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Abstract

The Internet may be conceptualised as a social laboratory, providing freedom to experiment with different presentations of self. Adolescence is an important time in the development of self-concept, however little is known about how clarity of self-concept relates to online behaviour. The principal aim of this study was to test the hypothesis that self-concept clarity would be associated with adolescents' inclination to experiment with online self-presentation. 148 participants aged 13-18 completed the Self-Concept Clarity Scale, the Facebook Intensity Scale and the Presentation of Online Self Scale (POSS). Adolescents possessing a less stable sense of self reported experimenting with online self-presentation more regularly, presenting an idealised version of the self and a preference for presenting themselves online. Adolescents with a more stable self-concept reported presenting an online self which was more consistent with their offline self-presentation. Younger adolescents were more likely to present an inconsistent self, whereas older adolescents presented themselves more consistently across different communication contexts. Finally, adolescents who spent more time on Facebook and had fewer Facebook friends were more likely to present multiple versions of the self whilst online. The implications of these findings will be discussed in terms of the development of the self-concept during adolescence and the potential for the online world to facilitate flexible identity construction and self-presentation.

Introduction

It has long been recognised that the online world affords users greater freedom to experiment with “the constructions and reconstructions of the self”¹ (pg. 80). Scholars generally agree that the Internet comprises several idiosyncratic features which permit greater flexibility in self-presentation^{2,3}. These include: the increased potential to interact anonymously, leading to a virtual environment seemingly safer and easier for self-disclosure; greater control over content creation and modification, for example users can make more deliberate decisions over which photos they upload; and more opportunities for asynchronous interaction, meaning that users can edit messages/content before sending/posting^{2,3,4,5}. These factors are suggested to promote optimal self-presentation^{6,7}.

Although being online undoubtedly provides the freedom to try on different masks and see how they feel, not all who venture into cyberspace take up these opportunities. Indeed, many individuals present an online self more or less consistent with their offline self^{8,9}. Research has identified numerous variables which relate to online self-presentation experimentation, including loneliness^{10,11}, low levels of social support¹⁰, low self-esteem¹² and narcissism¹³. Certain types of individuals may be more predisposed to experiment with self-presentation online, perhaps because they wish to compensate for certain shortcomings or because they are especially motivated to garner desirable impressions². In this paper, we focus on the role that self-concept clarity may play in determining one's inclination to engage in different types of self-presentation behaviour online. Moreover, we shift our attention to a group who are associated with possessing a malleable sense of self, namely adolescents.

Self-concept may be defined as “the totality of an individual's thoughts and feelings having reference to himself as an object”¹⁴ (pg. 7). Our self-concept is derived from ruminations and evaluations about our interactions with others and the world around us and subsequent perceptions of abilities, identities, characteristics and attributes¹⁵. The self-concept is essentially a collection of beliefs that one possesses about oneself, incorporating past, present and possible future selves¹⁶. Adolescence is a crucial stage in human development and it is during the transition from childhood to adulthood that developing a clear sense of self and identity takes centre stage^{17,18,19}. An integrated sense of self is unlikely to have been fully realised during adolescence, so experimenting with different ways of behaving as an act of self-discovery is common in adolescents^{20,21}. For many adolescents, moving towards the formation of a stable and cohesive self may lead to an identity conflict as various potential selves are tried out and tested²². Adolescents also have to contend with dramatic physiological changes including sexual maturation, physical growth and cognitive development¹⁸.

It is clear that establishing a sense of identity and self is an important part of development, particularly given research findings suggesting that a clear sense of self predicts psychological adjustment²³. Individuals vary in the extent to which their self-concept is “clearly and confidently defined, internally consistent, and temporally stable” and this has become known as self-concept clarity²⁴ (p.141). Those with lower self-concept clarity also possess lower self-esteem, score higher in neuroticism, engage in more self-focused ruminations, and hold less stable self-descriptions over time. Conversely, those with a more clearly defined sense of self are less prone to prolonged self-analysis and have higher self-esteem²⁴. Developing a clear and stable sense of the self would therefore seem to have important ramifications for psychological wellbeing and social development.

The online world and social media in particular, provide young people with a ‘tool’ to try out different presentations of the self and to see how others react to them. Receiving approval (for example in the form of ‘likes’) may serve to authenticate a particular presentation of self, which may then be incorporated into one’s offline identity²⁵. No study to date has examined the role that self-concept clarity may play in shaping how young people present themselves online. Therefore, the primary aim of the current study was to test whether self-concept clarity could predict various types of online self-presentation behaviour in adolescents. We hypothesise that adolescents with a less stable sense of self will be more likely to experiment with their online self-presentation and present an idealised version of the self. Further, we expect those in late adolescence to have a more stable self-concept and to present an online self more consistent with the offline self. Additionally, as Facebook has the largest membership base of all social media platforms, we expected it to be the principal environment in which adolescents engage in online identity experiments. For this reason, we wanted to see if one’s level of attachment

to and engagement with Facebook would be associated with self-presentation behaviour; however a lack of previous research relating to these factors prevented the formulation of any specific predictions.

Method

Participants

148 participants (60 males; 88 females) were recruited from schools in the West Midlands area of the U.K. The mean age was 15.50 years (standard deviation 1.87), ranging from 13 to 18 years.

Materials

The Self-Concept Clarity Scale is a 12-item scale which assesses “the extent to which self-beliefs are clearly and confidently defined, internally consistent and stable”²⁴ (pg. 141). All questions are on a 5-point Likert scale (‘strongly disagree’ to ‘strongly agree’) and the questionnaire has good internal consistency (Cronbach’s alpha = .86)²⁴. Examples of items include ‘my beliefs about myself often conflict with one another’ and ‘in general I have a clear sense of who I am and what I am’. The Facebook Intensity Scale²⁶ includes behavioural items (i.e. hours per day on Facebook and total number of Friends) as well as attitudinal items which assess the individuals’ relationship with the site (i.e. how important Facebook is to them). Response categories on the attitudinal items (Facebook Intensity) ranged from 1 (strongly disagree) to 5 (strongly agree). Response categories on hours per day were presented on an ordinal scale with 6 categories ranging from ‘0-1 hours’ to ‘6+ hours’. Response categories on number of friends were presented on an ordinal scale with 5 categories ranging from ‘0-200’ to ‘800+’. The scale is reported to have good internal consistency (Cronbach’s alpha = .83). The initial item pool for the Presentation of Online Self Scale (POSS), developed for this study,

contained 24 items and participants rated on a 5-point Likert scale (from ‘strongly disagree’ to ‘strongly agree’) the extent to which each item accurately described how they felt about their online self-presentation behaviours. Drawing on available research and theory^{2,3,4,6}, items were selected for the initial pool to tap into the different ways in which people may experiment with self-presentation online (e.g. by presenting an idealised version of self, a false version of self or experimenting with multiple self presentations simultaneously).

The initial item pool of 24 for the POSS was subjected to exploratory factor analysis with varimax rotation to determine the factor structure. Factor loadings of .4 or greater were deemed statistically significant, so only these loadings were kept²⁷.

Table 1: Factor loadings and internal reliability for the POSS

	1	2	3	4
Factor 1: Ideal self				
I feel more comfortable behaving how I want to online	.721			
I can show my best qualities online	.712			
Being online allows me to express myself	.674			
The way I present myself online differs significantly from real life	.660			
Communicating online allows me to say the things I can't say offline	.640			
I like going online because it allows me to be a different	.608			
I feel I can be my ideal self-online	.527			
I can escape from myself online	.514			
I can talk to people who wouldn't usually talk to me in the real world	.430			
Factor 2: Multiple selves				
I very often act out different personas in certain online spaces		.809		
I regularly use different personas online		.771		
I enjoy acting out different identities online		.703		
Being online allows me to create a new identity		.673		
I am a different person depending on which online space I'm in		.636		
Factor 3: Consistent self				
I feel my personality online is the real me			.693	
I feel I am the same person in the cyber world that I am in the real world			.640	
I am always my true self online			.636	
I can't really be myself online			-.635	
Factor 4: Online presentation preference				
I find it easier to communicate in face to face contexts				-.759
I find it difficult to be myself in the real world				.688
I prefer being online than offline				.594
Cronbach's alpha	.862	.847	.621	.715

The final factor structure of the POSS accounted for 53.99% of the variance. Assumptions of sphericity ($\chi^2 = 1455.32$; $p < 0.001$) and sampling adequacy (Kaiser-Meyer-Olkin = 0.864) were met. The final factor structure comprising of 21 items, can be seen in Table 1, including factor labels and Cronbach's alphas. The 4 factors were: 1) 'ideal self' which relates to the extent to which individuals present an idealised version of the self online, 2) 'multiple selves' describes the extent to which individuals present different versions of the self across online environments, 3) 'consistent self' relates to the extent to which an individual's offline and online self-presentation are analogous, and 4) 'online presentation preference' describes the extent to which individuals prefer presenting themselves online.

Procedure

After permission had been gained from schools, consent was sought from each participant depending on their age. For participants younger than 16, consent was obtained from parents or schools in the place of the parents. Assent from the younger participants was also obtained on the day of the survey taking place. Consent was sought directly from participants older than 16. Participants were presented with a questionnaire booklet consisting of the Self-Concept Clarity Scale²⁴, Facebook Intensity Scale²⁶ and Presentation of Online Self Scale (POSS). Questionnaires were completed in semi-private settings within the educational institutes from which participants were recruited. Participants therefore completed the questionnaires in large groups, but under the supervision of teachers and under exam conditions. The entire pack took approximately twenty minutes to complete. Participants were fully debriefed with regard to the aims of the study upon completion.

Results

Correlations

Several of the factors in the POSS were significantly inter-correlated. ‘Ideal self’ correlated positively with ‘multiple selves’ ($r = .644, p < .001$) and ‘online presentation preference’ ($r = .589, p < .001$). A positive association was found between ‘multiple selves’ and ‘online presentation preference’ ($r = .455, p < .001$). ‘Consistent self’ was negatively associated with ‘online presentation preference’ ($r = -.210, p < .05$). Additionally, there was a significant positive relationship between self-concept clarity and number of Facebook friends ($r = .162, p < .05$). There was no significant relationship between age and self-concept clarity ($r = .100, p = .223$). See table 2 displaying inter-correlations between all of the variables.

Table 2: Correlation coefficients (Pearson Correlations) and summary statistics for all variables (means and standard deviations in brackets)

	Mean (SD)	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1) Age	15.50 (1.87)	1.00								
(2) Self-concept clarity	2.81 (0.68)	.100	1.00							
(3) Facebook Intensity	2.77 (1.05)	-.070	-.069	1.00						
(4) Facebook Friends	2.37 (1.25)	-.098	.162*	.281**	1.00					
(5) Facebook Hours	2.12 (1.36)	-.145	.035	.590**	.437**	1.00				
(6) Ideal Self	2.88 (0.79)	-.094	-.371**	.248**	-.063	.177*	1.00			
(7) Multiple Selves	2.18 (0.80)	-.062	-.325**	.116*	-.106	.198*	.644**	1.00		
(8) Consistent Self	3.40 (0.69)	.156	.255**	.173*	.153	.225**	-.089	-.142	1.00	
(9) Online Preference	2.70 (0.88)	-.182*	-.420**	.215**	-.068	.166*	.589**	.455**	-.210**	1.00

* $< .05$, ** $< .01$

Four 2-stage hierarchical regression analyses were conducted with ideal self, multiple selves, consistent self and online presentation preference as the separate dependent variables. To control for Age, Facebook Intensity, Facebook hours and Facebook friends, these variables were entered at stage one. Self-concept clarity was entered at stage two.

Ideal self

At stage one, Facebook intensity and Facebook friends contributed significantly to the regression model ($F(4, 145) = 3.834, p < 0.01$) and accounted for 9.6% of the variance (adjusted $R^2 = .071$) for 'ideal self'. Introducing Self-concept clarity explained an additional 10.9% of the variance ($R^2 = .205$; adjusted $R^2 = .177$) and this change was significant ($F(5, 144) = 7.426, p < 0.01$). When all five independent variables were included at stage 2, only Self-concept clarity (Beta = $-.395, t = -4.45, p < 0.01$) was a significant predictor of 'ideal self'.

Multiple selves

At stage one, Facebook hours and Facebook friends contributed significantly to the regression model ($F(4, 145) = 3.671, p < 0.01$) and accounted for 9.2% of the variance (adjusted $R^2 = .067$) for 'multiple selves'. Introducing Self-concept clarity explained an additional 8.6% of the variance ($R^2 = .178$; adjusted $R^2 = .149$) and this change was significant ($F(5, 144) = 6.235, p < 0.01$). When all five independent variables were included at stage 2, Facebook Hours (Beta = $.156, t = 2.63, p < 0.01$), Facebook Friends (Beta = $-.120, t = -2.17, p < 0.05$) and Self-concept clarity (Beta = $-.354, t = -3.88, p < 0.01$) were significant predictors of 'multiple selves'.

Consistent self

At stage one, Age contributed significantly to the regression model ($F(4, 145) = 3.745, p < 0.01$) and accounted for 9.4% of the variance (adjusted $R^2 = .069$) for 'consistent self'. Introducing Self-concept clarity explained an additional 5.1% of the variance ($R^2 = .145$; adjusted $R^2 = .116$) and this change was significant ($F(5, 144) = 4.892, p < 0.01$). When all five independent variables were included at stage 2, Age (Beta = $.061, t = 2.13, p < 0.05$) and Self-concept clarity (Beta = $.234, t = 2.95, p < 0.01$) were significant predictors of 'consistent self'.

Online presentation preference

At stage one, Age and Facebook Friends contributed significantly to the regression model ($F(4, 145) = 4.157, p < 0.01$) and accounted for 10.3% of the variance (adjusted $R^2 = .078$) for 'online presentation preference'. Introducing Self-concept clarity explained an additional 14% of the variance ($R^2 = .243$; adjusted $R^2 = .216$) and this change was significant ($F(5, 144) = 9.225, p < 0.01$). When all five independent variables were included at stage 2, only Self-concept clarity (Beta = $-.496, t = -5.15, p < 0.01$) was a significant predictor of 'online presentation preference'.

Discussion

From this exploratory study, the role of self-concept clarity in explaining different online self-presentations can be clearly seen in the added variance accounted for in the hierarchical regression models (5.1%-14%). This role is particularly noticeable in one's preference for online self-presentation, with lower self-concept clarity predicting a preference to present online rather than offline. Additionally, adolescents who possessed a less stable self-concept were more likely to report presenting an ideal self, made more diverse self-presentations and presented an online self which was inconsistent with their offline self. These findings echo the observation that adolescents perceive social media as a 'tool' to try out and test different presentations of the self²⁵.

In exploring the link between self-concept clarity and the different ways in which adolescents experiment with their online self-presentation, we offer a number of tentative explanations. An adolescent who can provide a coherent answer to the question 'who am I?' should, in theory, feel little desire to test out the presentation of alternative possible selves, as ultimately he/she will have a strong sense of who they are and may feel more confident presenting this version

of the self both on- and off-line²⁴. The adolescent with low self-concept clarity on the other hand may wish to present different versions of the self as an act of self-discovery as they work towards understanding who they are and finding a self that they are comfortable with²⁵. Alternatively, considering that those with low self-concept clarity have also been reported to possess lower self-esteem²⁴, it may be that these individuals are less satisfied with themselves and are therefore more prone to exploring alternative identities.

One possible explanation for why adolescents with low self-concept clarity may be happier presenting themselves online could be because they are provided with a much greater degree of flexibility in self-presentation options and will therefore not be constrained in the same way that they might be offline^{2,3}. The presentation of an 'ideal self' may also be perceived as a default self-presentation position by some individuals with low self-concept clarity. It could be argued that when we are not quite sure how we would like others to perceive us, the most sensible option might be to opt for a type of self-presentation which is going to win favours with others and boost our popularity across the board. Indeed, only under exceptional circumstances are we likely to deliberately engage in impression management tactics which would garner unfavourable responses²⁸.

There was also some suggestion that those adolescents who spent increased amounts of time on Facebook and who had fewer Facebook friends, combined with low self-concept clarity, were more likely to present multiple versions of the self online. It may be that testing out different presentations of the self online is an activity which requires a greater time investment than what the average user would normally expend. Alternatively, receiving praise and validation from others might be particularly appealing to those who have a less stable and clear self-concept, leading them to spend increased amounts of time in environments where they can

achieve this. Additionally, having fewer Facebook friends might either suggest that those with low self-concept clarity have more difficulty making friends generally¹¹, or that getting away with presenting multiple, inconsistent versions of the self would be easier to achieve when there are fewer individuals who could potentially pick you up on these incongruous variations. However as these are speculative ideas, additional research is needed to further explore the nature of this relationship.

Older adolescents were more likely to have consistent presentations of self between their off- and on-line interactions which may suggest that they are closer to attaining a clearer sense of self than the younger adolescents^{17,24}. However, the fact that there was no straightforward relationship between age and self-concept clarity would possibly warrant an alternative explanation. Future research may benefit from a more longitudinal approach in order to more precisely test how experimentations with self-presentation online feed into the development of the self-concept or vice versa across the adolescent period.

Overall, the results from this investigation provide evidence to support the notion that self-concept clarity is a good predictor of an adolescent's inclination to engage in self-presentation experiments whilst online. A more fluid approach to self-presentation may be particularly appealing to an individual whose sense of self is not clear and well defined as it permits them to try out different self-presentations in an attempt to resolve identity crises and work towards the discovery of a coherent self-concept. However, it is worth recognising some of the limitations of this research, including the use of self-report measures which required participants to reflect accurately on their current and previous online behaviour. In addition, the sample was limited in size and scope to adolescents living in the UK. Future research endeavours may focus on examining the construct validity of the POSS, for example by

correlating it with established constructs that may be related to self-presentation experimentation (e.g. the self-monitoring scale²⁹). In addition, it may be enlightening to examine gender differences in self-presentation behaviour across different platforms. For example, with teenage boys gaming may present more opportunities for multiple self presentations than social media platforms. Finally, it would be worthwhile replicating the study with adults to test if self-concept clarity is also related to online self-presentation experimentation in a non-adolescent sample.

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