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# Development and psychometric evaluation of a Turkish adaptation of the Social Media Flow Scale

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## Abstract

The present study adapted the Social Media Flow Scale (SMFS), developed by Brailovskaia et al. (2020), into Turkish and evaluated its psychometric properties. Data from 732 social media users (N = 732; 65.4% female; $M_{age}$ = 31.19 years, $SD_{age}$ = 11.13) were collected by an online survey. A standard procedure, including forward and back translation, was used to ensure the linguistic validity of the Turkish SMFS. Confirmatory factor analysis supported the original five-factor structure, comprising focused attention, enjoyment, curiosity, telepresence, and time distortion. Fit indices revealed a good fit of the model (comparative fit index = .975, Tucker-Lewis index = .960, root mean square error of approximation = .066, and standardized root mean square residual =

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- The Social Media Flow Scale (SMFS) was adapted into Turkish using confirmatory factor analysis.
- The scale confirmed a five-factor structure including focused attention, enjoyment, curiosity, telepresence, and time distortion.
- Flow dimensions showed strong concurrent validity with social media addiction and problematic smartphone use.
- The Turkish SMFS is a reliable tool for assessing multidimensional flow experiences and digital well-being.

.033). All subscales demonstrated acceptable to excellent internal consistency (α = 0.789–0.888; ω = 0.791–0.942). Convergent and discriminant validity of the SMFS were supported by average variance extraction, composite reliability, and heterotrait-monotrait ratio of correlations. Analyses of concurrent validity showed that total scores on the SMFS were significantly positively related to social media continuance, social media-related fear of missing out, social media addiction, and problematic smartphone use (r = .515 to .689). The findings suggest that flow in social media use acts as a double-edged sword by both maintaining engagement and being associated with problematic use. In sum, the results indicate that the Turkish SMFS is a reliable and valid instrument for assessing multidimensional flow experiences in social media contexts and can be utilized in research on digital well-being and addictive behaviors.

## 1. Introduction

The technological revolution, particularly the widespread adoption of social media worldwide, has fundamentally changed how humans interact, consume information, and conduct their daily lives. According to the Digital 2026 report, the number of internet users has surpassed 6 billion (Kemp, 2026). Central to this digital world are social media platforms, which are utilized by a vast majority of the global population (Kemp, 2026). These figures demonstrate a new socio-technical reality that may profoundly affect individuals' psychological states, behavioral patterns, and overall well-being. The time spent on social media platforms underscores the importance of understanding the quality of experiences in digital spaces and the psychological processes underlying their use, both for academic research and public health (Singh, 2026).

One key psychological factor driving social media platforms' ability to generate high engagement in an optimal mental state is the experience of 'flow' (Brailovskaia et al., 2020). Flow theory, initially defined by Csikszentmihalyi (1990), describes an inherently ideal rewarding experience. In this ideal state, an individual becomes fully absorbed in an activity, loses awareness of time, experiences a sense of merging between action and consciousness, and derives deep enjoyment from the activity itself. Although initially developed for offline activities such as art, sports, and creative pursuits, this concept was successfully adapted to digital environments by Hoffman and Novak (1996) and has since become a key part of understanding social media use (Brailovskaia et al., 2020; Hoffman & Novak, 1996). However, the flow experience on social media is often described as a 'double-edged sword'; while it enhances positive experiences and engagement, it may also lead to adverse outcomes, such as problematic use or addiction (Brailovskaia et al., 2020; Zhao & Zhou, 2021). On the one hand, flow increases engagement, satisfaction, and platform loyalty (Kim et al., 2020; Pelet et al., 2017; Zhou et al., 2010), and can even promote commercial behaviors such as purchase intention (Hyun et al., 2022; Santamaría et al., 2024), producing desirable outcomes for such platforms. On the other hand, when combined with specific psychological predispositions and motivations, such as escapism from negative emotions, social media flow may lead to compulsive and/or addictive use (Brailovskaia et al., 2020; Miranda et al., 2023; Zhao & Zhou, 2021), and academic procrastination (Argiropoulou & Vlachopanou, 2021), posing serious psychosocial risks.

Such duality underscores the importance of empirically examining flow experiences. Given the widespread use of social media in Türkiye (Kemp, 2026) and the potential impact of flow experience, the lack of a culturally adapted, psychometrically validated measurement instrument available to Turkish researchers and clinicians may substantially limit research on the impact of social media flow. Therefore, the present study addressed this gap by adapting the Social Media Flow Scale (SMFS; Brailovskaia et al., 2020) – a widely used, robustly psychometrically validated measure of social media flow – into Turkish. In the following sections, the theoretical foundations and digital evolution of flow theory are discussed, followed by a detailed analysis of its dual outcomes within the context of social media. Finally, the rationale, purpose, and importance of the present study are outlined, emphasizing the current situation in Türkiye and the need for a valid psychometric assessment tool.

## 1.1. Flow: The Psychology of Optimal Experience

The concept of flow was developed through Csikszentmihalyi's (1990) research on human happiness, creativity, and life satisfaction. This research demonstrated that the moments when individuals feel most energetic, creative, and in sync with life reflect a unique state of consciousness known as 'flow'. Flow is an intense concentration on an activity that makes other elements of the external world less important, and the individual exists only in that moment (Csikszentmihalyi, 1990). This experience is characterized by the individual acting solely for the pleasure of the act, without expecting an external reward. In this respect, flow is defined as an "autotelic" experience, meaning the activity is both the goal and the reward in itself (Brailovskaia et al., 2018; Pelet et al., 2017). This theoretical framework explains that flow is not merely a transient state of pleasure but also a powerful source of intrinsic motivation, evoking a deep sense of meaning and engagement among individuals. According to Csikszentmihalyi (1990), achieving this universal psychological state is not accidental. It becomes possible when specific preconditions converge. In the literature, these conditions are addressed under three main headings: challenge-skill balance, clear goals, and immediate feedback (Novak et al., 2000; Pelet et al., 2017; Roberts & David, 2023).

First, a delicate balance must be established between the difficulty of the task individuals face and the skills they possess to perform it. If the task exceeds the individuals' skills, anxiety arises; if their skills far exceed what the task requires, boredom occurs. Flow occurs within an "optimal" channel between these two extremes, where individuals' skills are challenged yet remain attainable (Brailovskaia et al., 2018; Brailovskaia et al., 2020; Pelet et al., 2017).

Second, the activity in which the individual experiences flow must have clear and understandable goals. This clarity allows the person to direct mental energy toward action rather than struggling with uncertainty (Pelet et al., 2017; Roberts & David, 2023). Ultimately, receiving immediate, clear feedback on the outcomes of actions enables individuals to continuously adjust their performance and feel they are making progress toward their goals. This feedback loop keeps the individual's attention focused on the task and is crucial for maintaining the continuity of the flow state (Novak et al., 2000; Pelet et al., 2017).

When these preconditions are satisfied, individuals experience a deep and comprehensive subjective state that characterizes the flow experience (Csikszentmihalyi, 1990; Hyun et al., 2022). This theoretical model provides a solid foundation for understanding how social media platforms engage individuals (Kaur et al., 2016; Mauri et al., 2011; Zhou et al., 2010). Platforms artificially mimic the essential preconditions of flow by delivering content customized to each individual's interests and skill level through algorithms (challenge-skill balance) (Yang et al., 2023). They also maintain engagement by offering ongoing, achievable goals (for example, watching the following video or viewing the next post) via the infinite scroll feature (clear goals) (Miranda et al., 2023) and by providing real-time social cues such as likes, comments, and shares (immediate feedback) (Yao et al., 2023). Consequently, an individual's attention becomes highly focused on the activity, leading them to ignore distractions (Csikszentmihalyi, 1990; Lin et al., 2020). This intense focus and enjoyment may lead individuals to lose track of time (time distortion) (Kwak et al., 2014; Pelet et al., 2017; Roberts & David, 2023). Through this experience, individuals see the time they spend on the platform as an inherently satisfying and meaningful engagement (intrinsic enjoyment) (Pelet et al., 2017), which directly influences loyalty and their intention to continue (Chang & Zhu, 2012; Hyun et al., 2022; Yang et al., 2023). This phenomenon forms the psychological foundation for the addictive potential of flow, which is discussed in subsequent sections.

## 1.2. The Evolution of Flow into Digital Environments: From Hypermedia to Social Media

Flow theory was initially developed to describe offline activities that require both physical and mental skills, such as sports, art, and games. However, the power and universality of the concept made its adaptation to new environments inevitable as the digital age emerged. The most important milestone in this theoretical shift was reached through the work of Hoffman and Novak (1996). These studies positioned the idea of flow as a key theoretical framework for understanding human behavior in online environments, which were among the new communication technologies of the era (Hyun et al., 2022; Kaur et al., 2016). Hoffman and Novak (1996) argued that, unlike the one-way, passive one-to-many communication model of traditional media, such as television and radio, the internet offers a many-to-many interactive structure (Hoffman & Novak, 1996; Kaur et al., 2016). In this new model, an individual is no longer a passive recipient but an active participant who interacts with content and other individuals, even creating their own content. Therefore, the focus shifts to the experience between the individual and the "mediated environment", rather than the relationship between the individual and the broadcaster (Hoffman & Novak, 1996).

Hoffman and Novak (1996) proposed that flow theory offers an ideal framework for capturing the essence of this interactive experience and developed a definition of flow specific to the digital context. According to them, digital flow is "a state that occurs during navigation on the network; which is characterized by (1) a seamless sequence of responses facilitated by machine interaction, (2) intrinsically enjoyable, (3) accompanied by a loss of self-consciousness, and (4) self-reinforcing" (p. 57). This theoretical adaptation process brought about a reinterpretation of Csikszentmihalyi's (1990) flow theory in the digital context. While some concepts from the original theory gained new layers of meaning specific to digital environments, the theoretical framework also added new components related to the nature of the digital experience. In this context, two concepts in particular play crucial roles in understanding the digital flow experience: interactivity and telepresence.

Interactivity describes an individual's ability to engage in two-way, real-time communication with a digital system. This feature is closely linked to the capacity of digital interfaces to deliver instant feedback to an individual's actions. Such a dynamic setup enhances the individual's sense of control, facilitates achieving a flow state, and deepens the subjective experience of the digital environment (Brailovskaia et al., 2020; Kaur et al., 2016).

Telepresence is the most distinctive and defining part of the digital flow experience. This concept describes a perceptual illusion in which an individual feels mentally present in a virtual environment created by media, even though they are not physically present (Pelet et al., 2017; Brailovskaia et al., 2020). In this state, individuals become so absorbed in the digital world that they become mentally detached from the physical environment, and the virtual experience feels more dominant and convincing than the real one (Santamaría et al., 2024). This deep immersion mean that individuals' attention is entirely focused on the digital activity and greatly intensifies the flow experience (Brailovskaia et al., 2020).

The concept of telepresence can be viewed as a modern adaptation of Csikszentmihalyi's (1990) original flow dimensions, which include 'intense focus on the task' and 'loss of self-consciousness'. However, there is a key difference between them. In the original theory, a surgeon's focus during surgery or a climber's concentration while climbing a mountain are the result of active mental and physical effort to master a difficult task (Pelet et al., 2017). However, in digital settings, telepresence is often created and reinforced by a platform's audiovisual design, immersive interface, and personalized content flow. Instead of an active state of 'doing', it may reflect a more passive condition of 'being in' or 'being absorbed'. These differences are important for understanding why social media use can lead to both gratifying and problematic outcomes, such as passive consumption and escapism.

### 1.3. The Flow Experience in Social Media Use: "A Double-Edged Sword"

The flow experience when using social media platforms is not a naturally neutral phenomenon. It is a complex, bidirectional structure with important consequences for both individuals and platforms (Zhao & Zhou, 2021; Zhou et al., 2010). The literature consistently shows that this experience is a 'double-edged sword' (Kim & Davis, 2009; Miranda et al., 2023; Zhao & Zhou, 2021). While flow can foster positive outcomes such as increased engagement, loyalty, and satisfaction (Carlson et al., 2017; Kaur et al., 2016; Pelet et al., 2017; Zhou et al., 2010), it also has the potential to generate serious psychosocial risks such as problematic use, compulsive use, and addiction, related to overuse or fatigue (Brailovskaia et al., 2018, 2020; Gökalp et al., 2024; Lin et al., 2020; Roberts & David, 2023; Üztemur et al., 2025). This complex relationship between flow and addiction highlights the dual nature of flow, which requires ethical design and careful use (Saura et al., 2021).

The flow experience on social media platforms is a key outcome that helps individuals develop positive attitudes toward the platform (Kim et al., 2020). Flow is an inherently rewarding state where individuals become fully engaged in the activity they are doing (Csikszentmihalyi, 1975, 1990) and experience enjoyment, pleasure, and satisfaction (Hyun et al., 2022; Mauri et al., 2011; Pelet et al., 2017). The desire to repeatedly seek this intense and pleasurable experience (self-reinforcement) motivates individuals to return to the platform and continue their activities (Zhao & Zhou, 2021). While in a state of flow, individuals may experience time distortion and remain on the platform longer, thereby increasing the frequency and duration of social media use (Lin et al., 2020; Pelet et al., 2017). Consequently, the flow experience is crucial for continued intention (Chang & Zhu, 2012), subsequently contributing to habit formation. These positive interactions and satisfying experiences ultimately lead individuals to build strong loyalty toward the platforms (Hyun et al., 2022; Zhou et al., 2010).

Empirical research indicates that the flow experience is a significant predictor of satisfaction, loyalty, and engagement among social media users (Kim et al., 2020; Zhou et al., 2010). Individuals who experience flow tend to spend more time on the platform and participate more actively, such as engaging in brand-related activities or creating content (Brailovskaia et al., 2020; Chang et al., 2022). Additionally, individuals who

experience flow are more likely to recommend the platform to others (Brailovskaia et al., 2020). Social media use can sometimes result in negative experiences such as information overload and social media fatigue or burnout (Brailovskaia et al., 2020; Lin et al., 2020; Üztemur et al., 2025). In this context, the flow experience may act as a 'psychological buffer' against these harmful outcomes (Brailovskaia et al., 2020). The intrinsic satisfaction and enjoyment gained from flow significantly decrease individuals' likelihood of quitting or temporarily stopping their engagement with the platform despite such negative experiences (Brailovskaia et al., 2020). The state of flow provides a buffering effect by preventing the perception of mental resource depletion generated by overload and by keeping attention focused on the ongoing activity (Lin et al., 2020). This mechanism is considered a key factor in social media platforms' success in retaining use (Brailovskaia et al., 2020; Lin et al., 2020).

The catalytic effect of the flow state on commercial behaviors makes individuals more receptive and motivated to engage in commercial actions (Brailovskaia et al., 2020). Individuals in a positive emotional state and highly focused in online environments show a significant increase in interaction with brand content, product exploration, and purchase intention (Brailovskaia et al., 2020; Hyun et al., 2022). Flow functions, particularly in the context of social commerce (i.e., commerce mediated by social media platforms), reduce psychological barriers and increase trust, guiding consumers toward a purchase decision (Tuncer, 2021). For example, experiencing a flow state while conducting a social search on Instagram enhances consumers' purchase intentions (Cuevas et al., 2021). In general, the flow experience positively influences commercial behavioral intentions by increasing the impact on shopping (Brailovskaia et al., 2020; Hyun et al., 2022). On the other hand, the compelling, intrinsically rewarding nature of the flow experience enables individuals to achieve intense focus and high levels of satisfaction in digital environments. However, this powerful experience can also bring specific risks. While the intensity of flow may cause individuals to become deeply immersed in a digital activity, this situation can lead to a weakened sense of control and the emergence of behavioral addiction tendencies. These potential risks may become more pronounced and potent, particularly when interacting with an individual's motivational structure, psychological predispositions, and personality features (Roberts & David, 2023; Zhao & Zhou, 2021). Flow is considered as an important psychological factor associated with compulsive social media use and behavioral addiction (Brailovskaia et al., 2018; Roberts & David, 2023; Zhao & Zhou, 2021).

Flow may be particularly relevant for individuals who are motivated by escapism to consume social media (Brailovskaia et al., 2020; Miranda et al., 2023). Individuals experiencing high stress, anxiety, depression, or boredom (Brailovskaia et al., 2020; Zhao & Zhou, 2021) may use the deep absorption and telepresence brought by flow as a temporary coping strategy (Brailovskaia et al., 2018; Roberts & David, 2023). This intrinsically rewarding and immersive nature of flow (Csikszentmihalyi, 1990) may cause individuals to lose their perception of time (time distortion) (Lin et al., 2020; Pelet et al., 2017) and to stay on the platform longer. However, research emphasizes that this behavior is a dysfunctional coping strategy and, although it may provide short-term relief, it may lead to the avoidance of underlying problems, impaired control, and, consequently, addictive use of social media in the long-term (Brailovskaia & Margraf, 2024; Lin et al., 2020; Roberts & David, 2023). Following the "vicious circle" model of addictive social media, this mechanism may be particularly risky when individuals use social media to regulate their negative emotions (Brailovskaia, 2024).

Among the sub-dimensions of flow experience, telepresence may be a particularly important dimension in the development of social media addiction (Brailovskaia et al., 2018; Brailovskaia et al., 2020; Roberts & David, 2023). This dimension reflects an individual's deep immersion into the world created by the platform and the feeling of ignoring everything happening around them (Brailovskaia et al., 2018; Brailovskaia & Margraf, 2024; Pelet et al., 2017). The more intense the telepresence, the more likely an individual is to disengage from daily responsibilities and problems, viewing the virtual world as a refuge (Brailovskaia & Margraf, 2024; Pelet et al., 2017; Roberts & David, 2023). Research indicates that this heightened level of immersion is associated with higher likelihood of experiencing social media addiction, especially when individuals turn to social media to escape negative feelings (Brailovskaia et al., 2020; Zhao & Zhou, 2021). In fact, telepresence has been associated with lower psychological well-being (e.g., anxiety and depression), and is viewed as a less effective coping method (Roberts & David, 2023).

For potentially high-risk groups, such as university students, the flow experience on social media may lead them to avoid less enjoyable but important responsibilities, including academic tasks (Argiropoulou & Vlachopanou, 2021; Brailovskaia et al., 2020; Thatcher et al., 2008; Zhao & Zhou, 2021). The deep immersion and sense of telepresence created by flow (Roberts & David, 2023) may cause individuals to view the online world as a form of escape, helping them forget about their academic responsibilities and related stress (Brailovskaia et al., 2018; Brailovskaia et al., 2020; Roberts & David, 2023). The immersive nature of flow and

its time-distorting aspect (Lin et al., 2020; Pelet et al., 2017) may cause a session that starts with the intention of "just checking for five minutes" to stretch into hours (Pelet et al., 2017).

This pattern may encourage students to procrastinate academically, as more enjoyable online activities may reinforce the avoidance of less pleasant academic tasks (Argiropoulou & Vlachopanou, 2021; Kim & Seo, 2013). Academic procrastination has been identified as a mediating factor linking flow experiences to problematic internet use (Argiropoulou & Vlachopanou, 2021). Ongoing procrastination may sustain avoidance behaviors and impair control (Zhao & Zhou, 2021), creating a vicious cycle that leads individuals toward social media addiction (Brailovskaia et al., 2020; Lin et al., 2020). Indeed, when individuals use social media as a means of escaping from negative emotions, flow may increase their risk of developing addiction (Brailovskaia et al., 2020).

It is widely recognized in the extant literature that the phenomena of flow experience on social media and social media addiction are not entirely separate. Instead, flow acts as a key mediating mechanism in the development and persistence of addictive behaviors (Brailovskaia et al., 2020; Miranda et al., 2023; Roberts & David, 2023; Zhao & Zhou, 2021). Evidence shows that triggers, such as stress (Brailovskaia et al., 2020; Zhao & Zhou, 2021) or escapism from negative emotions (Brailovskaia et al., 2020; Miranda et al., 2023), may lead individuals into a flow state (deep absorption and enjoyment) through social media platform interaction (Brailovskaia & Margraf, 2024; Zhao & Zhou, 2021). The intrinsic reward (Brailovskaia et al., 2018) and immediate enjoyment (Pelet et al., 2017) from flow, combined with the relief from negative emotions (negative reinforcement) (Brailovskaia et al., 2020; Zhao & Zhou, 2021), may foster desires to repeat this immersive experience, even at a high cost (Brailovskaia et al., 2018; Csikszentmihalyi & Larson, 2014). This cycle eventually pushes individuals toward compulsive use (Lin et al., 2020) and impaired control. This, in turn, may ultimately lead to functional impairment (conflict) (Andreassen et al., 2017; Miranda et al., 2023; Zhao & Zhou, 2021) and behavioral addiction (Roberts & David, 2023). Therefore, studying social media flow is not merely about evaluating an "enjoyable experience," but also about understanding and assessing the underlying psychological motivations of social media addiction.

## 1.4. The Present Study

Importantly, flow has become a critical topic not only because of its motivational and engagement benefits but also due to its potential negative health consequences. Evidence shows that telepresence and time distortion intensify in visually rich, high-feedback environments, facilitating prolonged use and displacing offline contexts, which, in turn, are associated with stronger indicators of problematic or addictive social media use (Brailovskaia et al., 2018; Brailovskaia et al., 2020; Pelet et al., 2017). Studies further indicate that when flow co-occurs with belongingness and use motivations, tendencies toward social media addiction increase, and that well-being indicators such as depression and anxiety can differ across flow profiles, with telepresence-dominated profiles showing patterns close to burnout (Miranda et al., 2023; Roberts & David, 2023). Short-video ecosystems appear particularly potent in rapidly triggering such immersive states through algorithmic curation and social influence, amplifying both engagement and potential risk (Zheng, 2023). At the same time, there is emerging evidence that the pathway from fear of missing out (FoMO) to flow to addictive use may be attenuated by mindfulness, underscoring the importance of detecting and targeting the riskiest flow components in assessment and interventions (Brailovskaia & Margraf, 2024).

As of 2024, internet penetration in Türkiye had reached 88.8%, with 66.8% of the population using social media (Turkish Statistical Institute, 2024). Turkish individuals spend considerable amounts of time online, averaging 6 hours and 51 minutes daily on the internet, of which 2 hours and 37 minutes are spent on social media (Ministry of Transport and Infrastructure, 2024). Applications such as WhatsApp (86.9%), YouTube (71.3%), and Instagram (65.4%) are the most popular platforms in Türkiye (Kemp, 2024). The literature suggests that these platforms are highly effective at inducing flow due to features that enhance interactivity, visual engagement, and feedback loops (Csikszentmihalyi, 1990; Hoffman & Novak, 1996; Zhou, 2012). This widespread use highlights the need for a reliable and valid instrument to assess the potential impacts of flow experiences in Turkish society. However, directly translating and implementing a scale developed in Germany, such as the SMFS, involves methodological challenges. Cross-cultural adaptation requires ensuring that cultural meanings, conceptual frameworks, and experiential equivalents of items are understood similarly in the target culture (Beaton et al., 2000). Therefore, testing a scale's psychometric properties in a new cultural setting is important for both scientific validity and local relevance (Beaton et al., 2000; Borsa et al., 2012). Consequently, the present study adapted the SMFS for Turkish culture and assessed its validity and reliability through thorough psychometric analyses, focusing on aspects identified in the literature as both engaging and

potentially health-related, especially telepresence and time distortion (Kaur et al., 2016; Pelet et al., 2017; Roberts & David, 2023; Zheng, 2023). Moreover, concurrent validity was evaluated by examining the relationships between scores on the Social Media Flow Scale (Brailovskaia et al., 2020) and the Social Media Continuance Scale (Han, 2018), the Social Media-Focused Fear of Missing Out Scale (Zhang et al., 2020), the Bergen Social Media Addiction Scale (Andreassen et al., 2016), and the Smartphone Application-Based Addiction Scale (Csibi et al., 2018).

## 2. Method

### 2.1. Participants and recruitment procedure

The present study was conducted to adapt the SMFS for use in Türkiye and comprised a sample of 732 participants. Details of the participants' demographic and social media use characteristics are presented in Table 1. Participants were recruited online through social networking sites using a survey hosted on Google Forms. Participants were included if they were 18 years of age or older, resided in Türkiye at the time of data collection, reported active SMU at least several times per week, had sufficient Turkish proficiency to complete the survey, provided informed consent, and completed the online survey. After data collection, a data cleaning procedure was applied. Participants who provided incomplete responses or did not meet the inclusion criteria were excluded, resulting in a final sample of 732 participants. Table 1 presents the demographics, daily smartphone use, and social media use of the sample investigated.

**Table 1.** Participants' characteristics (N = 732)

|  | Mean (*SD*) or n (%) |
|---|---|
| **Age** | 31.19 (11.13) |
| **Gender** | |
| *Female* | 479 (65.4%) |
| *Male* | 253 (34.6%) |
| **Relationship status** | |
| *Single* | 412 (56.3%) |
| *Married* | 320 (43.7%) |
| **Educational level** | |
| *High school* | 268 (36.6%) |
| *Undergraduate* | 360 (49.2%) |
| *Graduate* | 104 (14.2%) |
| **Smartphone use (daily use in hours over the prior seven days)** | 5.65 (6.46) |
| **Time spent on social media (daily use in hours over the prior seven days)** | 5.22 (9.66) |

*Note. SD* = standard deviation

### 2.2. Measures

*2.2.1. Social Media Flow Scale (SMFS):* In the present study, the SMFS (Brailovskaia et al., 2020) was adapted for use in Türkiye. The SMFS consists of 11 items and five subscales: focused attention (e.g., *"While using social media, I am immersed in the task I am performing"*), enjoyment (e.g., *"I enjoy using social media"*), curiosity (e.g., *"Using social media arouses my imagination"*), telepresence (e.g., *"While using social media, the world generated by the sites I visit is more real for me than the real world"*), and time distortion (e.g., *"Time flies when I am using social media"*). Items are rated on a 5-point Likert-type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). Higher scores indicate greater flow. Psychometric properties of the scale are presented in the Results section. For the adaptation of the SMFS into Turkish, ethical procedures were followed (i.e., permission was obtained from the scale developer via email, and then ethical approval was obtained from the Social Sciences Ethics Committee of Gaziantep University). The adaptation process followed the guidelines proposed by Beaton et al. (2000). First, two independent translators translated the scale into Turkish (forward translation). Then, a consensus version was created. Subsequently, a third independent translator, who had not seen the original scale, translated this Turkish version back into English (back translation). Finally, a committee reviewed all versions to ensure semantic, idiomatic, and conceptual equivalence.

*2.2.2. Social Media Continuance Scale (SMCS):* The four-item SMCS (Han, 2018; Turkish version: Üztemur et al., 2025) was used to assess individuals' intention to continue using a social media platform. Scale items

(e.g., *"I will certainly keep my social media account"*) are scored on a 7-point Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Higher scores indicate greater intention to continue social media use. In the present study, the internal consistency was very good (Cronbach's α = 0.881, McDonald's ω = 0.868).

*2.2.3. Social Media-Focused Fear of Missing Out Scale (SMF-FoMOS):* To assess social media-related FoMO, the study employed the Turkish version of the Social Media-Focused Fear of Missing Out Scale (SMF-FoMOS). While the original scale was developed by Zhang et al. (2020), the Turkish adaptation by Çelik and Özkara (2022) specifically modified the items to align with the social media context. The scale comprises two subscales: personal FoMO (five items) and social FoMO (four items). For the specific purpose of this study, only the social FoMO subscale was utilized. Scale items (e.g., *"When I am not active on social media, I feel ignored/forgotten by my social group"*) are scored on a 7-point Likert-type scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Higher scores indicate greater levels of social FoMO. In the present study, the internal consistency of the subscale was found to be excellent (Cronbach's α = 0.960, McDonald's ω = 0.948).

*2.2.4. Bergen Social Media Addiction Scale (BSMAS):* The six-item BSMAS (Andreassen et al., 2016; Turkish version: Demirci, 2019) was used to assess social media addiction. Scale items (e.g., *"You feel an urge to use social media more and more"*) are scored on a 5-point Likert-type scale from 1 (*very rarely*) to 5 (*very often*). Higher scores indicate greater social media addiction. In the present study, the internal consistency was very good (Cronbach's α = 0.874, McDonald's ω = 0.875).

*2.2.5. Smartphone Application-Based Addiction Scale (SABAS):* The six-item SABAS was used to assess problematic smartphone use (Csibi et al., 2018; Turkish adaptation: Gökler & Bulut, 2019). Scale items (e.g., *"My smartphone is the most important thing in my life"*) are scored on a 6-point Likert-type scale ranging from 1 (*strongly disagree*) to 6 (*strongly agree*). Higher scores indicate greater problematic smartphone use. In the present study, the internal consistency was good (Cronbach's α = 0.791, McDonald's ω = 0.796).

## 2.3. Data Analysis

Statistical analyses were conducted with Jeffrey's Amazing Statistics Program (JASP), which is freely available. The original factor structure of the SMFS was evaluated using confirmatory factor analysis (CFA). The heterotrait-monotrait (HTMT) ratio method was employed to assess the discriminant validity of the SMFS. Additionally, concurrent validity tests were conducted in conjunction with internal consistency and external criterion measures. To identify whether the factor structure of the original SMFS was confirmed, the fit indices recommended by Byrne (2016) were used: comparative fit index (CFI) > 0.9, Tucker-Lewis index (TLI) > 0.9, normed fit index (NFI) > 0.9, root mean square error of approximation (RMSEA) < 0.08, and standardized root mean square residual (SRMR) < 0.08. Moreover, considering the adequate sample size (N = 732), multi-group CFA was conducted to test the measurement invariance of the scale across gender groups. The invariance was tested through a hierarchical process: configural, metric, and scalar invariance. Following the recommendations of Chen (2007), the criteria for supporting the invariance between models were set as a change in CFI (ΔCFI) ≤ 0.010 and a change in RMSEA (ΔRMSEA) ≤ 0.015. The factor loadings obtained from CFA for the SMFS were used in the HTMT method. Kline (2023) states that discriminant validity is supported when the HTMT ratio is lower than 0.85.

The SMFS, along with all its subscales, was analyzed for internal consistency using both Cronbach's α and McDonald's ω. The internal consistency coefficient value is characterized as good (0.70-0.80), very good (0.80-0.90), and excellent (≥ 0.90) (Nunnally, 1978). In addition to the internal consistency coefficients, the average variance explained (AVE) and composite reliability (CR) were calculated for each factor in the scope of the reliability analyses. AVE values greater than 0.50 are acceptable threshold values for convergent validity, and CR values greater than 0.70 are acceptable threshold values for composite reliability (Fornell & Larcker, 1981; Psailla & Wagner, 2007). The entire SMFS, along with all its subscales, was examined for concurrent validity in relation to other measures (i.e., the SMCS, SMF-FoMOS, BSMAS, and SABAS). Pearson correlations (r) were used for concurrent validity. The correlation coefficient is interpreted as weak if r ranges between 0.00 and 0.30, moderate if r ranges between 0.30 and 0.50, and strong if r ranges between 0.50 and 0.70 (Hemphill, 2003; Hinkle et al., 2003). Additionally, to address the potential for common method bias, Harman's single-factor test was performed using principal component analysis. The results showed that a single factor accounted for 41.18% of the total variance, which is below the 50% threshold suggested by Podsakoff et al. (2003). This indicates that common method bias was not a significant concern for the present study.

# 3. Results

Table 2 presents the results of the internal consistency, construct validity, and discriminant validity analyses of the SMFS. The CFA results, which were generated to determine whether the original five-factor structure of the scale was confirmed, indicated that the model was robust, supported by all fit indices.

**Table 2.** Scale properties of the Social Media Flow Scale

| | SMFS (Total Score) | Focused Attention (Subscale) | Enjoyment (Subscale) | Curiosity (Subscale) | Telepresence (Subscale) | Time-Distortion (Subscale) |
|---|---|---|---|---|---|---|
| **Cronbach's α** | 0.888 | 0.879 | 0.869 | 0.813 | 0.789 | 0.793 |
| **McDonald's ω** | 0.942 | 0.879 | 0.869 | 0.813 | 0.791 | 0.795 |
| **CFA** | | | | | | |
| $\chi^2$ (df) | 143.477 (34) | -- | -- | -- | -- | -- |
| p-value | < 0.001 | -- | -- | -- | -- | -- |
| CFI | 0.975 | -- | -- | -- | -- | -- |
| TLI | 0.960 | -- | -- | -- | -- | -- |
| NFI | 0.968 | -- | -- | -- | -- | -- |
| RMSEA | 0.066 | -- | -- | -- | -- | -- |
| SRMR | 0.033 | -- | -- | -- | -- | -- |
| **HTMT method** | | | | | | |
| Focused Attention | -- | 1.000 | | | | |
| Enjoyment | -- | 0.468 | 1.000 | | | |
| Curiosity | -- | 0.363 | 0.799 | 1.000 | | |
| Telepresence | -- | 0.746 | 0.555 | 0.451 | 1.000 | |
| Time-Distortion | -- | 0.696 | 0.580 | 0.350 | 0.583 | 1.000 |
| **AVE** | -- | 0.785 | 0.769 | 0.685 | 0.566 | 0.660 |
| **CR** | -- | 0.879 | 0.873 | 0.810 | 0.792 | 0.793 |

*Note.* SMFS = Social Media Flow Scale; CFI = comparative fit index; TLI = Tucker-Lewis index; IFI = incremental fit index; NFI = normed fit index; RMSEA = root mean square error of approximation; SRMR = standardized root mean square residual; HTMT: heterotrait-monotrait ratio; AVE = average variance extracted; CR = composite reliability.

The SMFS had a very good internal consistency (see Table 2). When the internal consistency coefficients of the subscales were analyzed, focused attention, enjoyment, and curiosity demonstrated a very good internal consistency. The subscales telepresence and time distortion demonstrated a good internal consistency (see Table 2).

As shown in Table 2, AVE values for convergent validity and CR values for combined reliability were calculated within the scope of the reliability analyses. The CR values of all subscales (ranging from 0.792 to 0.879) exceeded the threshold value of 0.70, indicating acceptable combined reliability. Additionally, the AVE values of all subscales (ranging from 0.566 to 0.785) exceeded the acceptable threshold value of 0.50, supporting convergent validity. Moreover, an HTMT ratio below 0.85 indicated that discriminant validity was supported between the SMFS subscales (see Table 2).

**Table 3. Concurrent validity of the Social Media Flow Scale**

| | Pearson correlation with an external criterion measure | | | |
|---|---|---|---|---|
| | Social Media Continuance Scale | Social Media Focused FoMO Scale | Bergen Social Media Addiction Scale | Smartphone Application-Based Addiction Scale |
| Social Media Flow Scale | .515** | .532** | .634** | .689** |
| Focused Attention | .338** | .414** | .531** | .586** |
| Enjoyment | .490** | .346** | .429** | .510** |
| Curiosity | .446** | .285** | .346** | .431** |
| Telepresence | .368** | .608** | .575** | .579** |
| Time-Distortion | .344** | .287** | .487** | .492** |

*Note.* **$p < .01$. Harman's single-factor test was performed to address potential common method bias; a single factor accounted for 41.18% of the total variance, which is below the 50% threshold.

Table 3 presents the Pearson correlations of the SMFS and its subscales with four different external criterion measures (i.e., the SMCS, SMF-FoMOS, BSMAS, and SABAS). All correlation coefficients were significant at the $p < .01$ level. The SMFS demonstrated positive and strong correlations with the four external measures examined. However, when the relationships of the subscales with the external criterion measures were analyzed, weak (e.g., $r = .285$ and $r = .287$), moderate (e.g., $r = .338$ and $r = .368$), and strong (e.g., $r = .608$ and $r = .586$) positive relationships were observed (see Table 3).

**Table 4. Measurement Invariance of the Social Media Flow Scale Across Gender Groups**

| Model | χ2 | df | CFI | RMSEA | SRMR | ΔCFI | ΔRMSEA | Decision |
|---|---|---|---|---|---|---|---|---|
| Configural | 198.075 | 68 | .971 | .072 | .037 | — | — | Supported |
| Metric | 200.385 | 74 | .971 | .068 | .038 | .000 | -.004 | Supported |
| Scalar | 205.046 | 80 | .972 | .065 | .036 | +.001 | -.003 | Supported |

*Note.* N = 732 (479 females and 253 males). χ² = chi-square; df = degrees of freedom; CFI = comparative fit index; RMSEA = root mean square error of approximation; SRMR = standardized root mean square residual; Δ= Change from the previous step. All χ² values are significant at $p < .001$.

Measurement invariance of the SMFS across gender groups (males and females) was tested using a hierarchical procedure. As shown in Table 4, the configural model demonstrated a good fit to the data, supporting the assumption that the basic factor structure is consistent across both groups. Metric invariance was confirmed because the changes in fit indices stayed well within the recommended thresholds (ΔCFI = .000; ΔRMSEA = -.004). Finally, scalar invariance was established, with the changes in CFI (+.001) and RMSEA (-.003) remaining well below the critical limits.

# 4. Discussion

The primary objectives of the present study were to (i) translate the Social Media Flow Scale (Brailovskaia et al., 2020) into Turkish, (ii) validate its psychometric properties, and (iii) consider the theoretical and practical implications. The results indicated that the Turkish version of the SMFS is valid and reliable, and that the flow experience in the social media context can be considered as a multidimensional construct. Similar to the original version, the CFA results supported the five-factor structure of the Turkish SMFS, with dimensions of focused attention, enjoyment, curiosity, telepresence, and time distortion. Therefore, flow in social media use may be experienced not only as a pleasant and intense cognitive state but also as a state in which an individual detaches from the offline context, is transported to the platform's environment, and loses a sense of time. These results are consistent with current social media environments, which include short videos, algorithmic content feeds, and continuous social feedback designs (Cuevas et al., 2021; Roberts & David, 2023; Yang et al., 2023; Zheng, 2023).

The Turkish version of the SMFS demonstrated a structure consistent and comparable with previous psychometric evaluations of the scale (e.g., Brailovskaia et al., 2018, 2020). It has been reported that the scale, initially developed in the context of Facebook, conceptualizes flow particularly along the axis of pleasure and concentration. In contrast, deep immersion components, such as telepresence and time distortion, were not as prominent (Kaur et al., 2016). The present study's confirmation of telepresence and time distortion as distinct factors suggests that the contemporary immersive nature of social media use was accurately captured. These results are consistent with findings that place the virtual environment overriding reality at the center of flow and report that flow is reinforced through telepresence (Miranda et al., 2023; Pelet et al., 2017; Zhao & Zhou, 2021).

The relationship between flow and social media addiction was also supported, aligning with previous research (Brailovskaia & Margraf, 2024; Zhao & Zhou, 2021). Previous studies have reported that flow is experienced more intensely when social media is used to escape from negative affect, stress, or boredom, and that this flow, in turn, may increase problematic use (Brailovskaia et al., 2018; Brailovskaia et al., 2020; Miranda et al., 2023). In the present study, the telepresence and time distortion dimensions also correlated with measures of social media addiction and problematic smartphone use. Therefore, the findings support the idea that risky aspects of social media use include not only its enjoyable nature, but also the state of intense immersion that can make individuals temporarily forget their real surroundings.

These concurrent validity findings are further strengthened by previous validity and reliability studies conducted in the Turkish context. More specifically, the strong psychometric properties of the Turkish adaptations of the Bergen Social Media Addiction Scale (Demirci, 2019) and the Smartphone Application-Based Addiction Scale (Gökler & Bulut, 2019) provide a solid methodological foundation for the present study's results. Additionally, the validated structures of the Social Media-Focused Fear of Missing Out Scale (Çelik & Özkara, 2022) and the Social Media Continuance Scale (Üztemur et al., 2025) within the national Turkish literature enabled a robust evaluation of these risky interactions within the Turkish context of the present study. Using these Turkish-validated psychometric measures helped confirm that the Turkish SMFS correlates strongly and in the expected directions with multidimensional digital well-being and addiction metrics, thereby firmly establishing its concurrent validity.

Another key finding of the present study was that social media flow was not exclusively associated with adverse outcomes. Previous research (Cuevas et al., 2021; Hyun et al., 2022; Wu & Tien, 2024) has emphasized that, in environments such as Instagram, higher levels of flow during social browsing and social commerce are associated with greater purchase and reuse intentions. The flow experience when using social media often relates to positive behavioral outcomes, such as purchase intention, continued usage intention, and loyalty (Tuncer, 2021). For instance, a study conducted among individuals in China who used social media found that the flow experience was positively related to satisfaction (Chang & Zhu, 2012). Another study examining individuals' use of social media on mobile devices found that flow is related to loyalty (Zhou et al., 2010). In the present study, the overall SMFS score was strongly and positively correlated with the intention to continue using social media. This finding extends the existing body of knowledge. Based on these results, it can be argued that the SMFS may not only identify individuals characterized by high levels of telepresence and time distortion (potential precursors to problematic use) but also detect groups experiencing high enjoyment and focused attention during social media interactions. In this regard, the SMFS appears to have the potential to bridge between the literature focused on online problematic use and that centered on social commerce, loyalty, and usage experience.

Previous studies focusing on short-video-based platforms have also supported the scope of the SMFS. It has been suggested that in environments where short, intensive content is presented with social effects, flow can be quickly triggered, and this may increase rewatching and participatory behaviors (Cuevas et al., 2021; Roberts & David, 2023; Yang et al., 2023; Zheng, 2023). Consequently, there is a need for scales that can simultaneously assess the components of the experience in environments where flow is experienced quickly and intensely. It should also be considered, in conjunction with previous studies, that as telepresence and time distortion scores increase, disengagement from offline responsibilities may become easier among individuals who use social media intensively and who also show tendencies toward academic procrastination, such as university students (Argiropoulou & Vlachopanou, 2021). This finding is consistent with research indicating that the combination of flow, belongingness, and motivation may increase the likelihood of social media addiction (Brailovskaia & Margraf, 2024; Miranda et al., 2023; Zhao & Zhou, 2021). Similarly, it has been reported that well-being indicators (e.g., depression, anxiety) differ when flow increases on visually rich, high-feedback platforms such as Instagram and TikTok, and that feelings close to burnout can be observed, particularly in flow profiles dominated by telepresence (Roberts & David, 2023). Moreover, cluster comparisons show higher depression/anxiety scores in the high-flow, high-telepresence group relative to lower-telepresence profiles, reinforcing the link between telepresence-heavy flow and poorer well-being (Roberts & David, 2023). Therefore, assessing social media flow may be important for early detection of use patterns that threaten well-being.

## 4.1. Theoretical and Practical Implications

The SMFS combines the main components of the flow experience (pleasure, attention, curiosity, telepresence, and time distortion) into a single framework, allowing these elements, often discussed separately in research, to be assessed together. Analyses of the Turkish sample show that the SMFS has a robust and reliable structure. This important finding demonstrates that assessment instruments, often developed with Western samples, can be successfully adapted to diverse cultural settings. The fact that the SMFS shows strong associations with continuance use intention, FoMO, social media addiction, and problematic smartphone use indicates that a single instrument can assess both opportunities and risks. Additionally, the ability to assess flexible areas, such as telepresence and time distortion, provides clear, measurable, and actionable results for digital well-being initiatives and usage-limiting strategies.

Moreover, the present study firmly places the Turkish adaptation of the SMFS within the broader literature on flow and addiction by showing that flow is not just an ideal user experience but a key mechanism mediating

problematic online behaviors. Beyond simply replicating the original scale methodologically, the present adaptation study offers new theoretical and practical insights. First, while earlier flow models, mainly developed for older platforms, focused on enjoyment and focused attention, the present study's findings show that today's social media environments, driven by algorithms, require capturing deep immersion. More specifically, telepresence and time distortion stand out as strong risk factors for addiction. Second, the present study explicitly connects two traditionally separate research areas: user engagement and behavioral addiction. By demonstrating that a single multidimensional framework can address both positive and negative aspects of social media use, the study provides a unified tool for future digital wellness research.

Finally, by validating this model in a highly active online population, the study offers solid evidence across cultures that the psychological factors linking flow to addiction are perhaps universal, therefore expanding the original construct's theoretical scope. Because this flow state can mediate social media addiction when combined with FoMO and escape motivation (Brailovskaia et al., 2018, 2020), these findings highlight the importance of fostering positive cognitive and emotional states, such as enjoyment, curiosity, and focused attention, in designing social media learning and marketing content.

Conversely, it suggests that excessively high levels of telepresence and distorted time perception can have adverse effects and should therefore be monitored. Although the goal of keeping individuals engaged with content is a common approach in platform design, decisions that may disrupt individuals' senses of time and disconnect them from offline responsibilities should be carefully considered. Because the process from FoMO to flow experience and then to social media addiction may be mitigated by protective factors such as mindfulness and self-control (Brailovskaia & Margraf, 2024), applying the SMFS in such mediation and moderation models appears to be appropriate and valuable.

## 4.2. Strengths, Limitations, and Directions for Future Research

Given the relevance of flow to social media addiction, translating and validating the adapted Turkish version of the SMFS can be considered a strength of the present study. The validation of the Turkish SMFS, not only in terms of its psychometric properties but also regarding its relationships with expected external variables, enhances its validity and practical potential. By integrating research lines stemming from different theoretical approaches, a strong foundation is provided for the usability of the SMFS, both in studies addressing social media addiction (Miranda et al., 2023; Zhao & Zhou, 2021) and in research examining user engagement (Chang & Zhu, 2012; Yang et al., 2023; Zhou et al., 2010). Although a flow theory was initially developed in the context of offline activities, the present study provides empirical evidence for the transferability of this theoretical construct to digital and social media environments. Flow is defined as a multidimensional experience that essentially includes components such as enjoyment, intense concentration, challenge, a sense of control, and curiosity (Pelet et al., 2017; Zhou et al., 2010). The Turkish SMFS, with a valid and reliable structure, indicates that this phenomenon can be assessed within the Turkish cultural context, providing an important basis for cross-cultural research on social media flow.

Alongside its strengths, the present study also has some limitations. The cross-sectional design of the study precludes establishing causal relationships between variables. Similarly, the question of whether the flow experience precedes social media addiction or triggers such use warrants longitudinal research designs (Brailovskaia et al., 2018, 2020). The collection of data through self-report increases the risk of recall and social desirability biases, especially in the subjective components of flow such as enjoyment and telepresence. This issue has also been considered in previous studies examining the relationships between motivation, social belonging, and problematic use (Miranda et al., 2023; Roberts & David, 2023). Another limitation of the study was the reliance on online convenience sampling. Data were collected via social networking sites, which inherently introduces selection bias because only individuals active on these specific platforms and who were willing to participate in an online survey were reached. Moreover, the sample was predominantly female (65.4%) and highly educated (63.4% holding an undergraduate or graduate degree). Therefore, the sample was not representative of the broader, highly diverse population of Turkish social media users. These recruitment and sampling issues limit the generalizability of the findings.

Another methodological limitation of the present study was the reliance on a single dataset for validation. In psychometric research, it is recommended to use a cross-validation approach, such as splitting the total sample to analyze the factor structure in one subgroup and confirm it in another, to improve the methodological rigor of the results. Although the present study used a relatively large sample of 732 participants for a one-step confirmatory analysis, future research using split-sample validation or independent samples to assess the stability of the Turkish SMFS would further strengthen its validity.

Moreover, the SMFS was tested in only a single cultural context. Future cross-cultural studies are warranted. The study's lack of restriction to a specific social media platform makes it difficult to disentangle the effects of platform-specific interaction forms (e.g., social search on Instagram, shopping-oriented flow, or short-video scrolling behaviors) (Cuevas et al., 2021; Hyun et al., 2022; Roberts & David, 2023). Therefore, it is recommended that future research evaluate the SMFS using multi-group CFA on different platforms and monitor the momentary determinants of flow using time-sensitive methods (e.g., experience sampling or diary studies). Such designs could enable more robust testing of potentially causal relationships among rapidly triggered components, including those related to telepresence and time distortion (Brailovskaia & Margraf, 2024; Pelet et al., 2017).

In future research, the SMFS may be used to assess pre- and post-intervention changes in short-term digital well-being programs designed to reduce telepresence and time distortion. Cognitive-behavioral and mindfulness-based strategies designed to lower FoMO may be experimentally tested for their impact on risky aspects of flow. Additionally, assessing the factorial invariance of the scale across various social media types and age groups, as well as examining platforms that focus on short videos, image sharing, and text-based content separately, could enhance understanding of content-specific flow experiences. In this context, creating content designs that maintain positive flow components, such as enjoyment, curiosity, and focused attention, while minimizing telepresence and time distortion, and evaluating these designs with the SMFS, could lead to practical outcomes for promoting digital well-being.

## 5. Conclusion

In the present study, the SMFS, a five-dimensional, psychometrically robust scale with a validated nomological network, was translated to assess social media flow in a Turkish context. The results suggest that flow includes not only classic components such as enjoyment and focused attention, but also dimensions such as telepresence and time distortion, which may promote social media addiction. This finding, aligned with previous research, supports the idea that flow may facilitate problematic and escapism-driven social media use (Brailovskaia et al., 2018, 2020; Roberts & David, 2023). By demonstrating significant relationships with continuance intention, social-media-specific FoMO, and two different indicators of problematic use, the SMFS was shown to be a valid psychometric instrument (Cuevas et al., 2021; Hyun et al., 2022; Miranda et al., 2023). The findings demonstrate that the Turkish SMFS is a versatile instrument suitable for studies of social media addiction, as well as for investigations of use experiences and marketing research. Assessing the flow experience during social media use is not just a methodological detail but an important step in identifying both opportunities and risks.

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## Appendix

### English and Turkish Version of Social Media Flow Scale

| Factors (Faktörler) | Items (English) | Maddeler (Turkish) |
|---|---|---|
| Focused Attention (Odaklanmış Dikkat) | While using social media, I am deeply engrossed. | Sosyal medya kullanırken, derin bir şekilde kendimi kaptırıyorum. |
| | While using social media, I am immersed in the task I am performing. | Sosyal medya kullanırken, yaptığım işe dalıp gidiyorum. |
| Enjoyment (Keyif) | Using social media provides me with a lot of fun. | Sosyal medyayı kullanırken çok eğleniyorum. |
| | I enjoy using social media. | Sosyal medya kullanmaktan keyif alıyorum. |
| Curiosity (Merak) | Using social media arouses my imagination. | Sosyal medya kullanmak hayal gücümü harekete geçirir. |
| | Using social media excites my curiosity. | Sosyal medya kullanmak merakımı uyandırır. |
| Telepresence (Televarlık) | Using social media often makes me forget where I am and what currently happens around me. | Sosyal medya kullanırken çoğu zaman nerede olduğumu ve etrafımda neler olduğunu unutuyorum. |
| | Social media creates a new world for me, and this world suddenly disappears when I stop browsing. | Sosyal medya benim için yeni bir dünya yaratıyor ve gezinmeyi bıraktığımda bu dünya aniden yok oluyor. |
| | While using social media, the world generated by the sites I visit is more real for me than the real world. | Sosyal medya kullanırken, ziyaret ettiğim sitelerin yarattığı dünya benim için gerçek dünyadan daha gerçektir. |
| Time-Distortion (Zaman Bozulması) | Time flies when I am using social media. | Sosyal medya kullanırken zaman uçup gidiyor. |
| | I often spend more time on social media than I had intended. | Sosyal medyada genellikle planladığımdan daha fazla zaman geçiriyorum. |

Note. Items rated on a 5-point Likert-type scale from 1 (*strongly disagree*) to 5 (*strongly agree*).