Adaption and psychometric evaluation of the Presentation of Online Self Scale in adults

N. Strimbu [*], M. O'Connell, F. Nearchou, C. Ó'Sé

University College Dublin, School of Psychology, Dublin, 4, Ireland

ARTICLE INFO

ABSTRACT

Introduction: The Presentation of Online Self Scale (POSS) is an established psychometric tool used to measure how an individual presents oneself in online environments. The POSS was originally used with an adolescent sample. This study aimed to develop a factor structure of the POSS for use with an adult sample as well as examine the reliability and convergent validity of the tool.
Methods: A quantitative design was applied. Participants (n = 531) aged 18–74 (M = 35, SD = 12.09) completed the POSS and the Ten-Item Personality Index (TIPI) that assessed personality traits.
Results: Exploratory factor analysis revealed a three-factor solution of the POSS with an adult sample. The three factors explained 55% of the variance in POSS scores. All items had loadings ranging from 0.30 to 0.84. The new structure, renamed the Presentation of Online Self Scale for Adults (POSSA), showed satisfactory reliability and convergent validity.
Conclusions: The findings of this study suggest that the three factor version of the POSS is a valid and reliable tool for measuring online self-presentation in adults. Self-presentation evolves through developmental stages, thus presenting the need for age appropriate psychometric instruments to fit those stages.

1. Introduction

People frequently make conscious and deliberate decisions about how to present themselves to others (Baraket-Bojemal, Moran, & Sahar, 2016; Goffman, 1959). Goffman's (1959) dramaturgical approach likens self-presentation to that of an actor playing a role, and requesting that those observing the role-playing take seriously what is being put forward. In terms of everyday self-presentation, this means that when one presents oneself to others there is specific intent behind the formation of an impression. Furthermore, that impression is expected to be believed and viewed as true. However, online environments allow for a new level of flexibility in self-presentation. With the growth in use of Social Networking Sites (SNSs), researchers have become increasingly interested in the similarities and differences between offline and online self-presentation. Some research argues that individuals carefully manage their online self-presentation (Grieve, March, & Watkinson, 2020; Okdie, Guadagno, Bernieri, Geers, & Mclarney-Vesotski, 2011; Tosun, 2012; Yu & Kim, 2020). These self-presentation decisions can be facilitated with greater ease through the technological advancements of the online world and social-networking sites (SNSs) (Nadkarni & Hoffman, 2012). For example, in a study examining false self-presentation on Facebook, it was found that emerging adults (18–25 years of age) will use specific strategies when presenting the self online (Zhao, Grasmuck, & Martin, 2008). However, while individuals may omit or exaggerate certain aspects of the self online, other research has found that individuals are generally consistent offline to online with self-presentation (Back et al., 2010; Fullwood, James, & Chen-Wilson, 2016; Gosling, Augustine, Vazire, Holtzman, & Gaddis, 2011; Marriott & Buchanan, 2014; Strimbu & O'Connell, 2019; Wilson, Gosling, S. D., & Graham, L. T., 2012). This presents two arguments about online self-presentation. One is that online self-presentation is simply an extension of the self. The other argues that online self-presentation is an entirely different self.

These competing arguments pose a question of the degree to which personality plays a part in online self-presentation. Previous research has investigated whether personality traits like neuroticism and extroversion are associated with the presentation of an authentic self online. It has been found that individuals low in extroversion are more likely to engage in self-exploratory behaviors online, whereas individuals high in extroversion are less more likely to show consistency between offline and

---

* Corresponding author. 3909 SW Flatrock Ave, Bentonville, AR, 72713, USA.
E-mail addresses: nicole.strimbu@ucdconnect.ie (N. Strimbu), michael.f.oconnell@ucd.ie (M. O'Connell), niki.nearchou@ucd.ie (F. Nearchou), colum.ose@ucdconnect.ie (C. Ó'Sé).

online presentation (Michikyan, Subrahmanyam, & Dennis, 2014). One interpretation of this is that extroverted individuals tend to view SNS's as more of an extension of their offline world while more introverted individuals who view SNS's as an additional/alternate world to express oneself (Amichai-Hamburger & Vinitzky, 2010).

However, a different study assessing personality and the "true self" online found online self-presentation to be more closely related to personality expression preference than an individual's actual personality (Marriott and Buchanan, 2014). It was found that introverted individuals and those with higher levels of neuroticism prefer to express their "true self" online instead of in face-to-face interactions. This, however, was very heavily influenced by an individual's level of shyness. Individuals who scored low in Conscientiousness and Agreeableness also preferred to express their "true self" online. Where this occurred, the preference for presenting the "true self" online over face-to-face indicates inconsistency between offline and online self-presentation, but suggests that the authentic self is actually expressed online instead of face-to-face. This study also explored how both online friend and offline friends view the individual's online self-presentation. It was found that offline friends had significantly closer ratings to those of the participant than did online friends, suggesting that overall, participants were not representing themselves more authentically online compared to offline.

To date, research has focused primarily on the online self-presentation of adolescents (Bobkowski, Schafer, & Ortiz, 2016; Khan, Gagne, Yang, & Shapka, 2016), as they typically hold a less stable self-concept than adults (Strasburger, Wilson, & Jordan, 2014.) However, it has been suggested that the years of emerging adulthood offer the greatest opportunity for identity experimentation with regards to love, work, and worldviews (Arnett, 2000). Identity development is particularly pronounced as emerging adults transition to greater autonomy in education or work, where they are keen to explore their new adult identity (Kroger, Martinussen, & Marcia, 2010); they can try to project a more socially attractive self online (Yang & Brown, 2016). However, as adults develop, their identity becomes more congruent, and the gap between the ideal and actual self, i.e. the level of self-discrepancy (Higgins, 1987), becomes less pronounced (Bybee, Piastunovich, & Glick, 1995; Heidrich, 1999). The self-assurance of adults with regards to their identity is evident in online contexts. In a systematic review of 21 studies (N = 7573), findings of authentic/inauthentic online self-presentation were most generalizable to adolescents and emerging adults, less so to adults aged over 25 (Twomey & O' Reilly, 2017). Other studies have indicated that younger adults engage in false self-presentation more than older adults (Wright, White, & Obst, 2017).

It is clear from the research that online presentation is an important task for individuals, featuring in both broad developmental trends as well as individual differences. Understanding and measuring people's online behavior, and specifically their preferences in self-presentation, are important goals. The increasing ubiquity of digital applications, made possible by the steady growth of computing power, has accelerated the integration of people's online and offline worlds. We have entered a time where a majority of SNS users are what are referred to as digital natives – those who have grown up using digital technology. Society is keeping in touch online, dating online, and holding work meetings and conferences online. All of these interactions are happening in environments where one has to present themselves online. A widely used online self-presentation measure in cyberpsychology research is the Presentation of Online Self Scale (POSS). This scale was developed by Fullwood et al. (2016) to capture online self-presentation in adolescents. It included four factors of online self-presentation: Multiple Selves, Ideal Self, Consistent Self, and Online Presentation Preference. The Multiple Selves factor captures the presentation of different personas. This can be expressed by acting out different personas across various online platforms or even creating an entirely new online identity. The Ideal Self factor, while similar to Multiple Selves in its presentation of a different version of the self, encompasses the important element of presenting the self that one desires to be – the ideal version of oneself. The Consistent Self factor can

be broadly defined as presenting an authentic self. It is situated in opposition to Multiple Selves and the Ideal Self since it expresses the position that one's online character is no different to one's offline character. Finally, the Online Presentation Preference Factor captures the level of preference one has to present the self online over presenting the self offline. In other words, it reflects the comfort one feels showing who they are via online spaces vs. face-to-face. These four factors were found to be a reliable method for describing the adolescent population's online self-presentation. However, when used with an adult sample (aged 18+) the four factors did not maintain their original structure (Strimbu & O'Connell, 2019). More specifically, the Ideal Self factor was found to be the most unstable with the redistribution of its questions to the other factors. This study aimed to evaluate and validate a version of the POSS measure for future use with an adult sample. Moreover, because the factor structure of the previously examined tool in adults (Strimbu & O'Connell, 2019) was established by using principal component analysis (PCA), the present study aimed to examine the tool by applying factor analysis. PCA is a data reduction method, while factor analysis is a method used to capture and reflect the structure of latent factors underlying data (Ford, MacCallum, & Tait, 1986).

2. Methods

2.1. Participants

Five hundred thirty-one participants (377 female; 127 male; 10 non-binary; 6 transgender female; 4 gender non-conforming; 3 transgender male; 3 other, 1 prefer not to disclose), recruited through social media outreach and online advertisement, completed the POSS. The mean age was 35 (SD = 12.09), ranging from 18 to 74 years. Participants resided across sixty-two countries with majority citizenship reported as the United States of America and/or Ireland (70.5%). Finally, a majority of participants reported as having completed an undergraduate degree or higher (68%). To examine and establish the factor structure of the POSS, the sample was randomly split into two sub-samples. Data from sub-sample 1 (n = 265) were used to examine the factor structure of the tool by applying Exploratory Factor Analysis (EFA), while data from sub-sample 2 (n = 266) were used to establish the factor structure by applying Confirmatory Factor Analysis (CFA). Demographic characteristics for the two sub-samples are presented in Table 1.

2.2. Procedure

Participants were provided a link or QR code to the online survey (containing the POSS questionnaire) hosted by Qualtrics, a secure online survey platform. The survey could be completed via computer, tablet, or mobile phone. Participants were prompted to complete a Captcha, a response test to verify the user is human. Participants were fully informed with regard to the aims of the study and informed consent was obtained. Demographic information and various measures, including the POSS questionnaire were then completed.

2.3. Measures

The Presentation of Online Self Scale (POSS) (Fullwood et al., 2016) is a self-report measure with 21 items divided into four factors: Item 1–9: Ideal Self (IS), Item 10–14: Multiple Selves (MS), Item 15–18: Consistent Self (CS), and Item 19–21: Online Presentation Preference (OPP). Each factor is scored on a 5-point Likert scale from "strongly disagree" to "strongly agree." A higher score represents a higher presentation of each factor. For example, a higher IS score indicates that an individual presents more of an ideal self online when compared to their offline self-presentation. A higher MS score indicates higher online presentation of multiple selves, while a higher CS score indicates higher consistency between one's offline and online self-presentation. Finally, a higher OPP score suggests a stronger preference for online self-presentation over

Table 1
Descriptive Statistics for two POSS Subsample 1 (n = 265) and Subsample 2 (n = 266).

Descriptive Statistics		Subsample			
		1		2	
Age	M(SD)	39.35 (11.96)		30.77 (10.63)	
	Range	56		50	
	Minimum	18		18	
	Maximum	74		68	
		n	%	n	%
Gender	Male	51	19.2	76	28.6
	Female	206	77.7	171	64.3
	Trans-Male	2	.8	1	.4
	Trans-Female	1	.4	5	1.9
	Non-binary	2	.8	8	3.0
	Gender Non-conforming	1	.4	3	1.1
	Other	1	.4	2	.8
Education	Less than high school/secondary school	6	2.3	3	1.1
	Secondary school diploma	11	4.2	28	10.5
	Some college, no degree	42	15.8	34	12.8
	Bachelor/Undergraduate Degree	79	29.8	89	33.5
	Postgraduate Degree	104	39.2	86	32.3
	Post-secondary school vocational/certificate	4	1.5	12	4.5
	Associates Degree/2 Year Technical College	19	7.2	13	4.9

Note: M = Mean Score, SD = Standard Deviation, POSS = Presentation of Online Self Scale.

offline self-presentation.

The Ten Item Personality Measure (TIPI) (Gosling, Rentfrow, & Swann, 2003) is a 10-item measure that examines five personality traits: Extroversion, Agreeableness, Conscientiousness, Emotional Stability, and Openness to Experiences. It is a shortened version of the well-known Big Five Personality Measure (Goldberg, 1992). Each personality factor is addressed through an "I see myself as" statement and is scored on a 7-point Likert scale from 1 = "strongly disagree" to 7 = "strongly agree." A total mean score for each factor is then calculated.

2.4. Data analysis overview

To explore the tool's factor structure, we subjected data from sub-sample 1 to EFA using Principal Axis Factoring (PAF) as an extraction method with oblique rotation thus allowing the factors to be correlated. Parallel analysis, scree plots, eigenvalues >1 and item loadings >0.30 were used to determine the number of factors to be retained. Using data from sub-sample, CFA was applied to confirm whether the factor structure emerged from the EFA fits data adequately. The following indices were used to determine the data-model fitting adequacy: Chi-square test (χ^2), Tucker-Lewis Index (TLI), Comparative Fit Index (CFI), Root-Mean-Square Error of Approximation (RMSEA) and Standardized-Root-Mean-Square Residual (SRMR). A non-significant χ^2 suggests that there is no significant discrepancy between the observed and estimated covariance matrix. However, χ^2 can be sensitive, thus a ratio of Degrees of Freedom (df)/chi-square value < 2.5 has been suggested as an additional indication of a good model-fit (Kline, 2011). TLI and CFI range from 0 to 1 with values > 0.90 and >0.95 showing good and excellent fit respectively; RMSEA values < 0.08 and SRMR values < 0.08 indicate that the model fits the data adequately (Hu & Bentler, 1999).

Using the whole sample (N = 531) convergent validity was tested by applying Pearson product moment correlations between the POSS factors and the personality factors "Extroversion" and Conscientiousness" of the TIPI. These were the two personality factors selected as the link between them and online self-presentation has been widely reported and replicated in the relevant literature. Previous research found that people scoring higher on conscientiousness are more "cautious in their online

self-presentation" (Seidman, 2013), suggesting that they would also be less likely to explore multiple selves in an online context. Furthermore, individuals who are more extroverted use online settings as an extension to their offline self (Michikyan et al., 2014; Tosun & Lajunen, 2010) and present an authentic self online (Marriott & Buchanan, 2014; Seidman, 2013). Therefore, extroverted individuals would show more consistency between their offline and online self compared to introverted individuals. Thus, significant positive correlations were hypothesized between a factor describing consistency of self from offline to online and the TIPI factors "Extroversion" and "Conscientiousness." By contrast, it was hypothesized that a factor encompassing discrepancies from offline to online self-presentation would result in a significant negative correlation to the two TIPI factors.

EFA and correlations were conducted using IBM SPSS software version 24, while CFA was conducted using AMOS software version 24.

While not a primary element of this research, due to ethics recommendations on gender reporting, gender differences were examined. Only 5% of the sample identified as a gender other than male or female, therefore an independent-samples t-test was conducted to compare the new POSS factor structure.

3. Results

3.1. Exploratory Factor Analysis

Using data from the sub-sample 1, the 21 POSS items were subjected to a series of EFA in order to determine the most optimal factor structure. The initial 21 POSS items are provided in Appendix 1. The most optimal factor structure was achieved after removing three items in total. These items were deemed problematic because they either did not load on any of the emerged factors or had high cross-loadings on more than one factor (>0.35). Overall results of the EFA in conjunction with the scree plot and the outcomes of the Parallel Analysis showed that a three-factor solution was the most optimal. The three factors reflect constructs of an Adaptable Self, Authentic Self, and Freedom of Self Online, respectively. This three-factor solution including eighteen out of the 21 items of the original scale explains 55% of the variance in scores of the POSS. Factor loadings, eigenvalues item means, SDs and Cronbach's alphas are presented in Table 2. As Table 2 shows, all items had loadings ranging from 0.30 to 0.84. The internal consistency of the three factors was satisfactory for sub-sample 1 with corrected-item total correlations ranging from 0.37 to 0.59 and 0.30–0.73.

3.2. Confirmatory Factor Analysis

Using data from sub-sample 2 (n = 266), CFA was applied to examine the three-factor proposed model fitting adequacy. Overall CFA results revealed that the proposed three-factor model had a very good fitting adequacy to data. However, because item 15 (see Appendix A) demonstrated a quite low loading (β = 0.15, p = .02) on Factor 2: Authentic Self, we removed the item and re-ran the CFA. This resulted in an improved fitting model. Table 3 presents the fit indices before and after removing item 15 from the CFA. Reliability coefficients indicated satisfactory internal consistency for the Authentic Self factor both in sub-samples 1 and 2 (α = 0.74 and α = 0.71 respectively) after removing item 15.

3.3. Convergent validity of the POSS

Table 4 presents the correlation matrix for the associations between the three-factor POSS and TIPI (Extroversion and Conscientiousness subscales). Correlations revealed that the POSS factors have good convergent validity. Confirming our hypothesis, the POSS Factor 1: Adaptable Self and Factor 3: Freedom of Self Online showed a significant negative relationships with both Extroversion and Conscientiousness scores indicating that more extroverted and conscientious individuals show less discrepancies between their offline and online self-

Table 2
Exploratory Factor Analysis of the POSS using data from sub-sample 1 (n = 265).

Item	F1: Adaptable Self	F2: Authentic Self	F3: Freedom of Self Online	Mean (SD)
11	0.87			1.37 (.84)
12	0.84			1.37 (.83)
10	0.77			1.55 (.99)
13	0.67			1.70 (1.09)
14	0.57			1.67 (1.09)
8	0.40			1.89 (1.17)
16		0.65		4.29 (.91)
15		0.58		3.39 (1.41)
17		0.52		4.06 (1.03)
18		−0.49		4.09 (1.08)
4		−0.46		1.66 (1.03)
21			−0.68	2.16 (1.19)
19			0.59	2.34 (1.20)
7			−0.53	2.30 (1.25)
2			−0.52	2.70 (1.26)
5			−0.51	2.06 (1.32)
20			−0.49	1.93 (1.19)
9			−0.30	2.36 (1.33)
Eigenvalue	6.17	2.51	1.25	
Variance explained	34%	48%	55%	
Cronbach's alpha	0.87	0.72	0.77	
Corrected item-total correlations (min-max)	0.58–0.73	0.37–0.60	0.40–0.55	

Table 3
Confirmatory Factor Analysis of the POSS[a] in the second sub-sample.

CFA Fit indices	$\chi^{2[b]}$	$\chi^{2}/df[b]$	P-value	CFI[b]	TLI[b]	RMSEA[b]	SRMR[b]
Model with Item 15	301.7	2.5	<0.001	0.91	0.90	0.07	0.08
Model without Item 15	250.4	2.3	<0.001	0.94	0.92	0.07	0.06

[a] POSS, Presentation of Online Self Scale.
[b] CFI, Comparative fit index; TLI, Tucker-Lewis index; RMSEA, root mean square of approximation; SRMR, standardized root mean square residual.

presentation. Furthermore, also confirming our hypothesis, the POSS Factor 2: Authentic Self showed a significant positive relationship with both Extroversion and Conscientiousness scores indicating more consistency between offline and online self-presentation for more extroverted and conscientious individuals.

3.4. Gender differences

An independent-samples test showed significant differences in scores for males (n = 127) and females (n = 377) for the Adaptable Self factor and the Authentic Self factor. On the Adaptable Self Factor, males scores ($M = 12.58$, $SD = 6.30$) were significantly higher than females scores (M

Table 4
Correlations between POSS new three-factor structure and TIPI factors (N = 531).

	M(SD)	1	2	3	4	5
1 Factor 1: Adaptable Self	10.74 (5.47)	1				
2 Factor 2: Authentic Self	16.26 (3.20)	-.640**	1			
3 Factor 3: FOS Online	16.57 (6.08)	.609**	-.325**	1		
4 TIPI: EX	3.87 (1.72)	-.184**	.266**	-.350**	1	
5 TIPI: C	5.12 (1.37)	-.354**	.145**	-.260**	.037	1

Note: M is average mean; SD is standard deviation; *p < .05, **p < .01; POSS = Presentation of Online Self Scale; FOS = Freedom of Self; TIPI = Ten Item Personality Measure (Ex = Extroversion, C = Conscientiousness).

= 9.76, $SD = 4.70$; t (502) = 5.34, $p < .001$, two-tailed) with a small magnitude (eta squared = 0.05) of difference in the means (mean difference = 2.82, 95% *CI*: 1.78 to 3.86). However, scores on the Authentic Self factor were significantly higher for females ($M = 16.57$, $SD = 3.01$) than males ($M = 15.58$, $SD = 3.61$; t (496) = −3.02, p < .01, two-tailed) with a small magnitude (eta squared = 0.02) of difference in the means (mean difference = −0.99, 95% *CI*: 1.63 to −0.346). There were no significant results for the Freedom of Self Online factor.

4. Discussion

The EFA and CFA findings support the three-factor structure of the POSS for an adult sample, referred to as the Presentation of Online Self Scale for Adults (POSSA) from here on. All items had high loadings under each factor indicating three elements of online self-presentation. The significant correlations between the POSSA factors and TIPI scores, that is, online self-presentation and personality factors (extroversion and conscientiousness), established convergent validity of the POSSA three factor solution. The factors showed satisfactory internal consistency in the present sample and the overall findings indicate that the POSSA is a valid and reliable tool for measuring online self-presentation in adults.

4.1. The POSSA

The three POSSA factors were closely related to the original POSS factors: "Multiple Selves," "Consistent Self," and "Online Presentation Preference," with additional items from the original "Ideal Self" factor dispersed among them. This was consistent with previous findings from Strimbu and O'Connell (2019), who found that the "Ideal Self" factor in the POSS did not maintain structure with an adult sample. It also supports the findings that show while SNS's allow users to promote a version of their 'ideal self' online (Manago, Graham, Greenfield, & Salimkham, 2008; Michikyan et al., 2014) and to present multiple selves online (Lin & Wang, 2014), adults actually present a more authentic self in online settings (Twomey & O'Reilly, 2017; Wright et al., 2017) in comparison to adolescents.

The original POSS "Ideal Self" items reloaded on three factors now labeled: Adaptable Self, Authentic Self, and Freedom of Self Online (see Appendix B). The 'Adaptable Self' factor contains all of the original items from the 'Multiple Selves' factor (Fullwood et al., 2016), with the addition of item 8 ("I can escape from myself online") from the 'Ideal Self' factor (Fullwood et al., 2016). The items of the new 'Adaptable Self' factor suggest that the adult SNS user acts out multiple personas online, where they can escape from themselves and adapt their identity to one which is more desirable.

The 'Authentic Self' factor contains 3 of the original 4 items from the 'Consistent Self' factor (Fullwood et al., 2016), with the removal of item 15 ("I feel my personality online is the real me"). The 'Authentic Self' factor also includes item 4 ("The way I present myself online differs significantly from real life"), from the 'Ideal Self' factor (Fullwood et al.,

2016). The items of the new 'Authentic Self' factor refer to the adult SNS user's authenticity in the online world in comparison to their identity in the offline world.

The third factor of the new POSSA, 'Freedom of Self Online', comprises the original items from the 'Online Presentation Preference' factor and four items from the 'Ideal Self' factor (Fullwood et al., 2016). The 'Freedom of Self Online' factor includes items 2 ("I can show my best qualities online"), 5 ("Communicating online allows me to say the things I can't say offline"), 7 ("I feel I can be my Ideal Self online"), and 9 ("I can talk to people who wouldn't usually talk to me in the real world"), from the 'Ideal Self' factor (Fullwood et al., 2016). The new factor reflects the degree to which the SNS user believes in the merits of online self-presentation, particularly the freedom to express oneself.

Like the original POSS, each POSSA factor is scored on a 5-point Likert scale ranging from "Strongly Disagree" to "Strongly Agree." The items under each factor are added to make a total score for each factor where a higher score indicates a higher representation of that factor. For example, there are 6 items in the Adaptable Self factor which equate to an Adaptable Self score range of 7–42. The higher the total score, the more one presents various versions of themselves online.

4.2. Limitations and future research

While this study provides support for the psychometric value of the POSSA, this newly structured measure should be tested again across a variety of larger samples. This sample did show significant differences between male and female scores on the Adaptable and Authentic Self factors; however, the effect sizes were small and this study was comprised primarily of females. A more balanced gender ratio would be beneficial. Furthermore, culture has been associated with self-presentation (Markus & Kitayama, 1991), and any insight into how culture may affect the notion of multiple selves or an ideal self would be of great future contribution on online self-presentation. Finally, self-presentation happens across numerous social networking platforms and mode (written, photo, video, etc.) of self-presentation varies as well as the specific culture of the platform. Therefore, the use of this scale across the different platforms should be assessed.

5. Conclusion

This study contributed to the literature by creating an alternate version of the POSS to use with an adult sample. A version that has taken into account the evolution of the "Ideal Self" that comes with the transition from adolescence to adulthood. It has presented a valid instrument to measure online self-presentation of adults by capturing elements of authenticity, discrepancy, and comfort with online self-presentation.

Author disclosure statement

No competing financial interests exist.

Funding

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Appendix A

Original factor loadings for the Presentation of Online Self Scale (POSS) (Fullwood et al., 2016).

Factor 1: Ideal Self.

1. I feel more comfortable behaving how I want to online
2. I can show my best qualities online
3. Being online allows me to express myself
4. The way I present myself online differs significantly from real life
5. Communicating online allows me to say the things I can't say offline
6. I like going online because it allows me to be different
7. I feel I can be my ideal self online
8. I can escape from myself online
9. I can talk to people who wouldn't usually talk to me in the real world

Factor 2: Multiple selves.

10. I very often act out different personas in certain online spaces
11. I regularly use different personas online
12. I enjoy acting out different identities online
13. Being online allows me to create a new identity
14. I am a different person depending on which online space I'm in

Factor 3: Consistent Self.

15. I feel my personality online is the real me
16. I feel I am the same person in the cyber world that I am in the real world
17. I am always my true self online
18. I can't really be myself online*

Factor 4: Online presentation preference.

19. I find it easier to communicate in face-to-face contexts*
20. I find it difficult to be myself in the real world
21. I prefer being online than offline

*indicates a reversed scored item.

Appendix B

Final suggested structure of the modified version of the Presentation of Online Self Scale (POSS) (Fullwood et al., 2016) for use with adults.
Presentation of Online Self Scale for Adults (POSSA).
Factor 1: Adaptable Self.

1. I very often act out different personas in certain online spaces
2. I regularly use different personas online
3. I enjoy acting out different identities online
4. Being online allows me to create a new identity
5. I am a different person depending on which online space I'm in
6. I can escape from myself online

Factor 2: Authentic Self.

7. I feel I am the same person in the cyber world that I am in the real world
8. I am always my true self online
9. I can't really be myself online*
10. The way I present myself online differs significantly from real life*

Factor 3: Freedom of Self Online.

11. I find it easier to communicate in face-to-face contexts*
12. I find it difficult to be myself in the real world
13. I prefer being online than offline
14. I can show my best qualities online
15. Communicating online allows me to say the things I can't say offline

16. I feel I can be my ideal self online
17. I can talk to people who wouldn't usually talk to me in the real world

*indicates a reversed scored item.

References

Amichai-Hamburger, Y., & Vinitzky, G. (2010). Social network use and personality. *Computers in Human Behavior, 26*, 1289–1295. https://doi.org/10.1016/j.chb.2010.03.018

Arnett, J. J. (2000). Emerging adulthood: A theory of development from the late teens through the twenties. *American Psychologist, 55*(5), 469–480. https://doi.org/10.1037/0003-066X.55.5.469

Back, M. D., Stopfer, J. M., Vazire, S., Gaddis, S., Schmukle, S. C., Egloff, B., et al. (2010). Facebook profiles reflect actual personality, not self-idealization. *Psychological Science, 21*(3), 372–374.

Baraket-Bojemel, L., Moran, S., & Sahar, G. (2016). Strategic self-presentation on Facebook: Personal motives and audience response to online behavior. *Computers in Human Behavior, 55*, 788–795.

Bobkowski, P. S., Shafer, A., & Ortiz, R. R. (2016). Sexual intensity of adolescents' online self-presentations: Joint contribution of identity, media consumption, and extraversion. *Computers in Human Behavior, 58*, 64–74.

Bybee, J. A., Piastunovich, A., Glick, M., & April. (1995). The development and adaptiveness of self-image discrepancies in adulthood. In *Poster presented at the biennial meeting of the society for research in child development*. Indianapolis, IN.

Ford, J. K., MacCallum, R. C., & Tait, M. (1986). The application of exploratory factor analysis in applied psychology: A critical review and analysis. *Personnel Psychology, 39*(2), 291–314. https://doi.org/10.1111/j.1744-6570.1986.tb00583.x.

Fullwood, C., James, B. M., & Chen-Wilson, C. J. (2016). Self-concept clarity and online self-presentation in adolescents. *Cyberpsychology, Behavior, and Social Networking, 19*(12), 716–720. https://doi.org/10.1089/cyber.2015.0623

Goffman, E. (1956). *The presentation of self in everyday life*. London: Penguin.

Goldberg, L. R. (1992). The development of markers for the Big-Five factor structure. *Psychological Assessment, 4*(1), 26–42. https://doi.org/10.1037/1040-3590.4.1.26

Gosling, S. D., Augustine, A. A., Vazire, S., Holtzman, N., & Gaddis, S. (2011). Manifestations of personality in online social networks: Self-reported Facebook-related behaviors and observable profile information. *Cyberpsychology, Behavior, and Social Networking, 14*(9), 483–488.

Gosling, S. D., Rentfrow, P. J., & Swann, W. B., Jr. (2003). A very brief measure of the Big Five Personality domains. *Journal of Research in Personality, 37*, 504–528. https://doi.org/10.1016/S0092-6566(03)00046-1

Grieve, R., March, E., & Watkinson, J. (2020). Inauthentic self-presentation on Facebook as a function of vulnerable narcissism and lower self-esteem. *Computers in Human Behavior, 102*, 144–150. https://doi.org/10.1016/j.chb.2019.08.020

Heidrich, S. M. (1999). Self-discrepancy across the life span. *Journal of Adult Development, 6*(2), 119–130.

Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review, 94*, 319–340.

Khan, S., Gagné, M., Yang, L., & Shapka, J. (2016). Exploring the relationship between adolescents' self-concept and their offline and online social worlds. *Computers in Human Behavior, 55*, 940–945.

Kroger, J., Martinussen, M., & Marcia, J. E. (2010). Identity status change during adolescence and young adulthood: A meta-analysis. *Journal of Adolescence, 33*, 683–698.

Lin, H., & Wang, H. (2014). Avatar creation in virtual worlds: Behaviors and motivations. *Computers in Human Behavior, 34*, 213–218.

Manago, A. M., Graham, M. B., Greenfield, P. M., & Salimkhan, G. (2008). Self-presentation and gender on MySpace. *Journal of Applied Developmental Psychology, 29*(6), 446–458.

Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review, 98*(2), 224–253.

Marriott, T. C., & Buchanan, T. (2014). The true self online: Personality correlates of preference for self-expression online, and observer ratings of personality online and offline. *Computers in Human Behavior, 32*, 171–177. https://doi.org/10.1016/j.chb.2013.11.014

Michikyan, M., Subrahmanyam, K., & Dennis, J. (2014). Can you tell who I am? Neuroticism, extraversion, and online self-presentation among young adults. *Computers in Human Behavior, 33*, 179–183.

Nadkarni, A., & Hoffman, S. G. (2012). Why do people use facebook? *Personality and Individual Differences, 52*(3), 243–249. https://doi.org/10.1016/j.paid.2011.11.007

Okdie, B. M., Guadagno, R. R., Bernieri, F. J., Geers, A. L., & Mclarney-Vesotski, A. R. (2011). Getting to know you: Face-to-face versus online interactions. *Computers in Human Behavior, 27*, 153–159. https://doi.org/10.1016/j.chb.2010.07.017

Seidman, G. (2013). Self-presentation and belonging on Facebook: How personality influences social media use and motivations. *Personality and Individual Differences, 54*(3), 402–407.

Strasburger, V. C., Wilson, B. J., & Jordan, A. B. (2014). *Children, adolescents, and the media*. U.S.A: Sage Publications.

Strimbu, N., & O'Connell, M. (2019). The relationship between self-concept and online self-presentation in adults. *Cyberpsychology, Behavior, and Social Networking, 22*(12), 804–807. https://doi.org/10.1089/cyber.2019.0328

Tosun, L. P. (2012). Motives for Facebook use and expressing "true self" on the Internet. *Computers in Human Behavior, 28*, 1510–1517. https://doi.org/10.1016/j.chb.2012.03.018

Tosun, L. P., & Lajunen, T. (2010). Does internet use reflect your personality? Relationship between Eysenck's personality dimensions and internet use. *Computers in Human Behavior, 26*(2), 162–167.

Twomey, C., & O'Reilly, G. (2017). Associations of self-presentation on facebook with mental health and personality variables: A systematic review. *Cyberpsychology, Behavior, and Social Networking, 20*(10), 587–595.

Wilson, R. E., Gosling, S. D., & Graham, L. T. (2012). A review of Facebook Research in the social sciences. *Perspectives on Psychological Science, 7*(3), 203–220. https://doi.org/10.1177/1745691612442904

Wright, E. J., White, K. M., & Obst, P. L. (2017). Facebook false self-presentation behaviors and negative mental health. *Cyberpsychology, Behavior, and Social Networking, 21*(1), 40–49. https://doi.org/10.1089/cyber.2016.0647

Yang, C. C., & Brown, B. B. (2016). Online self-presentation on Facebook and self development during the college transition. *Journal of Youth and Adolescence, 45*(2), 402–416.

Yu, E., & Kim, H. C. (2020). Is she really happy? A dual-path model of narcissistic self-presentation outcomes for female facebook users. *Computers in Human Behavior, 108*. https://doi.org/10.1016/j.chb.2020.106328

Zhao, S., Grasmuck, S., & Martin, J. (2008). Identity construction of Facebook: Digital empowerment in anchored relationships. *Computers in Human Behavior, 24*(5), 1816–1836. https://doi.org/10.1016/j.chb.2008.02.012