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Testing the validity and reliability of a Turkish version of the social cyberloafing scale

Harun Yildiz PhD[1] | Bora Yildiz PhD[2]

[1]Department of International Trade and Logistics, Omer Seyfettin Faculty of Applied Sciences, Bandirma Onyedi Eylul University, Bandirma, Balikesir, Turkey

[2]Department of Management, Faculty of Economics, Istanbul University, Fatih, Istanbul, Turkey

Correspondence
Harun Yildiz, PhD, Department of International Trade and Logistics, Ömer Seyfettin Faculty of Applied Sciences, Bandirma Onyedi Eylul University, Bandirma, Balikesir 10200, Turkey.
Email: harunyildiz@bandirma.edu.tr

Abstract

Purpose: This paper aims to evaluate the validity and reliability of the Turkish version of the social cyberloafing (SC) scale as an important predictor of the mental health of healthcare employees.

Methods: The data for this descriptive cross-sectional study was obtained from 202 Turkish healthcare employees. We followed Dima's 6-step protocol for validation.

Findings: The one-dimensional structure of the scale was found to be homogenous ($H = 0.54$) and reliable ($\alpha = 0.87$). The CFA demonstrated that the 7-item and one-factor construct was a valid instrument to measure the SC (GFI = 0.98, CFI = 0.98, TLI = 0.95, SRMR = 0.03, RMSEA = 0.09).

Practical Implications: These results demonstrated that the Turkish version of the SC scale is an accurate measurement tool.

KEYWORDS

cyberslacking, healthcare employees, social cyberloafing, validation

1 | INTRODUCTION

With the development of information and communication technologies (ICT) and their greater involvement in daily life, the effect of these technologies on employees and the workplace has become an important issue (Özkalp & Yildiz, 2018). In particular, the improper usage of technology and the inability to manage these behaviors has resulted in many new problems (Yilmaz et al., 2015). Cyberloafing, which refers to ICT usage in the workplace for personal purposes, is one of the most prominent of these problems (Aghaz & Sheikh, 2016).

Studies based on Robinson and Bennett's (1995) deviant workplace behaviors classification has focused more on the negative effects of these behaviors on employees and organizations. According to this classification, cyberloafing is a set of new types of deviant behaviors, categorized into production deviance. Employee cyberloafing, which has minor and organizational dimensions, negatively affects organizational productivity and causes the waste of resources (Blanchard & Henle, 2008). For example, a high level of social cyberloafing (SC) may inhibit academic performance (Wu, Mei, Ugrin, et al., 2020), cause academic procrastination (Durak, 2020), and lead to life-to-work conflict (Tennakoon, 2018).

The phenomenon of cyberloafing has emerged as an increasingly important issue in the management literature over the last two decades (Lim, 2002; Örücü & Yildiz, 2014). Although many studies have been carried out on the antecedents and results of cyberloafing, there has not been sufficient research on new types of cyberloafing, such as "social cyberloafing" (Hu et al., 2021). The increase in the use of internet-connected personal smartphones in the last 5 years has drawn more attention to this new dimension of cyberloafing behaviors (Yildiz & Yildiz, 2016). SC, which is a kind of cyberloafing for socialization (Tozkoparan & Kuzu, 2019), refers to the misuse of social media platforms for nonwork-related purposes during working hours (Andreassen et al., 2014a). SC is a leisurely and especially addictive type of cyberloafing (Wu, Mei, Ugrin, et al., 2020). Considering that there are 4.5 billion internet users and 3.8 billion social media users globally, SC is now an inevitable phenomenon in the workplace (Kemp, 2020). Although SC has various antecedents, such as workplace loneliness, workplace ostracism (Hu et al., 2021), and fear of missing out (Tozkoparan & Kuzu, 2019), focusing more specifically on

the outcomes of the SC activities will highlight the influence of these behaviors.

Because social media platforms, such as Facebook, Instagram, Twitter, and WhatsApp are addictive networks, employees can experience some negative psychological and physiological symptoms when using them (Turan et al., 2021). Frequent engagement in SC activities negatively affects employees' mental health by consuming their time and causing fatigue (Dhir et al., 2018; Wu, Mei, Liu, et al., 2020). Also, excessive and problematic internet usage reduces workplace safety because SC is energy and time-consuming behavior (Abubakar & Al-zyoud, 2021). Similarly, online messages from social media networks can cause employees to feel the need to respond to them, disrupting their planned work. Therefore, these interruptions create time pressure and negatively affect employees' mental health (negative affective state) (Sonnentag et al., 2018). Compulsive social media use, which is an indicator of psychological well-being, triggers fatigue and, in turn, high anxiety and depression (Dhir et al., 2018). Addictive use of internet applications like social media may cause negative consequences such as social isolation, loneliness, feelings of being misunderstood, conflicts, feelings of emptiness, and other damaging emotions and behaviors in daily life and the workplace (Brand et al., 2016).

The healthcare sector is one of the most stressful sectors for workers. In Turkey (Turkish Ministry of Health, 2020), the number of individuals per nurse is four times higher than in OECD countries (Turkey = 413.2 people per nurse vs. OECD = 102 people per nurse), and the number of individuals per doctor is similarly high when compared to OECD countries (Turkey = 498.2 people per doctor vs. OECD = 341.3 people per doctor). As this suggests, the workload on Turkish healthcare professionals is high. Therefore, healthcare employees might engage in SC activities to cope with this excessive workload and mental fatigue; hospital employees could use these activities as a "resource recovery" mechanism. SC activities can be seen as a way to take a short break from work, avoid wasting mental resources, and refill consumed mental resources (Wu, Mei, Liu, et al., 2020). Although SC activities provide employees with psychological detachment and their discharge, excessive use of social media can unwittingly put the lives of patients and employees at risk (Abubakar & Al-zyoud, 2021). Accordingly, it is crucial to determine the levels of engagement in SC among healthcare professionals and develop strategies for managing these behaviors.

Despite its importance, interestingly, only three studies have been published on SC, according to searches using the Web of Science. Two of these studies were published in 2020 and one was published in 2021 (Hu et al., 2021; Wu, Mei, Ugrin, et al., 2020; Wu, Mei, Liu, et al. 2020), and all of these studies were done in China. In parallel with this scarcity, no research has been found in Turkish. Thus, SC appears to be a developing concept in the literature. The aim of this study was therefore to (a) examine the validity and reliability of a Turkish version of the SC scale as an important predictor of mental health and (b) provide a valid, reliable, and robust SC scale by integrating parametric and non-parametric item response theories with classical test theory.

2 | METHOD

In this paper, Dima's (2018) 6-step protocol was conducted to evaluate a Turkish adaptation of the SC scale of Andreassen et al. (2014b) as this protocol is more effective than other methods in evaluating all aspects of the scale. The iteration of the protocol with the R that is an open source statistical environment is straightforward and user-friendly, and is favored by recent research focusing on healthcare-related topics (Cilar et al., 2020; Dima, 2018; Yildiz et al., 2021; Yildiz, 2021). The six steps of the protocol (Dima, 2018) are to (1) define the descriptive statistics, (2) test the non-parametric item response theory, (3) analyze the parametric item response theory, (4) implement the factor analysis, (5) examine the classical test theory, and (6) evaluate the total (sub)scale scores.

2.1 | Aim

This paper aims to determine the psychometric characteristics of the SC scale of Andreassen et al. (2014b) through Dima's (2018) 6-step protocol to evaluate the SC behaviors of healthcare employees.

2.2 | Design

This descriptive cross-sectional study was performed for the validation process of a Turkish version of the SC scale. The data were obtained from 202 healthcare employees. The sample comprised employees employed in public hospitals in Turkey, mainly in Ankara, between April and May 2021.

2.3 | Participants

Before the data collection process, seven nurses and a technician were interviewed with personal contact using an online platform. These people had many personal contacts with workers in their teams. Later, these healthcare professionals were informed of the purpose of the study and the items of the scale. Then, a Google forms online survey link was sent to these eight employees, and data was collected from their colleagues and their professional networks via this link. The data set consisted of 208 participants. Next, using the Mahalanobis distance, six outliers were removed from the data (Reiser, 2001). The final usable sample comprised 202 healthcare employees (response rate: 202/208 = 97.1%). Most of the respondents were female (77.3%), married (60.9%), in the 31- to 40-year-old group (41.6%), and worked as nurses (64.9%). Other characteristics of the participants are presented in Table 1.

To test the adequacy of the sample, the "pwr" package for R software (Champely, 2020) was utilized. . Accordingly, a power analysis was run and determined to be 100 according to the sample size (n = 202), significance level (p = 0.05), and the overall inter-item

TABLE 1 Demographic characteristics (n = 202)

	n	%
Gender		
Female	157	77.3
Male	45	22.7
Marital status		
Single	79	39.1
Married	123	60.9
Age		
18–30	73	36.1
31–40	84	41.6
41–50	45	22.3
Professions		
Physicians and dentists	15	7.4
Nurses/midwives	131	64.9
Technicians	30	14.9
Other healthcare professionals	26	12.9
Total	202	100

correlation coefficient of scale (r = 0.50). As a result, we concluded that the sample size was acceptable for this study (Cohen, 1988).

2.4 | Data collection

The Covid-19 pandemic increased the workload on hospital staff, and this situation also severely limited the opportunity for face-to-face surveys. To overcome this problem, the snowball sampling method was used through personal contacts. Using the online survey technique, we ensured that the employees voluntarily answered the surveys at the most appropriate times. In addition, because SC activities are counterproductive and contrary to workplace norms, employees needed to respond to surveys without being under the influence of social desirability and managers. Therefore, we established a trusting relationship between researchers and participants through personal contacts.

The inclusion criteria of participants in the sample were as follows:

(1). Being employed in a hospital in Turkey,
(2). Having a mobile phone or computer with internet access,
(3). Voluntarily using social media activities for personal purposes in the hospital, and
(4). Having been on hospital staff for at least 1 year.

The scale was adapted into Turkish using Brislin's (1970) back-translation procedure. First, the scale was translated into Turkish by two independent experts who are bilingual (in English and Turkish). Then another two bilingual translators back-translated the translated version of the scale. Next, inconsistencies between the original and the back-translated versions were discussed and resolved by experts. Finally, a few adjustments and modifications to fit the Turkish context were made and the scale was finalized (see Appendix A). All items were answered with a 5-point Likert scale (1 = *strongly disagree*, 5 = *strongly agree*). All responses were defined as mandatory to prevent missing values, and hence there were no missing values in the data set.

SC was measured with a 7-item scale modified by Wu, Mei, Liu, et al. (2020) and developed by Andreassen et al. (2014b). The seven items are as follows:

(1). "When I need to take a break from work, I use social media (e.g., Facebook, Instagram, Twitter, WhatsApp) during working hours,"
(2). "If given a chance, I would use social media during working hours,"
(3). "I cannot resist using social media to follow current events during working hours,"
(4). "I would use social media to follow the current situation and update my family members or friends during working hours,"
(5). "I would use social media to 'post' pictures, videos, and comments during working hours,"
(6). "I would use social media to chat with my family members or friends during working hours," and
(7). "I would 'like' or comment on content that my family members or friends post on social media during working hours."

2.5 | Ethical considerations

The study obtained the ethical approval of the Social Sciences and Humanities Ethics Committee of the Bandirma Onyedi Eylul University (decision no.: 2021-05).

2.6 | Data analyses

We used R software in all statistical analyses (R Core Team, 2020). Usage of R software in the healthcare industry, and especially in healthcare research, is relatively low, and researchers are not very familiar with it. However, in recent years, the use of this program has been recommended due to its flexibility (Cilar et al., 2020; Stiglic et al., 2019; Yildiz, 2021). R is an innovative and complete open-source platform for statistical computing and graphics that requires coding knowledge. Also, it is a powerful statistical tool that offers researchers different alternatives thanks to its flexible structure. We, therefore, used specific R libraries to perform each step of the protocol, namely "likert" (Bryer & Speerschneider, 2016), "psych" (Revelle, 2020), "haven" (Wickham & Miller, 2021), "lavaan" (Rosseel, 2012), "mokken" (van der Ark, 2007), "mirt" (Chalmers, 2012), and "eRm" (Mair et al., 2021). This study implements the 6-step procedure of Dima (2018) to validate a Turkish

version of the SC scale developed by Andreassen et al. (2014b). Because the SC scale is a 7-item and 5-point scale, the scale's total score varies between a minimum of 7 and a maximum of 35. High scores would indicate that hospital staff were using social media platforms more for personal purposes at work, while low scores would indicate the opposite.

3 | RESULTS

3.1 | Sample characteristics

Total scores of the SC scale indicated that the values were between 7 and 35, with a mean of 22.52 (SD = 6.61) and a median of 23.00 (Figure 1).

The frequencies of each SC scale item are presented in Figure 2. Green colors represent the levels of agreement, while yellow colors represent levels of disagreement. SC_1 had the highest positive response rate (73%), while SC_5 had the lowest (29%). On the contrary, the item SC_3 had the highest neutral response (grey color) rate (27%) among all items.

Mean (ranges from 2.61 to 3.95), standard deviation (ranges from 1.05 to 1.37), and inter-item correlations of the scale items are presented in Table 2. The correlation coefficients of scale items fell between $r = 0.26$ and $r = 0.69$, and all correlations were positive and significant ($p < 0.01$). The heatmap of the inter-item correlations is also presented in Figure 3.

3.2 | Mokken scale analysis (MSA)

According to the MSA, the Turkish version of the SC scale was strongly scalable ($H = 0.54$, SE = 0.037) (Sijtsma & van der Ark, 2017). Homogeneity (*H*) coefficients of seven items ranged from 0.48 to 0.59, over the recommended (medium level) threshold value of 0.40 (Dima, 2018; Sijtsma & van der Ark, 2017). On the contrary, the results of automatic item selection procedure analysis indicated that there were no non-scalable items below the recommended threshold value (<0.30) (Dima, 2018; Sijtsma & van der Ark, 2017). As this suggests, all items were scalable for the SC construct.

3.3 | Parametric item response theory (IRT)

Because the construct of SC was measured with a 7-item and 5-point Likert-type scale, to evaluate the fitness of the scale, the rating scale (RSM) model was used (Paek & Cole, 2019). According to this model, "the RSM requires that all items have the same number of options or categories, and it assumes that adjacent threshold parameters are equally spaced, that is, are equidistant, across all items" (Paek & Cole, 2019: p. 123). Based on this method, infit and outfit scores were used to evaluate item quality (Dima, 2018). The recommended interval of these indicators is 0.6–1.4; our scale's minimum infit and maximum infit values were 0.72 and 1.09, respectively. Accordingly, we concluded that the 7-item structure of the scale represented a good level of homogeneity.

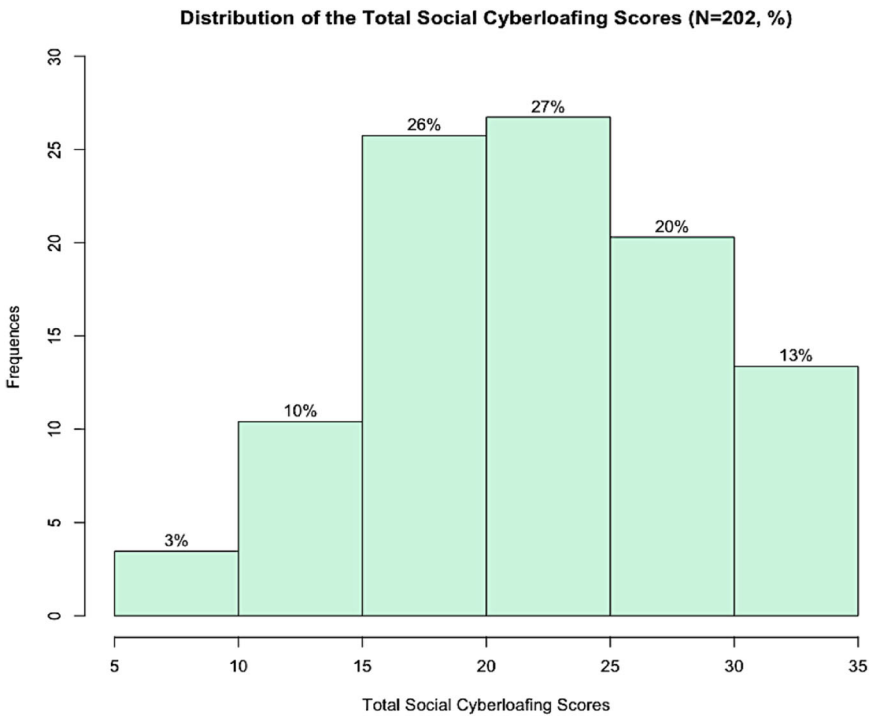

FIGURE 1 Total social cyberloafing scores

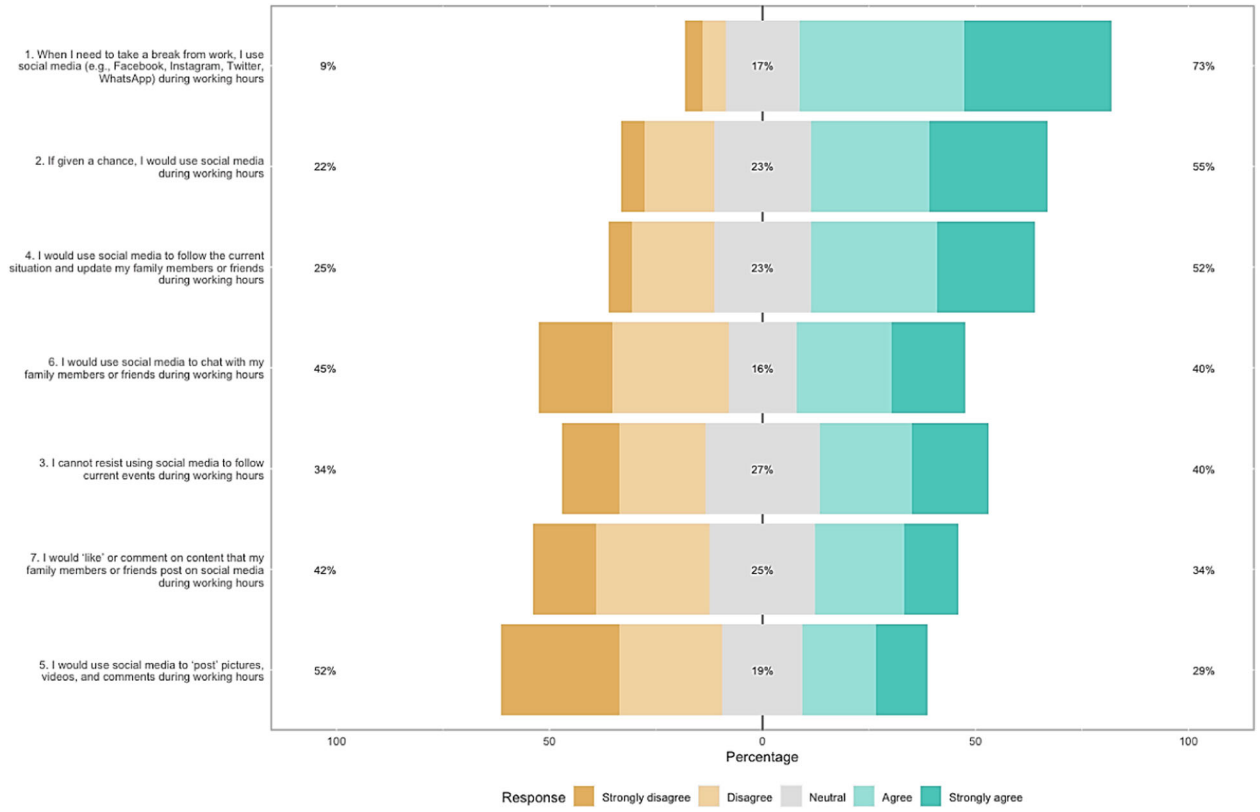

FIGURE 2 Likert bar plot of social cyberloafing items

TABLE 2 Means (M), standard deviations (SD), and correlations with confidence intervals (CIs)

Items	*M*	SD	1	2	3	4	5	6	7
1. SC_1	3.95	1.05	1						
2. SC_2	3.56	1.21	0.69** [0.61, 0.75]	1					
3. SC_3	3.10	1.29	0.37** [0.25, 0.49]	0.53** [0.43, 0.63]	1				
4. SC_4	3.45	1.19	0.53** [0.42, 0.62]	0.62** [0.53, 0.70]	0.61** [0.51, 0.69]	1			
5. SC_5	2.61	1.36	0.26** [0.13, 0.38]	0.43** [.31, .53]	0.52** [0.42, 0.62]	0.51** [0.40, 0.61]	1		
6. SC_6	2.95	1.37	0.32** [0.19, 0.44]	0.42** [.30, .53]	0.44** [0.32, 0.55]	0.54** [0.43, 0.63]	0.55** [0.45, 0.64]	1	
7. SC_7	2.90	1.26	0.39** [0.26, 0.50]	0.52** [.41, .61]	0.43** [0.31, 0.53]	0.49** [0.38, 0.59]	0.68** [0.60, 0.75]	0.62** [0.53, 0.70]	1

Note: The 95% CIs for correlations are in square brackets. The CI is an acceptable range of population correlations, which could have led to the sample correlation (Cumming, 2014).

**$p < 0.01$.

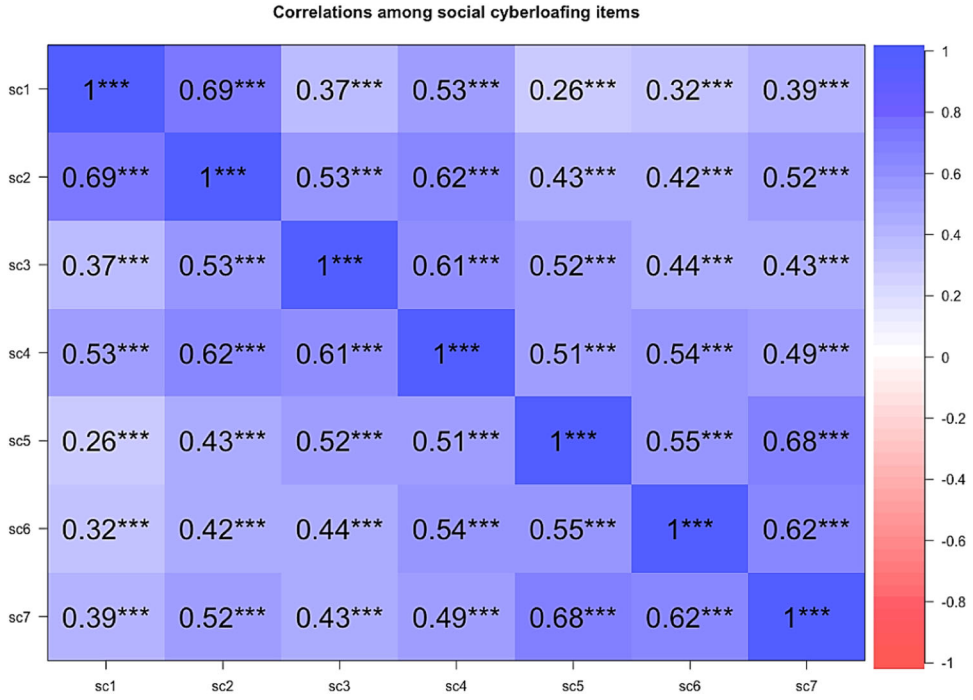

FIGURE 3 Heatmap of the inter-item correlations among the scale items

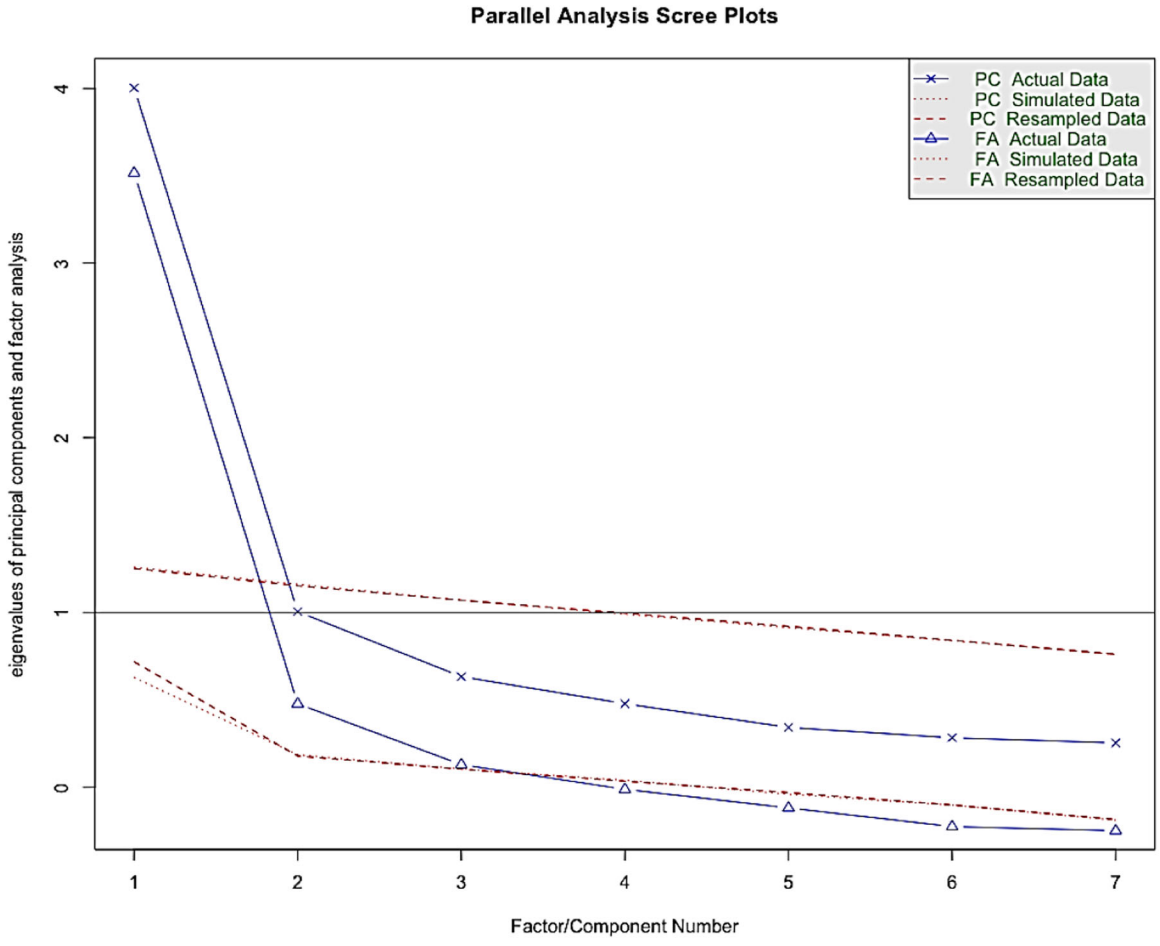

FIGURE 4 Parallel analysis screen plots

3.4 | Factor analysis

Both exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) were conducted for construct validity. First, we performed EFA. For factor resolution, principal component analysis and varimax rotation method were selected. The results showed that the sampling adequacy test was adequate, Kaiser-Meyer-Olkin (KMO) = 0.84. Further, Bartlett's test of sphericity was also significant, $X^2(21) = 693.5839$, $p < 0.001$. The parallel analysis scree plot results as well as the old and new Kaiser method indicated that the extracted factor number of the SC scale was 1 (Figure 4). According to the results of principal component analysis, the factor loadings of the items were between 0.66 and 0.82. The proportion of the explained variance was 57% of the total variance.

The measurement model (Figure 5) was analyzed using the CFA, and the results revealed a good fit (GFI = 0.98, AGFI = 0.91, NFI = 0.98, CFI = 0.98, TLI = 0.95, SRMR = 0.03, RMSEA = 0.09). All fit indices were higher than acceptable values (Maydeu-Olivares, 2017).

Table 3 gives detailed information about the measurement model by including the goodness of fit indices, model summary, estimates, and standardized factor loadings of the scale items that were statistically significant ($p < 0.001$).

3.5 | Classical test theory (CTT)

Cronbach (1951) recommended a cut-off value of $\alpha \geq 0.70$ for satisfactory internal reliability. As a result, Cronbach's α coefficient of SC was determined to be $\alpha = 0.87$ (95% CI [0.85, 0.90]). This value indicated good reliability and was also close to other reliability criteria, namely beta (0.77), G6 lambda (0.88), and omega (0.88) (Table 4).

3.6 | Total scale scores

Table 5 shows the summary of descriptive statistics. The mean and median of the total SC values were very similar, and total minimum and maximum values ranged from 7 to 35. The extreme values only covered 2.1% and were below 15% (Dima, 2018). Accordingly, these extreme scores will not be a problem in further scale development processes. Further, the distribution of the total SC was at an acceptable level, $\bar{X}$ (SD) = 22.52 (6.61). Consequently, the results did not cause ceiling and floor effects.

4 | DISCUSSION

Our study's findings demonstrated that the Turkish version of the SC is suitable for assessing SC behaviors in healthcare employees and fulfilled Dima's (2018) protocol. The mean values of the indicators in this study varied between 2.61 and 3.95, while they ranged from 1.62 to 2.89 in the original study by Andreassen et al. (2014b). The mean value of the overall SC scale in our study is 3.22 ± 0.94. These results are slightly higher than those of the Andreassen et al. (2014b) study (2.24 ± 1.39) and the study (2.93 ± 0.81) conducted by Wu, Mie, Liu, et al. (2020). One reason for this could be that the number of population per doctor and nurse is higher in Turkey than in OECD countries (Turkish Ministry of Health, 2020). Accordingly, healthcare employees in Turkey might engage in more SC behaviors to eliminate their excessive workload and mental fatigue as a "resource recovery" mechanism. These behaviors can be seen as a way to take a short break from work and refill consumed mental resources (Wu, Mie, Liu, et al., 2020). Although these behaviors provide employees with psychological detachment, overuse of social media can unwittingly turn into a form that can put the lives of patients and employees at risk (Abubakar & Al-zyoud, 2021).

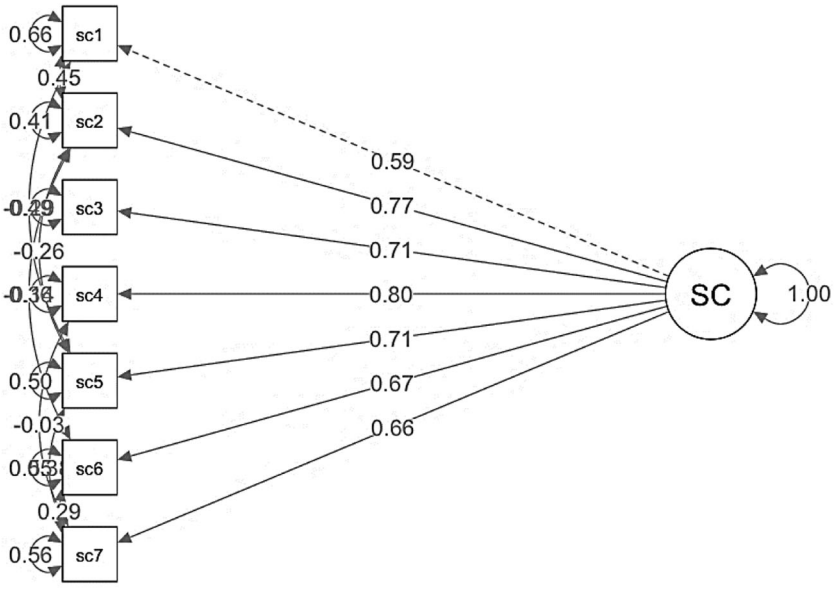

FIGURE 5 The CFA results of the SC scale. CFA, confirmatory factor analysis; SC, social cyberloafing

TABLE 3 Estimates and SFLs for the CFA

Goodness of fit indices							
x^2/df	GFI	AGFI	NFI	CFI	TLI	SRMR	RMSEA
2.530	0.98	0.91	0.98	0.98	0.95	0.03	0.09
Item no.		Estimate	SE	*z*-value	*p* (<|z|)	Std. lv	Std. all
SC_1		1.000	–	–	–	0.612	0.586
SC_2		1.504	0.149	10.098	0.000***	0.921	0.767
SC_3		1.500	0.202	7.418	0.000***	0.919	0.713
SC_4		1.549	0.197	7.848	0.000***	0.949	0.797
SC_5		1.581	0.240	6.574	0.000***	0.968	0.709
SC_6		1.502	0.212	7.098	0.000***	0.920	0.670
SC_7		1.343	0.199	6.767	0.000***	0.823	0.661

Abbreviations: CFA, confirmatory factor analysis; SC, Social cyberloafing.
***$p < 0.001$.

TABLE 4 Reliability results of the scale

Scale reliability statistics		
Maximum split-half reliability (lambda 4)	=	0.89
Guttman lambda 6	=	0.88
Average split-half reliability	=	0.88
Guttman lambda 3 (alpha)	=	0.87
Guttman lambda 2	=	0.88
Minimum split-half reliability (beta)	=	0.77
Omega	=	0.88
Average inter-item correlation (*r*)	=	0.50 (Med = 0.52)

Item total statistics

Items	Scale means if item deleted	Scale variance if item deleted	Corrected-item total correlation	Squared multiple correlation	Cronbach's α if item deleted
SC_1	18.58	35.80	0.539	0.50	0.87
SC_2	18.97	32.62	0.693	0.62	0.85
SC_3	19.42	32.66	0.632	0.46	0.86
SC_4	19.07	32.36	0.728	0.57	0.85
SC_5	19.91	31.74	0.654	0.55	0.86
SC_6	19.57	31.92	0.634	0.47	0.86
SC_7	19.62	32.15	0.696	0.59	0.85

Abbreviation: SC, social cyberloafing.

TABLE 5 The item and total scores of SC

Item no	Min	Max	Median	Mean	SD
SC_1	1	5	4	3.95	1.05
SC_2	1	5	4	3.56	1.21
SC_3	1	5	3	3.10	1.29
SC_4	1	5	4	3.45	1.19
SC_5	1	5	2	2.61	1.36
SC_6	1	5	3	2.95	1.37
SC_7	1	5	3	2.90	1.26
SC_Factor	1	5	3.48	3.22	0.94
Total SC	7	35	23	22.52	6.61

Abbreviation: SC, social cyberloafing.

The parametric and non-parametric item response theories demonstrated that the SC scale has one-dimensional structure, consistent with the original research. MSA (non-parametric item response theory) revealed that the scale was homogeneous, and the 7-item *H* coefficients were at the medium level (Cilar et al., 2020). The Automatic Item Selection Procedure analysis showed no non-scalable items (Dima, 2018; Sijtsma & van der Ark, 2017), and all indicators measured SC behaviors. Also, infit and outfit values of the scale showed that there were no extreme values that disrupted the structure of the scale (DeMars, 2017).

The EFA demonstrated that the one-factor dimension of SC was retained from the original and the studies adapted for Chinese. However, in the study of Wu, Mie, Liu, et al. (2020), the first and second items of the SC scale were excluded from the SC scale because of the low factor loadings. On the other hand, no items were omitted from the scale in this Turkish adaptation. Additionally, the KMO and Bartlett tests showed sufficient sampling adequacy and intercorrelation among the SC behaviors. Furthermore, the CFA demonstrated that the one-factor construct fit the data well. In summary, these results are coherent with other SC studies (Andreassen et al., 2014b; Wu, Mie, Liu, et al., 2020).

The scale's reliability was determined to be $\alpha = 0.87$, which is a little lower than the reliability of the original Norwegian study

TABLE 6 Mokken scaling for the social cyberloafing items

Item	*H*	Homogeneity threshold levels (*H* = 0.54)										
		0.05	0.10	0.15	0.20	0.25	0.30	0.35	0.40	0.45	0.50	0.55
SC_1	0.48	1	1	1	1	1	1	1	1	1	1	1
SC_2	0.57	1	1	1	1	1	1	1	1	1	1	1
SC_3	0.52	1	1	1	1	1	1	1	1	1	1	1
SC_4	0.59	1	1	1	1	1	1	1	1	1	1	1
SC_5	0.55	1	1	1	1	1	1	1	1	1	2	2
SC_6	0.52	1	1	1	1	1	1	1	1	1	2	2
SC_7	0.57	1	1	1	1	1	1	1	1	1	2	2

Note: Numbers state which sub-dimension the item belongs to; 0 shows that the item is unscalable at different homogeneity levels.

(α = 0.88) and higher than the adapted Chinese study (α = 0.84), and the minimum value (α = 0.70) recommended by Cronbach (1951). As a result, it can be concluded that the scale is highly reliable.

Lastly, our SC scale's total scores and other descriptive statistics were consistent with each other. The extreme values only covered 2.1% of the data and were below 15%; therefore, we concluded that there were no extreme scores (Dima, 2018). Furthermore, considering the total average values of SC, Turkish healthcare professionals engage in social loafing behaviors at levels that are above average.

4.1 | Limitations

Despite the successful international adaptation of the SC scale, some limitations still exist. First, data for the measurement of SC was self-reported by hospital employees. In cultures with high power distance, such as Turkey, employees might be afraid that their manager might become aware of their SC behavior, and therefore they may respond more desirably by underreporting behaviors (Hofstede, 2021; Yildiz & Elibol, 2020). Therefore, further research could use social desirability bias as a control variable to minimize such biases. Future studies can also add the manager's attitude toward SC or the hospital's policies toward these behaviors as a control variable or as a moderator to minimize the effects of these factors on reporting SC behaviors. Second, the data was collected from healthcare professionals, therefore, it is recommended to conduct research on employees from different sectors (e.g., banking, education) or on specific healthcare professionals such as nurses or doctors. Third, our study had a cross-sectional design; therefore, longitudinal studies should be conducted to detect causal relations among the SC and its antecedents and outcomes. Finally, this study did not investigate any hypothetical causal relationship as it aimed to adapt the SC scale to the Turkish context. Therefore, we suggested that future studies include socio-demographic variables, perceptions, attitudes, or behavioral factors as dependent or independent variables.

5 | CONCLUSION

Our study produced results similar to the ones from Chinese and Norwegian studies and met all psychometric properties. The findings confirm the one-factor structure of the scale, using the same items as the original study of Andreassen et al. (2014b). The 7-item scale can be used to measure medical staff's SC behaviors. Healthcare professionals need to take preventive measures to curb SC behaviors, which are detrimental to mental health and safety in the workplace. Hospital managers need to ensure that these behaviors remain at a level that does not impair the productivity and attention of their employees (Turan et al., 2021). This validated SC scale could be used to assess SC behaviors of healthcare staff in Turkey. Furthermore, considering the scarcity of studies on SC, this field is an area that is open to development. Therefore, both the positive and negative aspects of these behaviors on hospital employees can be evaluated in future research.

In addition, the current scale measures the SC structure as a behavior. In the literature, this structure can be measured separately as behavior and activity as in the general cyberloafing structure. Measuring these behaviors as an activity also allows to measure the frequency of SC (e.g., "always" in response to a statement such as, "I use Facebook Messenger in the hospital," would mean that this activity was done frequently). In this sense, future research should focus on these gaps in the SC literature.

5.1 | Implications for nursing practice

Because modern organizations will use the internet, and mobile and digital devices more in the future, hospital administrators need to prepare effective usage policies to keep SC under control (Abubakar & Al-zyoud, 2021). For example, social media platforms and smartphones with these applications should only be used during scheduled breaks, unless otherwise stated, as these applications are the primary workplace productivity killers. Even if hospital administrators give permission within certain limits (e.g., times that do not exceed 30 min), notification sounds from these platforms should be turned off during working hours to prevent distraction and occupational accidents caused by carelessness. Employees should be informed about the negative effects of the use of social media on job performance and productivity, and such training should be organized periodically. When these policies are not clearly stated, long-term social media use might negatively affect hospital employees' mental health and psychological well-being. These negative effects are especially harmful to nurses. Because nurses spend most of their time on the treatment and care of patients, patients may experience permanent harm from nurses' uncontrolled use of social media platforms that results in unsafe behaviors. Therefore, potential occupational accidents should be prevented by determining social media usage policies and formulating time-based control mechanisms. For example, it can be ensured that nurses in critical duties turn off their smartphones or do not have their phones with them while performing these tasks.

Researching SC in different countries or cultures can provide managers or policymakers with a more holistic perspective on managing these behaviors. In addition, future SC research with this Turkish adaptation study will provide more information to healthcare managers about the positive and negative aspects, antecedents, and consequences of these behaviors. Future research findings could contribute to formulating strategies on how to manage SC in the workplace effectively. Thus, the information technology usage procedures could be generated, and these procedures would be able to be incorporated by managers or policymakers into codes of conduct in the workplace.

CONFLICT OF INTERESTS

The authors declare that there are no conflict of interests.

ETHICS STATEMENT

The study obtained ethical approval of the Social Sciences and Humanities Ethics Committee of the Bandirma Onyedi Eylul University (decision no.: 2021-05).

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

ORCID

Harun Yildiz https://orcid.org/0000-0003-0394-9812
Bora Yildiz https://orcid.org/0000-0002-0373-6457

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APPENDIX A

Original and Turkish versions of the social cyberloafing scale

English	Turkish	Factor loadings
In hospital,	*Hastanede,*	
1. "When I need to take a break from work, I use social media (e.g., Facebook, Instagram, Twitter, WhatsApp) during working hours,"	1.İşime ara verme ihtiyacı duyduğumda, mesai saatleri içinde sosyal medyayı (ör. Facebook, Instagram, Twitter, WhatsApp gibi) kullanırım.	0.66
2. "If given a chance, I would use social media during working hours,"	2. Fırsat olduğunda, mesai saatlerinde sosyal medyayı kullanırım.	0.80
3. "I cannot resist using social media to follow current events during working hours,"	3. Mesai saatleri içinde güncel olayları takip etmek için sosyal medyayı kullanmaktan kendimi alamam.	0.74
4. "I would use social media to follow the current situation and update my family members or friends during working hours,"	4. Mesai saatlerinde gündemi takip etmek ve aile üyelerim veya arkadaşlarımdan haberdar olmak için sosyal medyayı kullanırım.	0.82
5. "I would use social media to 'post' pictures, videos, and comments during working hours,"	5. Mesai saatlerinde resim, video paylaşmak ve yorum yazmak için sosyal medyayı kullanırım.	0.75
6. "I would use social media to chat with my family members or friends during working hours,"	6. Mesai saatlerinde aile üyelerim veya arkadaşlarımla sohbet etmek için sosyal medyayı kullanırım.	0.74
7. "I would 'like' or comment on content that my family members or friends post on social media during working hours."	7. Mesai saatlerinde aile üyelerim veya arkadaşlarımın sosyal medyada paylaştığı içeriklere beğeni gönderir veya yorum yaparım.	0.78

Note: Wu, Mie, Liu, et al. (2020) conducted a Chinese adaptation of the SC scale of Andreassen et al. (2014a, 2014b), but the first and second items were excluded from the SC scale because of the low factor loadings. On the other hand, no items were omitted from the scale in the Turkish adaptation.