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Virtual Space and Social Laziness in Organizations: A Structural Modeling Approach

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This study investigates the impact of excessive virtual space usage on social laziness within the executive bodies of Sirjan. Utilizing structural modeling to analyze data collected through standardized questionnaires, the study reveals that heavy use of virtual space can lead to an increase in social laziness, which, over time, negatively affects employees' efficiency and productivity. Structural analyses further indicate that this phenomenon can gradually reduce effective participation and interaction among organization members. The paper also offers practical recommendations for managers, such as holding awareness workshops, enhancing time management, and promoting in-person interactions, all of which can help reduce the adverse effects of excessive virtual space usage. This study provides valuable insights into the challenges posed by digital engagement and its consequences for organizations, paving the way for future research in this field.

***Keywords**: Employee Productivity, Executive Organizations, Excessive Virtual Space Usage, Social Laziness, Structural Modeling.*

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2. Introduction

In today's dynamic world, organizations rely heavily on teamwork and collaboration to achieve their defined goals (Traylor, Tannenbaum, Thomas, & Salas, [26]). However, if individuals feel that their personal efforts in a group are not recognized, they may not only refrain from exerting additional effort for the success of the entire group but may also lower their performance to match that of the least productive member. This phenomenon, known as *social **Laziness***, can have detrimental effects on commitment, performance, and productivity within an organization, creating a negative atmosphere (Akgunduz & Eryilmaz, [2]). Organizational managers must recognize the negative aspects of social Laziness and take preventive measures to minimize its occurrence (Ofole, [17]), especially within Iranian organizations, where there is evidence of an upward trend in social Laziness (Eydi & Fazli, [10]).

Meanwhile, media, including the internet, significantly influence the formation of social Laziness (Purwantini, Satyaninrum, Kusumarini, Mardiati, & Vanchapo, [18]). In today's rapidly evolving digital landscape, excessive internet use has become a part of people's daily lives (Khazaie et al., [14]). Social media platforms, online games, and virtual reality experiences have gained widespread popularity, offering users seemingly limitless possibilities and connections in the virtual world. While these advancements create numerous opportunities, they also raise concerns about the impact of

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excessive virtual engagement on people's social interactions. In Iranian culture, wasting time or avoiding work is sometimes considered a clever tactic, becoming normalized (shah abadi, Mobaraki, & Beiranvand, [25]), posing challenges for organizational managers, especially in the public sector. With the growing prevalence of digital technologies and the increase in remote work or flexible work arrangements, employees have increasingly relied on virtual spaces for communication, collaboration, and task completion. Thus, understanding the impact of virtual space on social Laziness has become essential.

This study, through a structural modeling approach, seeks to explore the impact of virtual space usage on social Laziness within the executive bodies of Srijan. By gaining a clear and accurate understanding of how virtual spaces are utilized and recognizing their effects on social Laziness, this research can pave the way for improving efficiency and productivity in organizations. Ultimately, the potential findings of this study could shed light on the influence of virtual space usage on social Laziness and provide valuable insights for individuals, organizations, and managers as they navigate the challenges of the digital age. Furthermore, practical recommendations to mitigate social Laziness in organizations are provided. Based on the above, the research hypotheses are formulated as follows:

Main -hypotheses

- Virtual space usage has a significant impact on social Laziness within executive departments in Sirjan.

Sub-hypotheses:

- The level of accessibility significantly impacts social Laziness within executive departments in Sirjan.
- The level of usage significantly impacts social Laziness within executive departments in Sirjan.

Accordingly, the conceptual model of the research is presented in Figure 1.

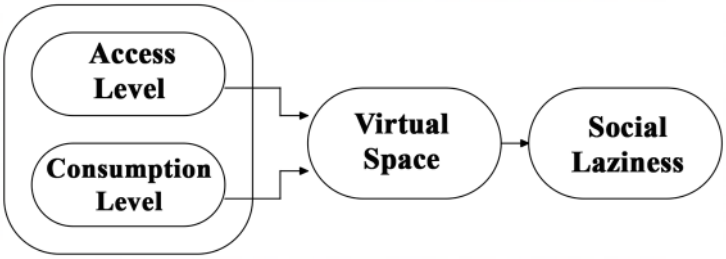

Fig.1. Conceptual model of the research

3. Theoretical Foundations and Research Background

In this section, the relevant theoretical literature will be briefly reviewed in the fields of "virtual space" and "social Laziness," followed by an overview of the conducted research and identification of research gaps.

2.1. Virtual Space

The concept of online social networks in its modern form was first introduced in 1960 at the University of Illinois in the United States. In 1977, the first internet social networking site was launched (Campbell,

[5]), allowing users to create profiles and build friend lists. The subsequent explosion of social websites in 2002 led to the emergence of platforms like Friendster, Orcutt, and LinkedIn, which facilitated the proliferation of social networking sites such as Facebook and Twitter on the internet. Virtual social networks can be defined as contact patterns facilitated by technical infrastructures and the internet, allowing for interaction and communication among network users. These networks enhance the sense of community and connection among individuals who share common interests, needs, or goals, despite physical absence. Today, there are numerous virtual social networks that offer a wide range of features and services to users. Despite structural and functional differences, these networks share common characteristics that distinguish them from other online platforms. These platforms facilitate various activities, including sharing, reading online news, playing games, uploading videos and files, and engaging in visual and written communication. According to the model by Dolatabadi and colleagues, virtual space encompasses the following essential dimensions:

- **Access Level:** Includes factors such as the availability of personal computers, ease of internet access, internet speed, and proficiency in using the internet.

- **Consumption Level:** Encompasses the duration and frequency of internet use, whether during the day or night, as well as the amount of internet usage over a specified week (bagheri doltabadi & zareian jahromi, 2013).

2.2. Social Laziness

Social Laziness is a concept that has increasingly attracted attention in the field of social psychology (Deb, Gireesan, Prabhavalkar, & Deb, [8]). It refers to a phenomenon where individuals demonstrate a lower inclination or effort to engage in face-to-face social interactions, potentially leading to reduced participation in social activities, which may include a decreased willingness to engage in conversations, group activities, or the formation of new (Cymek, Truckenbrodt, & Onnasch, [7]). The study of social Laziness is relatively new but has evolved with researchers' efforts to better understand the complexities of human social behavior and their adaptations in the modern digital age. Early research on social Laziness primarily focused on individuals' willingness to invest time and effort in social interactions and how it relates to personal characteristics and motivational factors (Karau & Wilhau, [13]).Over time, research in this area expanded to uncover the underlying mechanisms and consequences of social Laziness. Studies have explored various factors, such as decreased empathy, diminished social competence, and changes in the perceived balance of effort and reward in social interactions that contribute to this phenomenon (Sallquist, Eisenberg, Spinrad, Eggum, & Gaertner, [21]). This multidimensional perspective acknowledges that social Laziness is influenced by a combination of individual, situational, and social factors. Furthermore, current comprehensive investigations of social Laziness cover a range of topics, including its relationship with mental health outcomes (Elshaer, Algezawy, Ghaleb, Mohamed, & Azazz, [9]), its impact on interpersonal relationships (Rutte, [20]), and the role of technology and the digital environment (Samarakoon & Imbulpitiya, [22]). Researchers are striving to understand how the increasing reliance on digital communication platforms and virtual spaces can further reinforce manifestations of social Laziness. The concept of social Laziness has also been analyzed within the framework of cultural differences (Bokhari & Aftab, [4]), highlighting changes in social norms, values, and expectations that influence individuals' attitudes and behaviors in social interactions. Overall, social Laziness has evolved alongside social changes and the growth of digital communication. As researchers delve deeper into the complexities of social Laziness, further exploration could guide interventions and strategies to promote healthy social participation, strengthen meaningful relationships, and ensure overall well-being in an increasingly digitally connected world.

2-3. Research Background

Here is a summary of some studies on the topics of "virtual space" and "social Laziness":

Table 1. Research Background

Author (Year)	Title	Methodology	Findings
(Agdasi & Mahmudi, [1])	Examining the relationship between internet usage and social isolation (Case study: Islamic Azad University students in Tabriz)	Correlation Method	Results indicated that the extent of internet use and participation in social networks has a positive and direct relationship with aspects of social isolation (feelings of despair, helplessness, and loneliness).
(Sepahvand & Mohammadyari, [24])	Impact of individuals' perception on organizational laziness using the Q method	Q Method (Mixed quantitative and qualitative)	Findings revealed that government managers in Ilam had three mental models regarding organizational laziness: individual factors, organizational factors, and the nature of public sector jobs.
(Chen & Nath, [6])	Understanding contextual factors of internet addiction across cultures: A comparative study	Factor Analysis	Analysis indicated that a significant percentage of users in each region suffer from issues related to internet addiction.
(Lin, Wu, You, Hu, & Yen, [16])	Rising internet addiction and its risk and protective factors: A case study of high school seniors in Taiwan	Regression Analysis	Results showed that internet addiction is significantly prevalent among high school students in Taiwan. Prevention strategies should focus on behavioral and cognitive risk factors specific to this age group.
(Sarfraz & Khawaja, [23])	Is the internet a double-edged sword for organizations? An empirical study on cyberslacking	Correlation and Regression Analysis	Findings revealed that internet addiction mediates the relationship between technology self-efficacy and cyberslacking, indicating that internet addiction influences the strength of this relationship.
(Lebni et al., [15])	Examining internet addiction and its effects on mental health: A study on university students in Iran	Correlation and Regression Analysis	Results showed that excessive internet use among students leads to anxiety, depression, and poor mental health, negatively impacting academic performance.
(Fereydon Nejad, [11])	Examining the impact of internet and social media addiction on students' academic performance	Correlation Method	Results indicated a negative, significant relationship between internet addiction and students' GPA and a positive, significant relationship with the number of failed courses.
(Robert & Kadhiravan, [19])	Impact of excessive internet use on mental health	Correlation Method	Results indicated a significant relationship between excessive internet use and negative outcomes like depression, loneliness, and reduced life satisfaction.

2.4. Identifying Research Gaps

By reviewing previous research, the existing research gaps related to the research topic can be examined in two areas:

- Limited Focus on Executive Bodies: While there are some existing studies on the impact of virtual space on social behavior, there is a significant lack of studies specifically targeting executive bodies or professional settings. This study aims to address this gap by examining the executive bodies of Sirjan in relation to social Laziness.
- Lack of Structural Modeling Analysis: Existing research often relies on correlational methods. In contrast, this study seeks to provide a comprehensive understanding of the causal relationships and interactions among variables related to excessive use of virtual space and social Laziness through structural modeling.

Consequently, this theoretical framework is presented with the aim of clarifying the impact of excessive use of virtual space on the social Laziness of employees in executive bodies. By addressing the existing research gaps, this study contributes to understanding the challenges faced by executive bodies in Sirjan and offers valuable insights into the consequences of social Laziness in professional environments.

3. Materials and Methods

This research is descriptive-correlational in nature and applied in purpose. To analyze data and test the research hypotheses, structural equation modeling is utilized. The statistical population of this study includes all executive bodies in Sirjan city, encompassing both governmental and non-governmental institutions, with a total of 3,000 individuals in 1401. The data collection tools employed in this study include two standardized questionnaires: the virtual space questionnaire (11 items) by Bagheri Dolatabadi et al. [3] and the social Laziness questionnaire (10 items) by George [12]. Based on the Karjesi and Morgan table, a sample size of 341 individuals was determined from the mentioned statistical population, with the allocation for each executive body and its respective employees specified through stratified random sampling. The questionnaires were distributed among the sample members to gather information. A total of 332 questionnaires were returned, of which 321 were valid for analysis. To validate the research tools, construct validity was assessed, and Bartlett's test and the KMO index were used to ensure the adequacy of the data. Reliability was measured using Cronbach's alpha coefficient and composite reliability index. Data analysis in the descriptive statistics section was performed using Excel and SPSS software, while inferential statistics were conducted using structural equations and Lisrel software. Finally, to evaluate the adequacy of the research model and the relationships among variables, fit indices visible in the final output of the software were utilized.

4. Research Findings

The research findings will be examined in three subsections: validity and reliability assessment, descriptive findings, and inferential findings.

4.1. Validity and Reliability Assessment

As mentioned in the previous section, Bartlett's test was conducted to ensure the adequacy of the data, and the KMO index was evaluated. Table 2 displays the results obtained from performing Bartlett's test and the KMO index.

Table 2. Bartlett's Test and KMO Index

Cyberspace	KMO Test		0.885
	Bartlett's test	Amount χ^2	849.700
		Degree of Freedom	277
		Significance level (Sig)	0.000
Social laziness	KMO Test		0.994
	Bartlett's test	Amount χ^2	709.688
		Degree of Freedom	121
		Significance level (Sig)	0.000

As indicated, the KMO test value is greater than 0.6 and close to 1, along with the significance coefficient of Bartlett's test, which is less than 0.05, suggesting that factor analysis is suitable for identifying the structure and appropriate factor model. Given that in terms of significance, the t-values for both questionnaires were greater than 1.96, the relationship between the questions and the variables is significant. In terms of standardized estimates, the factor loadings were also above 0.5, indicating that the questions were appropriate for the research variables. Additionally, based on Table 2, the convergent validity of the research variables was confirmed (0.7 < CR, CR > 0.5 AVE). To assess reliability, 30 questionnaires were distributed in the statistical population using Cronbach's alpha coefficient and the composite reliability index. The results are presented in Table 3.

Table 3. Cronbach's alpha coefficient, combined reliability and convergent validity

Variables	**AVE**	CR	Alpha Cronbach
Cyberspace	0.74	0.87	0.88
Availability	0.71	0.94	0.92
Dosage	0.68	0.75	0.77
Social laziness	0.66	0.82	0.81

The results shown in Table 3 confirm the adequacy of the reliability of the questionnaires, as both composite reliability and Cronbach's alpha coefficients for all variables exceed 0.7. Additionally, the square root of the AVE for each construct (the main diagonal of the matrix) is greater than the correlation coefficient of that construct with other constructs, indicating that the discriminant validity of the constructs is acceptable.

Table 4. Diagnostic Validity Assessment

	1	2	3	4
Cyberspace	0.74			
Availability	0.62	0.71		
Dosage	0.57	0.60	0.68	
Social laziness	0.59	0.63	0.55	0.66

4.2. Descriptive Findings

Among the 321 respondents in the study, 218 were male (68%) and 103 were female (32%). Of this group, 15 individuals had a high school diploma (0.4%), 196 had a bachelor's degree (61%), 87 had a master's degree (27%), and 23 held a doctoral degree (0.8%). Additionally, 24 respondents (0.7%) had 5 to 10 years of work experience, 81 (25%) had 11 to 15 years, 112 (35%) had 16 to 20 years, 68 (21%) had 21 to 25 years, and 36 (11%) had 26 to 30 years of work experience.

4.3. Inferential Findings: Relationships Between Hypotheses

In this study, structural equation modeling was used to examine the relationships proposed in the hypotheses. According to Figure 2, if the t-value is between +1.96 and -1.96, the relationships between the variables will not be significant at a 95% confidence level. If the t-value is greater than +1.96 or less than -1.96, the relationships will be significant at a 95% confidence level. Based on this criterion, all relationships in the model are significant.

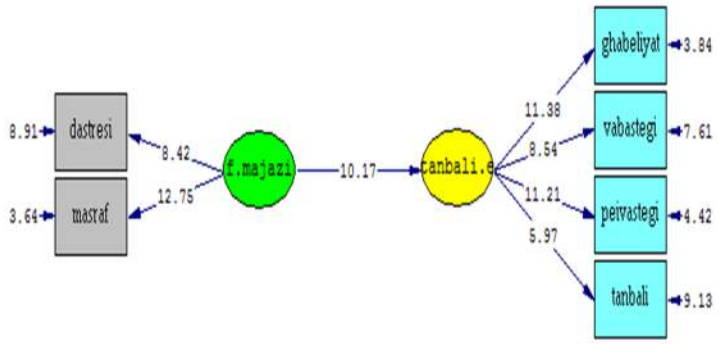

Figure 2. Significance Values Obtained from Structural Equation Modeling of the Main Hypothesis

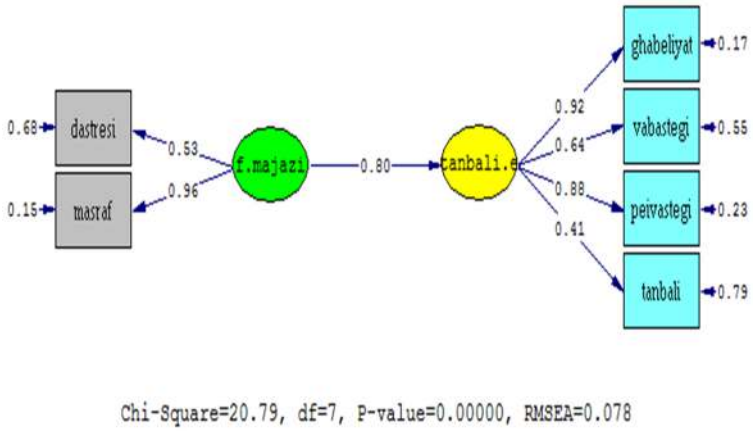

Figure 3. Standardized Coefficient Values Obtained from Structural Equation Modeling of the Main Hypothesis

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Normed Fit Index (NFI) = 0.92
Non-Normed Fit Index (NNFI) = 0.94
Parsimony Normed Fit Index (PNFI) = 0.93
Comparative Fit Index (CFI) = 0.94
Incremental Fit Index (IFI) = 0.91
Relative Fit Index (RFI) = 0.92

Critical N (CN) = 141.18

Root Mean Square Residual (RMR) = 0.10
Standardized RMR = 0.097
Goodness of Fit Index (GFI) = 0.91
Adjusted Goodness of Fit Index (AGFI) = 0.93
Parsimony Goodness of Fit Index (PGFI) = 0.94
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Main Hypothesis: The virtual space has a significant effect on social Laziness in the executive bodies of Sirjan County.

The significance value between the virtual space and social Laziness is 10.17. Additionally, according to Figure 3, the standardized coefficient between the virtual space and social Laziness is 0.80. This value is greater than 0.60, indicating a strong and significant impact of the virtual space on social Laziness. This coefficient is positive, suggesting that as virtual space increases, social Laziness also increases. According to the software outputs, the correlation coefficient between these two variables is 0.80. A summary of the structural equation modeling results is presented in Table 5:

Table 5. Results of Structural Equation Modeling of the Main Hypothesis

Relationships of research variables	T Value	Direct Effect (R)	Indirect effect	Total effect	Results	Relationship
Cyberspace - Social laziness	10.17	0.80	-	0.80	Confirm	Positive and Meaningful

Subsequently, to validate the structural model, the goodness-of-fit indices of the model in structural equation modeling were examined. As shown in Table 6, the research model has a good fit, and the acceptance levels of the indices have been met.

Table 6. Fitting Indices for Model

Variable	X2 /df	RMSEA	GFI	RMR	**IFI**	CFI	NFI	NNFI
Calculate Indicator	2.97	0.078	0.91	0.10	0.91	0.94	0.92	0.94
Suitable surface	5>	0.1>	0.90<	0.5>	0.90<	0.90<	0.90<	0.90<
Results	Appropriate	Appropriate	Appropriate	appropriate	appropriate	Appropriate	Appropriate	Appropriate

Similarly, for testing the sub-hypotheses of the research, the structural equation modeling method is used, and the goodness-of-fit indices are examined.

Sub-Hypotheses

1. The level of access has a significant impact on social Laziness in the executive agencies of Sirjan County.

2. The level of consumption has a significant impact on social Laziness in the executive agencies of Sirjan County.

Furthermore, structural models for testing the sub-hypotheses of the research have been illustrated.

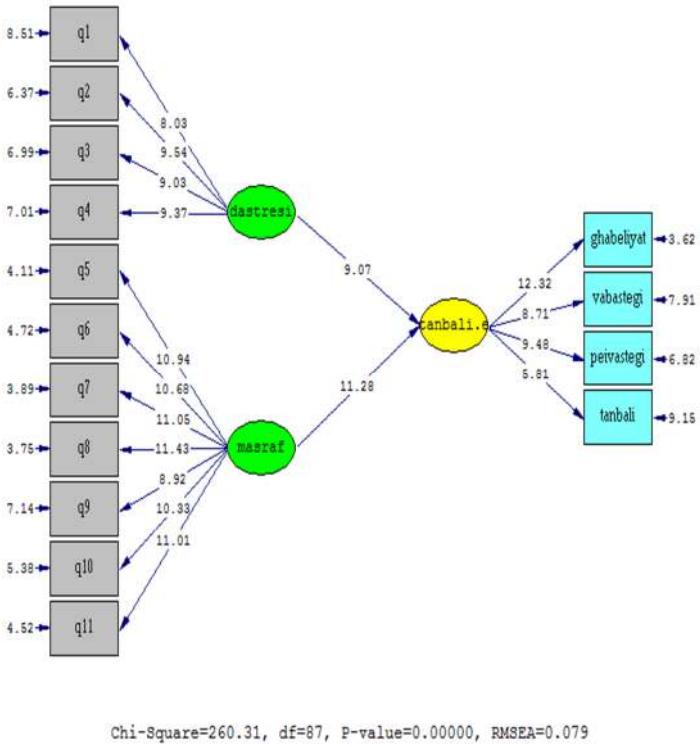

Figure 4. Significant values obtained from the structural equation modeling of the sub-hypotheses**.**

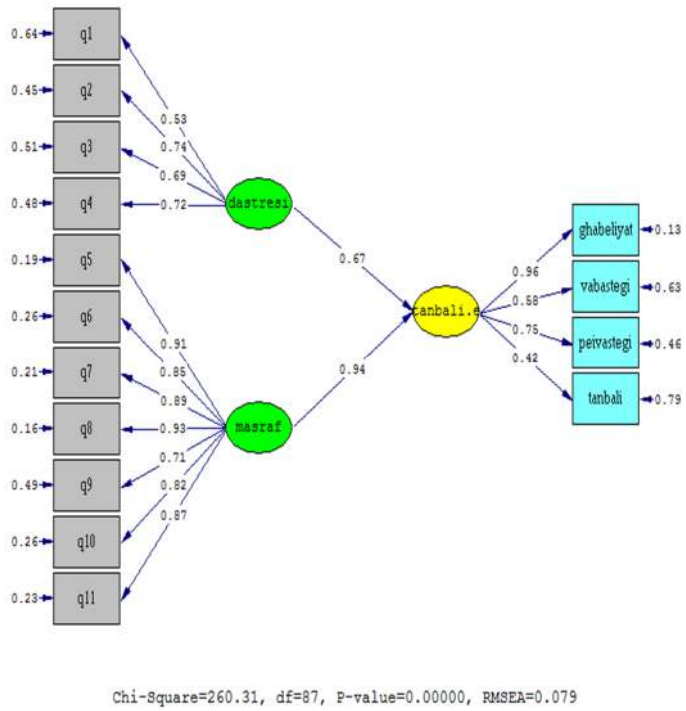

Figure 5. Standardized coefficients obtained from the structural equation modeling of the sub-hypotheses.

Normed Fit Index (NFI) = 0.91
Non-Normed Fit Index (NNFI) = 0.93
Parsimony Normed Fit Index (PNFI) = 0.94
Comparative Fit Index (CFI) = 0.92
Incremental Fit Index (IFI) = 0.93
Relative Fit Index (RFI) = 0.91

Critical N (CN) = 122.45

Root Mean Square Residual (RMR) = 0.32
Standardized RMR = 0.27
Goodness of Fit Index (GFI) = 0.92
Adjusted Goodness of Fit Index (AGFI) = 0.91
Parsimony Goodness of Fit Index (PGFI) = 0.92

Hypothesis 1. Access level significantly impacts social laziness in the executive organizations of Sirjan.

As indicated in Figure 4, the significance level for the impact of access level on social laziness is 9.07. Since this value exceeds 1.96, it is statistically significant. The standardized coefficient between access level and social laziness is 0.67, which, being greater than 0.6, suggests a positive and meaningful impact of access level on social laziness. This implies that an increase in access level corresponds with an increase in social laziness.

Hypothesis 2. Consumption level significantly impacts social laziness in the executive organizations of Sirjan.

The significance level for the impact of consumption level on social laziness is 11.28, which, being

above 1.96, indicates that consumption level has a statistically significant effect on social laziness. In other words, as consumption level rises, social laziness also increases. Figure 5 shows that the standardized coefficient between consumption level and social laziness is 0.94, confirming a positive and significant effect of consumption level on social laziness. A summary of the structural equation modeling results is provided in Table 7.

Figure 6. Structural equation modeling of sub-hypotheses

Relationships of research variables	T Value	Direct Effect (R)	Indirect effect	Total effect	Results	Relationship
Accessibility - Social laziness	9.07	0.67	-	0.67	Confirm	Meaningful and Positive
Consumption - Social laziness	11.28	0.94	-	0.94	Confirm	Meaningful and Positive

Table 8 presents the model fit indices in the structural equation modeling. As observed, the research model demonstrates a good fit, meeting the acceptable levels for the indices.

Table 8. Model Fit Indices

Variable	Χ2 /df	RMSEA	GFI	RMR	**IFI**	CFI	NFI	NNFI
Calculate Indicator	2.99	0.079	0.92	0.32	0.93	0.92	0.91	0.93
Suitable surface	5>	0.1>	0.90<	0.5>	0.90<	0.90<	0.90<	0.90<
Results	Appropriate	Appropriate	Appropriate	appropriate	appropriate	appropriate	appropriate	appropriate

5. Discussion and Conclusion

This study aimed to examine the impact of social media usage on social laziness within executive departments of Sirjan. This section presents the results from the data analysis conducted using structural equation modeling. Based on the analyses, it was found that the t-test statistic between social media usage and social laziness was statistically significant, confirming a positive and significant impact of social media on social laziness within these departments. This finding implies that the more individuals excessively engage with social media, the greater their tendency towards social laziness. Increased social media use results in employees losing much of their time, thereby reducing their efficiency. Over time, this becomes habitual, contributing to social laziness. Therefore, excessive social media use plays a fundamental role in fostering social laziness.

Executive departments can potentially improve their performance and productivity by implementing the following measures. Furthermore, the fit statistics indicate that the structural model aligns well with the collected data. The chi-square (χ^2 /df) test result of 2.97 suggests an acceptable

model fit. Additionally, the root mean square error of approximation (RMSEA) value of 0.78 and the comparative fit index (CFI) of 0.94 support the model's adequacy. These findings are partially consistent with Keser et al. (2016). Given that excessive social media usage disrupts the work environment and adversely impacts productivity, it is recommended to minimize social media usage to enhance organizational performance and responsiveness to clients. Additionally, practical recommendations are provided to managers in Sirjan's executive departments to help mitigate the potential negative effects of excessive social media use on employee social laziness:

Awareness Programs and Workshops: To address social laziness stemming from excessive social media usage, it is recommended that Sirjan's executive department conduct awareness programs and workshops. These programs can educate individuals on the potential negative consequences of social laziness and help them develop strategies to manage it effectively.

Time Management and Work-Life Balance: The Sirjan executive department should also focus on promoting effective time management and work-life balance among its members. Encouraging employees to prioritize face-to-face interactions and limit social media use during work hours can help reduce social laziness and foster stronger social connections within the organization.

Collaboration and Teamwork Initiatives: Creating opportunities for collaborative work and promoting teamwork can counteract social laziness. Sirjan's executive department should encourage employees to collaborate on projects, form cross-functional teams, and establish active communication channels for both in-person and virtual interactions.

Monitoring Usage Patterns: Regularly monitoring and evaluating employees' social media usage patterns by Sirjan's executive department is essential. This can help identify individuals who may be at higher risk of social laziness and implement targeted interventions to address the issue.

Creating a Positive Work Environment: Fostering a positive and inclusive work environment is crucial for combating social laziness. Sirjan's executive department should encourage open communication, provide opportunities for social activities and team-building, and recognize and reward employees for collaboration and active participation within the organization.

By implementing these practical recommendations, the Sirjan executive department can actively address social laziness resulting from excessive social media use, creating a more productive work environment. Moving forward, future research could investigate the long-term consequences of social laziness. Specifically, how does social laziness impact productivity, communication, and overall performance within executive departments? This could contribute to a better understanding of excessive social media usage. Additionally, comparing the effects of excessive social media use on social laziness across various organizational levels would be valuable. Examining other departments or levels within executive organizations, or even across different types of organizations, could provide a broader perspective on this issue.

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