Extracted from Instrument(s)	**Table 1** **Clinician Assessment of Social Media use (CASM)**
BSMAS, IAT, SMAS, SMDS	Salience: Do you find that you are spending more time on social media than when you first began using it?
BFAS, BSMAS, IAT, SMDS	Perseverance: Have you tried to cut down on social media without success?
BFAS, SMAS, SMDS	Functioning: Have you used social media so much that you have given less priority to your job, studies, hobbies, leisure activities or exercise?
SMAS	Productivity: Has your productivity diminished due to social media use?
BFAS, IAT, SMAS, SMDS	Conflict: Do others in your life complain about the amount of time you spend on social media?
BSMAS, IAT	Relational: Have you ignored your partner, family members, or friends because of social media activity?
BFAS, IAT, SMAS, SMDS	Mood Modification: Do you generally feel better or worse after using social media? Does it affect your self-esteem or self-perception?
SMDS, IAT	Withdrawal: Have you ever felt sad, anxious, irritable when you could not use social media?
SMAS, SMDS	Escape: Do you see social media as an escape from the real world?
SMAS	Social Isolation: Do you prefer to communicate with people via social media rather than in person?
Key	*BFAS= Bergen Facebook Addiction Scale* *BSMAS= Bergen Social Media Addiction Scale* *IAT= Internet Addiction Test* *SMAS= Social Media Addiction Scale* *SMDS= Social Media Disorder Scale*

1. Bergen Facebook Addiction Scale (BFAS)

In the original study, Andreassen et al. (2012) found the scale to be reliable at one time (α = .83), and at a three-week retest (α = .82). The BFAS has shown validity in detection of behavioral-addictive symptoms, such as using Facebook to forget problems, failing to cut down on time spent on Facebook, etc. There is convergent validity when correlated with the Wilson, Fornasier, and White addictive tendencies scale (r = .69; Andreassen et al., 2012). It has been translated into several languages and has acceptable psychometric properties across replications. (Bowman et al. 2019)

The scale also shows some value in its predictive validity. Neuroticism (β = .25) and Extraversion (β = .22) constructs of the Big Five personality inventory show a relationship (Andreassen et al., 2012). Divergent validity has been established, namely its negative relationship between BFAS and Conscientiousness (β = -.23). Andreassan and colleagues have argued that the Big Five personality inventory scales supports the validity of BFAS, since individuals high in neuroticism would be expected to be more prone to addiction, while those who are conscientious would be less likely.

i. Andreassen, C. S., Torsheim, T., Brunborg, G. S., & Pallesen, S. (2012). Development of a Facebook addiction scale. Psychological reports, 110(2), 501-517
ii. Bowman, Nicholas & Clark-Gordon, Cathlin. (2019). Bergen Facebook Addiction Scale. 10.4324/9780203730188-14.

2. Bergen Social Media Addiction Scale

Bergen Social Media Addiction Scale (BSMAS) is an adaptation of the Bergen Facebook Addiction Scale (BFAS). The adaptation of the BSMAS involves replacing the word "Facebook" with "social media", (social media defined as "Facebook, Twitter, Instagram, and the like" in the instructions to participants). Internal consistency of the BSMAS was good in the original studies validation, Cronbach's α = .88.

The BSMAS and the test it is derived from (BFAS) are based on the components model of addiction which suggests six core elements of addictive behavior (salience, tolerance, mood modification, withdrawal, relapse, conflict) (Griffiths, 2005). Similar to the BFAS, the BSMAS has been adapted, validated, and used in international samples including English, Hungarian, German, Greek, Spanish, Romanian, Bengali, where it has demonstrated good psychometric properties (Andreassen et al., 2016).

i. Andreassen, C. S., Billieux, J., Griffiths, M. D., et al. (2016). The relationship between addictive use of social media and video games and symptoms of psychiatric disorders: A large-scale cross-sectional study. Psychology of Addictive Behaviors, 30(2), 252–262. https://doi.org/10.1037/adb0000160
ii. Mark Griffiths (2005) A 'components' model of addiction within a biopsychosocial framework, Journal of Substance Use, 10:4, 191-197, DOI: 10.1080/14659890500114359

3. Internet Addiction Test (IAT)

One the most used scales assessing internet addiction is Young's 1998 Internet Addiction Test (IAT). On measures of validity, the IAT has shown strong internal consistency (α = 0.90–0.93) and good test-retest reliability (r = 0.85). Young's definitive questionnaire contains 20 items, and assesses the extent internet use affects daily life, social life, productivity, sleep, and the individual's feelings, mood and emotional state. It has been adapted and validated in several languages including English, Chinese, French, Finnish, German, Italian, Greek, Arabic, and Portuguese with acceptable psychometric properties.

    i.   Young, K. S. (1998). Caught in the net: How to recognize the signs of internet addiction--and a winning strategy for recovery. John Wiley & Sons.

    ii.   Fernández-Villa, T., Molina, A.J., García-Martín, M. et al. Validation and psychometric analysis of the Internet Addiction Test in Spanish among college students. BMC Public Health 15, 953 (2015). https://doi.org/10.1186/s12889-015-2281-5

4. Social Media Addiction Scale (SMAS)

The scale measures of the SMAS is composed of four factors, "occupation" responsible for 17% of the variance, "mood modification" responsible for 9.8% of variance, the third factor "relapse" 8.8% of the variance itself, and the fourth factor "conflict" explained 23.5% of the variance. The correlation between the scale and "Facebook Addiction Scale" adapted from Internet Addiction test (IAT, Young, 1998) was found to be 0.75. Internal consistency coefficient α= .967. Test-retest reliability co-efficient was found to be 0.84, all suggesting acceptable psychometric properties that are valid and reliable.

    i.   Tutgun-ünal, A. & Deniz, L. (2015). Development of the Social Media Addiction Scale . AJIT-e: Academic Journal of Information Technology , 6 (21) , 51-70 . DOI: 10.5824/1309-1581.2015.4.004.x

5. Social Media Disorder Scale (SMDS)

The SMDS was developed based on the premise that it should emulate similar criteria to the DSM-V diagnosis of internet gaming disorder. The original study developed a long scale consisting of 27 items, three items created for nine identified criteria of DSM-V internet gaming disorder: Preoccupation, Tolerance, Withdrawal, Displacement, Escape, Problems, Deception, Displacement, and Conflict. Factor structure and factor loadings of this 27-item scale was conducted, then the nine items with the highest factor loading per criterion were selected to constitute the shorter 9-item scale. The psychometric properties of the short SMD scale were tested and compared with some psychometric properties of the 27-item SMD scale. The dimensional structure of the 27-item SMD scale (3 items per criterion) was tested using a second-order factor model. This resulted in an acceptable model fit, $\chi2$ (288, n = 724) = 672.424, p < 0.001, CFI = 0.963, RMSEA = 0.043 (90% CI: 0.039–0.047). The 27-item SMD scale showed good internal consistency with a Cronbach's alpha of 0.90.

Supporting convergent validity respondents mean scores on the long and short SMD scales were correlated with compulsive Internet use and self-declared social media addiction. In assessment of criterion validity, the SMD scales were (both short and long) correlated with depression, self-esteem, loneliness, attention deficit, impulsivity, and frequency of daily social media use. The long (27-item) and short (9-item) versions of the SMD scale both showed large positive correlations with compulsive Internet use ($r > 0.50$) and medium to large correlations with self-declared social media addiction, ($r > 0.48$), both indicating acceptable convergent validity.

Correlations between the two SMD scales and these related constructs indicated good criterion validity. Overall, the strength of the correlations between the SMD scales and these similar and related constructs was somewhat lower for the 9-item scale than for the 27-item scale, but both demonstrate satisfactory convergent and criterion validity.

i.   Van den Eijnden, R. J. J. M., Lemmens, J. S., & Valkenburg, P. M. (2016). The Social Media Disorder Scale. Computers in Human Behavior, 61, 478–487. https://doi.org/10.1016/j.chb.2016.03.038

How often during the last year have you ...

		Item-total Correlation
Salience		
BFAS1*	Spent a lot of time thinking about Facebook or planned use of Facebook?	.61
BFAS2	Thought about how you could free more time to spend on Facebook?	.42
BFAS3	Thought a lot about what has happened on Facebook recently?	.55
Tolerance		
BFAS4	Spent more time on Facebook than initially intended?	.68
BFAS5*	Felt an urge to use Facebook more and more?	.73
BFAS6	Felt that you had to use Facebook more and more in order to get the same pleasure from it?	.57
Mood modification		
BFAS7*	Used Facebook in order to forget about personal problems?	.60
BFAS8	Used Facebook to reduce feelings of guilt, anxiety, helplessness, and depression?	.55
BFAS9	Used Facebook in order to reduce restlessness?	.52
Relapse		
BFAS10	Experienced that others have told you to reduce your use of Facebook but not listened to them?	.61
BFAS11*	Tried to cut down on the use of Facebook without success?	.68
BFAS12	Decided to use Facebook less frequently, but not managed to do so?	.62
Withdrawal		
BFAS13*	Become restless or troubled if you have been prohibited from using Facebook?	.69
BFAS14	Become irritable if you have been prohibited from using Facebook?	.59
BFAS15	Felt bad if you, for different reasons, could not log on to Facebook for some time?	.58
Conflict		
BFAS16*	Used Facebook so much that it has had a negative impact on your job/studies?	.66
BFAS17	Given less priority to hobbies, leisure activities, and exercise because of Facebook?	.60
BFAS18	Ignored your partner, family members, or friends because of Facebook?	.51

*Items retained in the final model/scale. All items are scored on the following scale: 1: Very rarely, 2: Rarely, 3: Sometimes, 4: Often, 5: Very often.

i.   Andreassen, C. S., Torsheim, T., Brunborg, G. S., & Pallesen, S. (2012). Development of a Facebook addiction scale. Psychological reports, 110(2), 501-517

Bergen Social Media Addiction Scale (BSMAS; Andreassen et al., 2012)

Instruction: Below you find some questions about your relationship to and use of social media (*Facebook, Twitter, Instagram*, and the like). Choose the response alternative for each question that best describes you.

How often during the last year have you . . .	Very rarely	Rarely	Sometimes	Often	Very often
. . . spent a lot of time thinking about social media or planned use of social media?[1]	❏	❏	❏	❏	❏
. . . felt an urge to use social media more and more?[2]	❏	❏	❏	❏	❏
. . . used social media to forget about personal problems?[3]	❏	❏	❏	❏	❏
. . . tried to cut down on the use of social media without success?[4]	❏	❏	❏	❏	❏
. . . become restless or troubled if you have been prohibited from using social media?[5]	❏	❏	❏	❏	❏
. . . used social media so much that it has had a negative impact on your job/studies?[6]	❏	❏	❏	❏	❏

Note. Addiction component: [1] salience, [2] craving/tolerance, [3] mood modification, [4] relapse/loss of control, [5] withdrawal, [6] conflict/functional impairment. All items are scored on the following scale: 1 (*very rarely*), 2 (*rarely*), 3 (*sometimes*), 4 (*often*), 5 (*very often*).

i. Andreassen, C. S., Torsheim, T., Brunborg, G. S., & Pallesen, S. (2012). Development of a Facebook addiction scale. Psychological reports, 110(2), 501-517

ii. Andreassen, C. S., Billieux, J., Griffiths, M. D., et al. (2016). The relationship between addictive use of social media and video games and symptoms of psychiatric disorders: A large-scale cross-sectional study. Psychology of Addictive Behaviors, 30(2), 252–262. https://doi.org/10.1037/adb0000160

INTERNET ADDICTION TEST

Name_____
Male_____Female_____
Age_____Years Online_____   Do you use the Internet for work?_____Yes_____No

This questionnaire consists of 20 statements. After reading each statement carefully, based upon the 5-point Likert scale, please select the response (0, 1, 2, 3, 4 or 5) which best describes you. If two choices seem to apply equally well, circle the choice that best represents how you are most of the time during the past month. Be sure to read all the statements carefully before making your choice. The statements refer to offline situations or actions unless otherwise specified.

0 = Not Applicable
1 = Rarely
2 = Occasionally
3 = Frequently
4 = Often
5 = Always

1. ___How often do you find that you stay online longer than you intended?
2. ___How often do you neglect household chores to spend more time online?
3. ___How often do you prefer the excitement of the Internet to intimacy with your partner?
4. ___How often do you form new relationships with fellow online users?
5. ___How often do others in your life complain to you about the amount of time you spend online?
6. ___How often do your grades or school work suffer because of the amount of time you spend online?
7. ___How often do you check your email before something else that you need to do?
8. ___How often does your job performance or productivity suffer because of the Internet?
9. ___How often do you become defensive or secretive when anyone asks you what you do online?
10. ___How often do you block out disturbing thoughts about your life with soothing thoughts of the Internet?
11. ___How often do you find yourself anticipating when you will go online again?
12. ___How often do you fear that life without the Internet would be boring, empty, and joyless?
13. ___How often do you snap, yell, or act annoyed if someone bothers you while you are online?
14. ___How often do you lose sleep due to being online?
15. ___How often do you feel preoccupied with the Internet when off-line, or fantasize about being online?
16. ___How often do you find yourself saying "just a few more minutes" when online?
17. ___How often do you try to cut down the amount of time you spend online and fail?
18. ___How often do you try to hide how long you've been online?
19. ___How often do you choose to spend more time online over going out with others?
20. ___How often do you feel depressed, moody, or nervous when you are off-line, which goes away once you are back online?

i.   Young, K. S. *Caught in the net: How to recognize the signs of internet addiction--and a winning strategy for recovery*. New York, NY, John Wiley & Sons, 1998

Annex-1. Social Media Addiction Scale (SMAS)

Item No	Items	Never	Rarely	Sometimes	Often	Always
1	I pretty much think about what's going on at social media recently.					
2	If there's anything I have to do first I check the social media.					
3	When I don't check the social media for a while, the thought of checking it occupies my mind.					
4	I think that my life would be boring, blank and tasteless without social media.					
5	When I'm not connected to the internet, I intensely think of checking the social media.					
6	I wonder of what's happening at social media.					
7	There are times that I spent more time at social media than I think.					
8	Each time I decide to cut my connection with social media, I tell myself "a few more minutes".					
9	I can't give up using social media for a long while.					
10	There are times that I use social media more than I plan.					
11	I can't understand how time passes while using social media.					
12	I allocate long periods to actions (games, chat, viewing the photographs etc) relevant to social media.					
13	I use social media in order to forget my personal problems.					
14	I spend time at social media at times when I feel alone.					
15	I prefer surfing at social media in order to be relieved from negative thoughts regarding my life.					
16	When I get bored of my problems, the best place that I shelter is social media.					
17	I forget about everything along the period that I use social media.					
18	There happens to be times when I try to stop using social media and become unsuccessful.					
19	I desire intensively to regulate my use of social media.					
20	I make useless efforts in order to leave the use of social media.					
21	I make useless efforts in order to regulate the use of social media.					
22	I try to decrease the time that I spent at social media, and I become unsuccessful.					
23	I use social media more although it negatively affects my profession/studies.					
24	I give less priority to my hobbies and leisure activities due to social media.					
25	There happens to be times that I neglect my spouse and family members due to social media.					
26	There happens times that I neglect my friends due to social media.					
27	Due to social media, I can not complete the activities that I start in a timely manner.					
28	In order to spend more time at social media, I neglect activities regarding school or work.					
29	I prefer spending time at social media rather than spending time with my friends.					
30	My school studies or works are interrupted due to the time I spent at social media.					
31	My productivity decreases due to social media.					
32	I prefer spending time at social media rather than going out with my friends.					
33	People criticize me for the time I spend at social media.					
34	I find myself trying to hide the time I spent on social media.					
35	There happens times that I forget eating due to social media.					
36	There happens times that I allocate less time to my personal care due to social media use.					
37	Alterations/disturbances occur in my sleeping order due to social media use.					
38	There happens times that I encounter physical problems (back, head, eye aches) due to social media use.					
39	The use of social media causes me to encounter problems in my relations with individuals who are important for me.					
40	The use of social media causes problems in my life.					
41	As the things I have to do increase, my desire to use social media increases at that rate.					

i.　　Tutgun-ünal, A. & Deniz, L. (2015). Development of the Social Media Addiction Scale . AJIT-e: Academic Journal of Information Technology , 6 (21) , 51-70 . DOI: 10.5824/1309-1581.2015.4.004.x

Table3. The 9-item SMD scale.

Criterion	During the past year, have you …
Preoccupation	… regularly found that you can't think of anything else but the moment that you will be able to use social media again?
Tolerance	… regularly felt dissatisfied because you wanted to spend more time on social media?
Withdrawal	… often felt bad when you could not use social media?
Persistence	… tried to spend less time on social media, but failed?
Displacement	… regularly neglected other activities (e.g. hobbies, sport) because you wanted to use social media?
Problem	… regularly had arguments with others because of your social media use?
Deception	… regularly lied to your parents or friends about the amount of time you spend on social media?
Escape	… often used social media to escape from negative feelings?
Conflict	… had serious conflict with your parents, brother(s) or sister(s) because of your social media use?

i. Van den Eijnden, R. J. J. M., Lemmens, J. S., & Valkenburg, P. M. (2016). The Social Media Disorder Scale. Computers in Human Behavior, 61, 478–487. https://doi.org/10.1016/j.chb.2016.03.038