gradually as the power applied by the individuals pulling the rope

and the number of people increased (Zhang et al., 2021). For years, this concept has been called the Ringelmann Effect (Robert, 2020). In the 1970s, these experiments were repeated by using various methods such as rope, shouting, and clapping (Fronza & Wang, 2021). As a result, the sum of the individual efforts of those in the group alone was found to be more than the total effort of the individuals in the group (Wilhau, 2021).

The fact that the performance of individuals alone is not shown in the group, and they display less performance is explained by previous studies as the loss of motivation (Spoelma & Hetrick, 2021). Moreover, it is difficult to determine how much work the individuals in the group undertake individually, which draws attention to social loafing behavior (Cantor & Jin, 2019). It is known especially with the Hawthorne Effect, that people tend to work more when they are watched or observed. However, social loafing increases in cases where it is difficult to determine the work of people individually. As the number of people in the group increases, social loafing behavior increases as well (Chang et al., 2020).

Social loafing is a negative behavior that reduces production quality, negatively affects the organizational climate, and hinders the organization's success and goals. Some authors define social loafing as deviant behavior (Wilhau, 2021). Social loafing not only affects production and service but also can turn into a negative cycle of not doing work, which can cover the entire organization (Chang et al., 2020). Social loafing is theoretically influenced by the Social Impact Theory (Latané, 1981). According to the social impact theory, individuals are affected by the actions of other individuals and their results. This impact paves the way for changes in people's feelings, emotional reactions, beliefs, and behaviors (Mihelič & Culiberg, 2019). Especially the people resorting to social loafing are called "Free Riders" in the literature. The Free Rider Effect is used to express the condition in which someone consciously takes part in a group and exhibits social loafing behavior to utilize the benefit provided by the group (Fronza & Wang, 2021; Rajaguru et al., 2020). The Sucker Effect states that individuals feel bad as a result of the fact that others benefit from the values emerging owing to their work and efforts (Robert, 2020). Individuals who feel fooled either withdraw from the work in the group or slow down their work (Nguyen et al., 2021).

Indifference, social disconnection, and negative behaviors within the organization emerge as the main factors resulting in social loafing. Social loafing negatively affects work quality (Jassawalla et al., 2009). It is possible to use Social Exchange Theory to avoid social loafing. Especially for the staff expecting a promotion or increase in salary and wanting to show themselves in the organization, enabling appropriate changes will reduce social loafing (Dai et al., 2020).

Following the development of technology, remote working, and online transactions have increased. Social loafing is expected to increase in virtual teams where physical distance and communication opportunities are limited (Robert, 2020). It is considered that social loafing behavior will decrease gradually when the necessary precautions in online groups are taken (Fronza & Wang, 2021). It has been found that technological changes will not reduce social loafing in group work unless necessary precautions are taken (Stieglitz et al., 2022). Peer leadership and supervisor support are estimated to be the measures that could reduce social loafing in information technology teams (Fronza & Wang, 2021). It has been observed that high-quality leader-member interaction reduces social loafing among employees (Murphy et al., 2003). The control factor and management elements are possibly be used to reduce social

loafing. Furthermore, it is also possible to reduce and control social loafing with the help of sensor technology and artificial intelligence (Stieglitz et al., 2022). Today, developing technologies are expected to affect the organizational culture and take part in the organization (Frick et al., 2021). Hence, social loafing is thought to decrease during digital transformation thanks to the transformational characteristics of the digital leader (Khan et al., 2020).

Job Performance

Job performance is defined as an individual behavior (Dinc et al., 2018) that makes a contribution to the targets of the organization and can be observed in terms of quality and quantity over a specified period (Motowidlo, 2003) and has the quality of being one of the most important variables handled within the fields of industrial management and organizational behavior (Ángeles López-Cabarcos et al., 2022). The performance levels of the employees in an organization play a vital role in maintaining the development of the organization and achieving their aims, gaining a sustainable competitive power in the sector in which they work, and producing products and services that are of good quality (Qian et al., 2022; Sarıköse & Göktepe, 2022). Performance is also regarded as an important variable that impacts the wages and rewards of organizational members closely (Bekiş et al., 2013).

Employers use performance as a measure in order to evaluate whether an individual contributes to the organization at the expected level (Chikazhe et al., 2022). On the other hand, performance measurements play a significant role in revealing employees' behavioral attitude toward the organization (Katebi et al., 2022).

In the literature, organizational performance is studied under two dimensions, including task performance and contextual performance. Task performance (in-role performance) indicates how well the employees perform the activities which are considered part of their official job and are defined as their competence displayed in performing the job. Contextual performance (extra-role performance), on the other hand, refers to unity and helping others in the organization while fulfilling the tasks and being voluntary to contribute to organizational effectiveness by shaping the organizational, social, and psychological context, acting as a catalyst for task activities despite not being part of the task formally (Borman & Motowidlo, 1997; Christian et al., 2011; Motowidlo & Kell, 2012; Viswesvaran & Ones, 2000). There are three main differences between task performance and contextual performance: 1) while task performance is job-specific, contextual performance is handled for all jobs; 2) task performance is mainly associated with ability, whereas contextual performance is associated with motivation and personality, and 3) task performance is part of the formal job description, while contextual performance includes altruistic extra-role behaviors (optional) which go beyond the formal job requirements that are useful for the organization (Ricketta, 2002; Sonnentag et al., 2008).

Another important issue, on the other hand, is the necessity of distinguishing performance from effectiveness and productivity. Whereas efficiency states the evaluation of performance results, productivity appears as a value indicating the ratio of efficiency to the cost of achieving results (Sonnentag et al., 2008).

Both organizational (situational) and individual factors are closely related to job performance. Leadership theories try to define the direct impact of leader behavior on the motivation and attitudes of the members of the organization and do not consider the indirect effect which is likely to occur as a result of changing systems or conditions (Yukl, 2008).

Leaders affect organizational performance in two ways by using leadership behaviors to affect individuals and groups and/or by making and practicing decisions about organizational structure, competitive strategy, and management programs (Yukl & Gardner, 2020). The literature remarks that leadership affects employee performance no matter what type it is. For instance, it has been empirically confirmed that the presence of an ethical leader triggers employees to develop a politically transparent environment, which can easily reduce social loafing intentions in organizations (Hyusein & Eyupoglu, 2022). Another study reveals that the low quality of leader-member interaction (LMX) causes employees exposed to rude behavior by their superiors to show a tendency towards social loafing and also restricts the personal efforts of followers for the organization (Thompson et al., 2018).

In the literature, there are many empirical studies on the existence of an inverse relationship between social loafing and individual performance (Chen, 2022; Eluwole et al., 2022; Gabelica et al., 2022; Gorgulu et al., 2022) and the fact that digital leadership practices increase the individual performance of employees (Benitez et al., 2022; Borah et al., 2022).

Digital Leadership

Developing digital technologies bring about ever-increasing applications and platforms. In parallel with the changing demands of customers, the demand for digital services and understanding shows an increase daily (Zulu & Khosrowshahi, 2021). The amount spent on digital transformation in the Asia Pacific region in 2019 alone was 380 billion US dollars, which is expected to increase over the years (Karippur & Balaramachandran, 2022). Despite allocating large budgets, the question of why businesses should attach importance to digitalization brings along a great unknown (Karatepe & Arman, 2019). Technological investments need large budgets but also involve some risks as they change the present practices and production methods for businesses (Kane et al., 2017). Small problems in production and application could cause the whole to go out of action (Corte et al., 2019). It is also possible for employees to display many negative behaviors against technological innovations, such as slowing down, quitting work, and resisting new technology. Therefore, a new type of leadership is required to ensure digital transformation and integration of the organization with firm steps and in a planned way (Larjovuori et al., 2016). Digital leadership is accepted to be a leader who has a risk-taking culture, is flexible, can collaborate with customers and employees, adopts transformative strategies, and is open to innovation (Sow & Aborbie, 2018).

Digital leadership emerges as a leader possessing a vision, making strategic plans, having digital competencies, followed by his inferiors, and having transformative qualities in a strong and effective leadership understanding in which digital transformation comes to the fore (Benitez et al., 2022; Husing et al., 2015; Khaw et al., 2022; Mihardjo et al., 2019a). Digital leadership is expected to be performed with technological applications and methods, including the internet of things (IoT), cloud storage, artificial intelligence, cyber-physical systems, and blockchain technology (Karippur & Balaramachandran, 2022). Similar methods form the basis for Industry 4.0 (Abbu et al., 2022; Oberer & Erkollar, 2018; Zhu et al., 2022). From this perspective, it is thought that the main reason for the emergence of digital leadership is related to Industry 4.0 (Mihardjo et al., 2019b; Oberer & Erkollar, 2018). In this respect, it is thought that a 25% increase in productivity and a 30% increase in production speed will be ensured with technological development (Rüßmann et al., 2020). With the help of error-free production with

the same raw material, a 25% increase in productivity makes digital transformation inevitable for businesses. Due to digital transformation, businesses will be able to meet customers' needs and enable a great competitive advantage by making decisions with artificial intelligence and working 24 hours a day, seven days a week (Khaw et al., 2022). In the same breath, the order system and method will be automated with blockchain-based smart contracts, increasing the efficiency in time and cost. Digital leadership can become a digital object with artificial intelligence that can think, program, and design by 2050 by differentiating from a person or human over time (Büyükbeşe et al., 2022). In this regard, the UK 2050 program of the UK promises great hope.

Digital leadership describes the leaders who know the business, have advanced communication skills, have a command of digital technology, and can direct employees with digital equipment (Benitez et al., 2022). The digital leader needs a digital transformation vision, talent, and knowledge, and a strategy to transform the business (AlAjmi, 2022; Erhan et al., 2022). Although some authors refer to the technology dimension of digital leadership (Benitez et al., 2022), digital leadership is also affected heavily by the classical leadership approach (Klein, 2020). The classical leadership perception is considered to continue, as it is anticipated that the enterprises do not consist of merely technological units, and the human factor will also be present in the production and service sector over time (Anak Agung Sagung & Sri Darma, 2020). It is realized that a leadership matrix that stipulates a digital transformation, including people and innovation together, is important in explaining digital leadership (Oberer & Erkollar, 2018).

Strategic Action Area (SAF) theory is utilized to explain the digital transformation of digital leaders. According to SAF theory, there are many groups, teams, and organizations which are formed by employees and leaders. While a leader is part of a team, he can also participate in another organization. Bearing this in mind, a strategic action plan is expected to be prepared collectively and digitalization will be implemented as a whole, including all stakeholders. Customer orientation, cultural influences, new technologies, and business development methods are some of the strategic action areas to be determined (Peter et al., 2020). Studies (Erhan et al., 2022; Mihardjo et al., 2019a) express that digital leadership is based on upper echelon theory (Hambrick & Mason, 1984). According to the upper-echelon theory, the past experiences and present abilities of the leader have a heavy impact on the business and employees (Wang et al., 2022). It is thought that this effect will influence the organization and individuals in terms of digital transformation and that the business will act in accordance with the vision determined (Wasono & Furinto, 2018).

Digital initiatives are organizations benefitting from the power of the latest digital technologies to improve business performance, recognizing the need to be agile, researching and rethinking new business models, fostering digital talent, and adopting a cooperative approach and culture (Karippur & Balaramachandran, 2022). For this reason, the digital transformation process necessitates a determined leadership orientation (Oberer & Erkollar, 2018). By supporting the transformation, leaders are regarded as the biggest factor in implementing strategic transformation plans thanks to their instant interventions and decisions (Erhan et al., 2022). For businesses, ensuring digital transformation is an inevitable fact of providing a competitive advantage and maintaining operations in the long run (Zulu & Khosrowshahi, 2021). The evolution of people's ways of doing business and shopping towards

digital supports this view. For example, it is realized that the e-commerce volume in Turkey increased by 69% in 2021 compared to the previous year (E-Ticaret, 2022).

Research Model and Development of Hypotheses

When the literature is considered, it is realized that there is a negative and significant relationship between social loafing and job performance. As social loafing increases, job performance decreases (Chen, 2022; Eluwole et al., 2022; Khan et al., 2020; Kim, 2021). Taking this point into account, the following hypothesis was formed:

H₁: *Social loafing behavior has a negative and significant impact on job performance.*

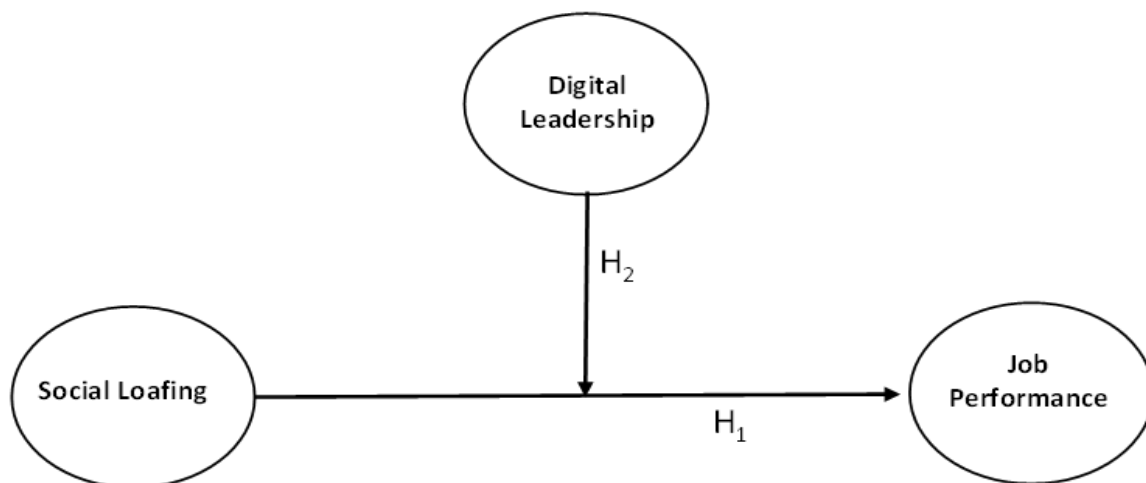
There is a negative and significant relationship between the general understanding of leadership and social loafing (Byun et al., 2018; Hyusein & Eyupoglu, 2022; Khan et al., 2020; Lee et al., 2015). This situation, which is included in the general understanding of leadership, is thought to be valid also for digital leadership. When the literature is considered, it is realized that digital leadership is an approach that is close to transformational leadership (Erhan et al., 2022; Karippur & Balaramachandran, 2022). It is found that there is a positive relationship between digital leadership and job performance (Khaw et al., 2022). The transformational feature of digital leadership and the opportunities it creates under the control of employees are expected to reduce social loafing. Briefly, the negative impact of social loafing on business performance is predicted to decrease under digital leadership mediation. Based on this, the following hypothesis was formed.

H₂: *Digital leadership has a moderating impact on the negative and significant effect of social loafing behavior on job performance.*

In addition to the hypotheses created, the model of the research was also determined, and the model of the research is displayed in Figure 1.

Figure 1

Research Model



The Significance and Aim of the Study

Digitization continues to be a phenomenon embraced by businesses day by day. Especially with the acceptance of Industry 4.0 as a program by Germany in 2011, digitalization has become a requirement for businesses. With this idea including many technologies such as artificial intelligence, the internet of things, cyber-physical systems, and smart contracts, up to 30% increase in production has ensured the production of error-free, high quality, and personalized products. With the aging population of Germany and the decrease in the workforce, this initiative, aiming to return the production towards the Far East countries, has influenced the whole world. For instance, “UK Industry 2050” was implemented by the UK while “New Industrial France” was practiced by France, and “Made in China 2025” by China. Briefly, the digitalization attempt in businesses initiated by Germany has impacted the whole world (Zengin et al., 2021). In the present study, the moderating effect of digital leadership on the effect of social loafing behavior on job performance has been measured.

Ethical approval was obtained for the present study with the approval decision of the Social and Human Sciences Scientific Research and Publication Ethics Committee of Istanbul Arel University, dated October 21, 2022, and numbered 2022/21-1.

Method

Sample

The research was carried out in an enterprise which is located in Tekirdag. Approximately 1000 people were working in the enterprise, and a questionnaire was applied to the participants via convenience sampling method. It was calculated that the number of samples to represent approximately 1000 people was at least 278 (İslamoğlu & Alniaçık, 2019). Three hundred fifty questionnaires were distributed, 308 of which were evaluated and analyzed.

Instrument

Six demographic questions were included in the questionnaire to collect the data. For measuring Digital Leadership, the Digital Leadership Scale developed by Zeike et al. (2019) and translated into Turkish by Oktaysoy et al. (2022) was utilized. The Digital Leadership Scale is in a 5-point Likert form and consists of six items. The Job Performance Scale, developed by Kirkman and Rosen (1999) and translated into Turkish by Çöl (2008), was selected to measure job performance. The Job Performance Scale is in a 5-point Likert form and consists of four items. In order to measure Social Loafing Behavior, the Social Loafing Behavior Scale, developed by Høigaard and Ingvaldsen (2006) and translated into Turkish by Sezer et al. (2021), was used. The Social Loafing Behavior is in a 5-point Likert form and consists of five items.

The questionnaires were applied on October 26, 2022, via the convenience sampling method. In light of the collected data, the impact of social loafing on job performance was measured as the moderating effect of digital leadership. It was planned to analyze the data with the Smart PLS program. The fact that the Smart PLS program does not require normality distribution permits complex model structures, and evaluates large data and multiple variables simultaneously has been the main determinant in the selection of Smart PLS (Hair et al., 2017; Sarstedt & Ringle, 2010). Smart PLS is an estimation approach enabling statistical explanation of structural equation models and reveals the causality relationship statistically (Sarstedt et al., 2014). The PLS-SEM application has superior qualities and conveniences, such as not requiring

normal distribution compared to co-variance-based programs, along with providing reliability and validity values in the results with no need for any calculations (Hair et al., 2017).

Results

The participants of the present study involved 308 people, and the demographic information belonging to the participants is presented in Table 1. It is observed that the participants are dominantly male (56.80%). The number of married participants (55.85%) is also realized to be higher than the number of single participants. It is found that the participants are predominantly 31 years old and above. The number of the ones who graduated from vocational school constitutes the majority of the participants. When the age and education level of participants are considered, it can be said that the possibility of entering vocational schools without taking an exam creates such a picture. When the participants are examined according to their experience period, it is observed that the weight consists of individuals with 5 years or more experience. Moreover, the income obtained in accordance with working hours and experience is realized to be above the minimum wage.

Table 1

Demographic Findings

Demographic	Items	n	%
Gender	Female	133	43.20
	Male	175	56.80
Marital Status	Married	172	55.85
	Single	136	44.15
Age	Between the ages of 20-30	89	28.90
	Between the ages of 31-40	126	40.90
	Between the ages of 41-50	78	25.30
	Age 51 and over	15	4.90
Education	High school and below	42	13.65
	Associate degree	165	53.55
	Bachelor's degree	70	22.80
	Postgraduate degree	31	10.00
Experience	Up to 5 years	89	28.90
	Between 6-10 Years	54	17.50
	Between 11-15 Years	50	16.30
	Between 16-20 Years	42	13.60
	Over 21 Years	73	23.70
Income	Between 6.000-8.000 TL	76	24.70
	Between 8.001-10.000 TL	73	23.70
	Between 10.001-12.000 TL	72	23.30
	Between 12.001-14.000 TL	43	14.00
	Over 14.001 TL	44	14.30

Various tools are available to measure the model of the structural equation. To measure the consistency of the model, the beta coefficient, t value, and p values should be examined. Factor loadings determine the loading values among the variables. It is also utilized to calculate the Composite Reliability (CR) and Average Variance Extracted (AVE), which verify the convergent validity (Yaşlıoğlu, 2017). For convergent validity, the CR value is expected to be higher than the AVE value. According to factor loading values, discriminant validity between scales is measured using the Fornell-Larker criterion (Hair et al., 2017). Cronbach's Alpha value gives information about composite reliability and internal consistency. Against the tendency of Cronbach's Alpha to yield good results as the number of variables increases, measuring the internal consistency and reliability of the scale through CR also creates an alternative for the shortcomings of Cronbach's Alpha (Sarstedt et al., 2014). The factor load, validity, and

reliability values of the analysis are displayed in Table 2. It is of great significance for factor loading values not to be below .50 for scale structure integrity (Hair et al., 2014). Cronbach's Alpha, rho_A, and CR values are expected to be above .70 and AVE values above .50 (Dijkstra & Henseler, 2015; Hair et al., 2017). As presented in Table 2, it is observed that the factor loading values are above .50. Perform4 and Socialoafing4 questions below .50 were excluded from the scale. In the light of the Cronbach's Alpha, rho_A, CR and AVE values obtained, it was found out that the scales were reliable and structurally valid. Because of the fact that Kurtosis and Skewness values are between +1.96 and -1.96, it can be stated that the sample is normally distributed (Hair et al., 2014).

Table 2

Factor Loading Values, Reliability, and Validity

Items	β	<i>M</i>	<i>SD</i>	Kurtosis	Skewness
Digital Leadership Scale					
Cronbach's Alpha = .96, rho_A = .97, CR = .97, AVE = .86					
dijitalleader1	0.89	3.06	1.18	-0.98	-0.20
dijitalleader2	0.93	3.06	1.16	-0.95	-0.24
dijitalleader3	0.95	3.12	1.15	-0.90	-0.25
dijitalleader4	0.95	3.20	1.18	-0.86	-0.39
dijitalleader5	0.90	3.15	1.13	-0.81	-0.31
dijitalleader6	0.92	3.16	1.16	-0.84	-0.33
Social Loafing Scale					
Cronbach's Alpha = .84, rho_A = .91, CR = .89, AVE = .69					
socialloaf1	0.51	2.23	0.92	0.36	0.80
socialloaf2	0.91	2.43	1.15	-0.67	0.55
socialloaf3	0.90	2.63	1.12	-0.85	0.36
socialloaf5	0.92	2.60	1.20	-0.86	0.41
Job Performance Scale					
Cronbach's Alpha = .86, rho_A = .88, CR = .91, AVE = .79					
perform1	0.93	2.95	1.34	-1.24	-0.02
perform2	0.93	2.96	1.34	-1.27	-0.01
perform3	0.79	3.30	1.34	-1.05	-0.40

According to the Fornell-Larcker Criterion, the AVE value should be higher than the correlation between constructs to confirm discriminant validity (Hair et al., 2017). In this respect, all values of the square root of the AVE were higher than the inter-structure correlation in the same column, which indicates discriminant validity. Measurements regarding the Fornell-Larcker Criteria are presented in Table 3.

Table 3

Fornell-Larcker Criteria Analyses

	1	2	3
Digital Leadership	.92		
Performance	.30	.88	
Social Loafing	-.12	-.33	.83

Henseler et al. (2015) offered a different alternative to the Heterotrait-Monotrait (HTMT) ratio of correlations instead of the Fornell-Larcker criterion (Hair et al., 2017). HTMT defines it as the mean value of item correlations between constructs relative to the average of the mean correlations for the items which measure the same construct. In the event that HTMT values are high, then discriminant validity problems are experienced. Henseler et al. (2015) propose a threshold value of .90 for structural models with conceptually very similar structures. The HTMT results of the model are shown in Table 4.

Table 4
Heterotrait-Monotrait Ratio (HTMT)

	1	2	3
Digital Leadership			
Job Performance	.32		
Social Loafing	.14	.37	

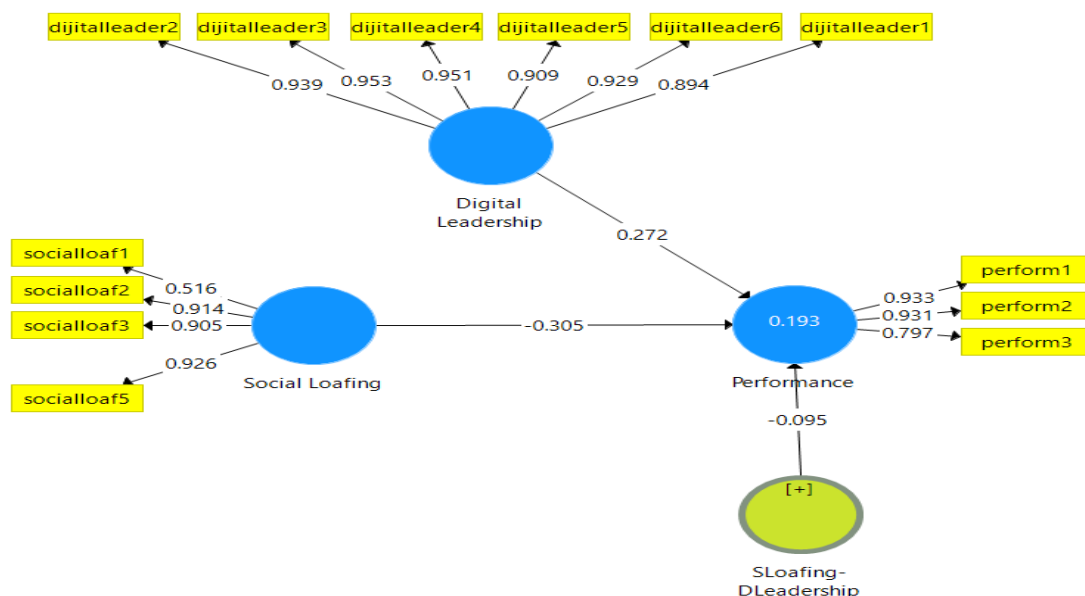
Following the validity and reliability analyses, it was observed that there were no problems in terms of testing the model. In this context, the determined model was tested. The goodness of fit information regarding the model is illustrated in Table 5. While evaluating the model's goodness of fit, a Standardized Root Mean Square (SRMR) value below .08 and an NFI value above .90 indicated good fit value for the model (Dijkstra & Henseler, 2015; Hair et al., 2017). In this regard, it is possible to state that the model has a good fit value.

Table 5
The Goodness of Fit Values of the Model

	Saturated Model	Estimated Model
SRMR	0.04	0.04
d_ULS	0.18	0.18
d_G	0.14	0.14
Chi-Square	270.27	268.79
NFI	0.92	0.92

The path diagram of the model is shown in Figure 2. Taking the path diagram into consideration, it is realized that the factor loading values are above .50 and there is a relationship between the variables.

Figure 2
Path Diagram of the Model



Nevertheless, examination of the t-value and p-values is required so as to determine whether the resulting values are significant or not and to determine the moderating effect. The measurement values regarding the model are presented in Table 6. According to the measurement values of the model, it is observed that there is a moderate interaction with the ratio of .30 between social loafing and job performance, and the value is significant. For this reason, the H1 hypothesis was accepted. It is also realized that digital leadership had a moderate

(-.09) low-level significant effect on the negative significant effect of social loafing behavior on job performance. Thus, the H2 hypothesis was accepted. It was found that the hypotheses H1 (Chen, 2022; Eluwole et al., 2022; Khan et al., 2020; Kim, 2021), and H2 (Erhan et al., 2022; Karippur & Balaramachandran, 2022), which were created in accordance with the literature, were both accepted. The histogram diagram of the moderator relationship is displayed in Figure 3.

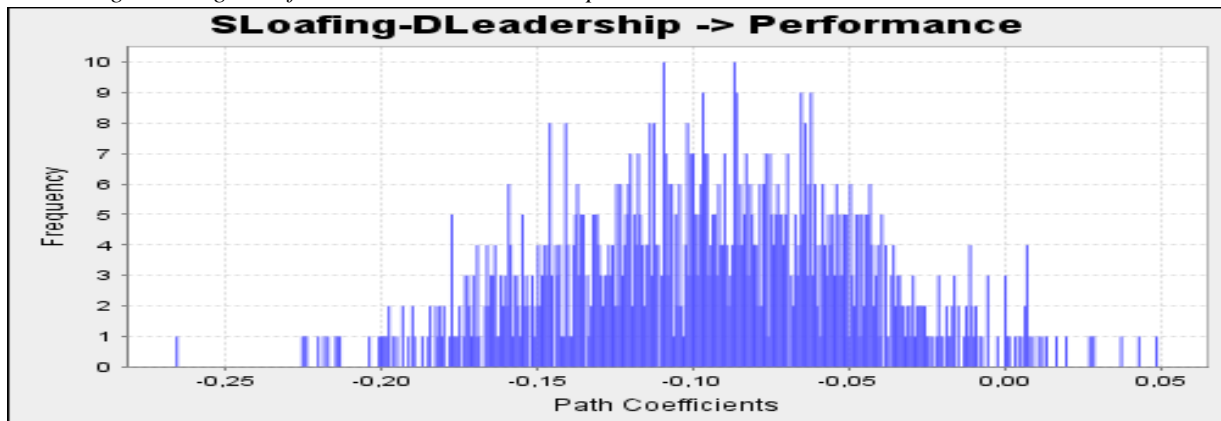
Table 6

Measurement Values of the Model

Paths	β	SD	t	p	Support
Social Loafing -> Performance	-0.30	0.05	5.65	0.000	H1 Yes
SLoafing-DLeadership -> Performance	-0.09	0.04	1.96	0.049	H2 Yes

Figure 3

The Histogram Diagram of the Moderator Relationship



The quality values regarding the analyses performed are shown in Table 7. The Determination Coefficient (R^2) and Cross-Validation Excess (Q^2) of the outcome variables depending on the determinants are presented in Table 7. It is observed that the R^2 and Q^2 values are higher than 0, and that all independent variables have a significant relationship with the dependent variables.

Table 7

Quality Criteria

Latent Variable	R^2	R^2 Adj.	Q^2
Job Performance	.19	.18	.14

Discussion

The present study revealed that social loafing behavior has a negative effect on job performance. Social loafing, tried to be eliminated and expressing negative behavior for businesses, exists despite technological developments and precautions among employees (Stieglitz et al., 2022). Employees perform less than expected owing to social loafing. Many studies supporting this result which was also obtained in the present study, are available in the literature (Chen, 2022; Eluwole et al., 2022; Khan et al., 2020; Kim, 2021). Nonetheless, the main finding of the study is that digital leadership has an effect on reducing social loafing. When considered in this regard, it is partially possible to say that the teams formed by the leader act in accordance with the strategic action plans. The fact that digitalization in production enterprises is slower than in the information sector is thought to affect the result. Despite the result obtained, it is also

possible to talk about the effectiveness of SAF Theory in the development of digital leadership in the business (Peter et al., 2020). Furthermore, it is an undeniable fact that the past experiences and experiences of the leader make great contribution to this result. When considered from this point of view, with the interaction of the upper echelon theory (Hambrick & Mason, 1984), it is realized that the leaders affect and direct the employees in terms of transformation (Wasono & Furinto, 2018).

Due to Industry 4.0, Society 5.0, and the Covid-19 pandemic, businesses are trying to realize digital transformation. Transformation is a necessity for businesses to survive. As a result of the necessity which has been experienced, the present study has proven that digital leadership is not merely about technological transformation and management of businesses with digital tools. Additionally, the study indicated that digital leadership helps prevent negative organizational behaviors in the business, which is similar to transformational leadership. Hence, it has been found that digital leadership has transformative properties, as claimed by other authors in the literature (Benitez et al., 2022; Husing et al., 2015; Khaw et al., 2022; Mihardjo et al., 2019a).

The biggest contribution of the study to the literature is that the digital leader is not only responsible for transformation in businesses, and can use technological tools well but also possesses classical leadership characteristics. Therefore, it can be claimed that digital leaders have to own a classical leadership understanding.

Conclusion

In the present study, the moderating role of digital leadership in the effect of social loafing on job performance was aimed to be determined. Social loafing is a negative phenomenon that reduces businesses' potential to work. Despite the fact that businesses make an effort to prevent social loafing as it reduces job performance, it emerges in businesses depending on the Social Impact Theory (Latané, 1981) and human characteristics. In previous studies on digital leadership, the digital leadership process was tried to be explained by focusing on sustainability, digital transformation, and innovation (Khaw et al., 2022; Oberer & Erkollar, 2018; Peter et al., 2020; Wasono & Furinto, 2018; Zhu et al., 2022). Studies conducted on human factors and organizational behavior draw attention as they are relatively limited (Erhan et al., 2022; Zeike et al., 2019).

With the acceptance of the first hypothesis in the present study, it was observed that social loafing continues to be a negative phenomenon for businesses. It is pointed out in the literature that social loafing can only be avoided through a regular and systematic audit (Lee et al., 2015). The biggest instrument possessed by the digital leader in this regard is the ability to use digital tools well. Many elements, such as cloud storage, artificial intelligence, cyber-physical systems, big data, and data analysis, emerge as digital tools (Oberer & Erkollar, 2018). For this reason, it can be stated that the leaders in today's world should dominate technology, not use it.

As for the second hypothesis, it is revealed that the negative effect of social loafing on job performance decreases somewhat with the help of the moderating effect of digital leadership. On the other hand, it is realized that this change cannot eliminate the negative effect of social loafing. Considering that digital transformation is still in its infancy for businesses, it can be remarked that this effect is normal. It can also be stated that negative organizational behaviors, such as social loafing could be reduced with an increase in digital transformation and the further

development of digital leadership as a result (Klein, 2020; Zhu et al., 2022). The Social Impact Theory promises hope for the potential to be able to reduce, especially as humans are social beings and are greatly affected by each other. Moreover, it has been found that that digital leadership has a positive effect on business performance and will be useful for businesses in this regard.

In spite of the fact that carrying out the study with a limited sample has reduced the generalizability, it is thought that the study will encourage further studies with organizational behavior issues on digital leadership. Furthermore, it is thought that the effect of digital leadership on human emotion and social structure will also be seen in the literature. In terms of further studies, it can be suggested that the limitations of digital leadership emerge as a subject that has not been fully determined. Bearing this in mind, new studies and researchers from all fields are required for the development of digital leadership. Moreover, taking Hofstede et al.'s (2010) Theory of Cultural Differences into consideration, it is thought that the direction and dimensions of the relationship between the variables used in the present study may show differences in different countries and cultures. It can be stated that the research gap on this issue is of great significance, especially for multinational organizations.

Declarations

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Disclosure Statement

No potential conflict of interest was reported by the authors.

Ethics Approval

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