Changes in Social Media Behavior During Life Periods of Uncertainty

Xinru Page,[1] Marco Marabelli[2]

Dept. of Computer Information Systems[1], Dept. of Information and Process Management[2], Bentley University, Waltham, MA (USA)
xpage@bentley.edu, mmarabelli@bentley.edu

Abstract

Social psychology has found that individuals are more self-focused in times of uncertainty such as new life phases. That is, in times of uncertainty and transition, one's thoughts and actions are more egocentric. In other literature, more narcissistic individuals have been shown to behave differently on social media. Bringing these two streams of research together, we investigate whether and how egocentrism during life periods of uncertainty affect social media behaviors. We identify two life phases with patterns of behavior driven by different types of narcissism. The social needs and heightened sense of egocentrism in these different life phases shape social media behavior, albeit in different ways. We discuss the relevance of these motivational and behavioral differences for understanding social media behavior in different phases of life.

Introduction

As social media increasingly shape our interpersonal relationships, researchers have tried to understand how and why people are using it. One of the most commonly studied social media behaviors is disclosure such as self-disclosure or sharing pictures of oneself, a.k.a. "selfies" (Bergman et al. 2011; McKinney et al. 2012; Weiser 2015). Certain personality traits such as Narcissism have been linked to frequent self-disclosure (e.g. Buffardi and Campbell 2008). Recently, studies also focus on the type and role of feedback that results from self-disclosure (Benski and Fisher 2013).

However, when trying to reconcile the various findings about social media use and impact, discrepancies arise. Much of this social media literature generalizes the results of their findings, albeit often controlling for factors such as gender, age, personality traits and other demographics. However, relying on these generalizations leads to inconsistencies. Psychosocial developmental theory (Erikson 1959; Newman and Newman 2006) explains human development as influenced by both individual needs and societal demands and expectations. In each developmental stage in life, one's behaviors are shaped by a different set of psychological and social needs. We extend this to a social media

context and ask: How do different expectations and motivations connected with life phase lead to differences in social media behavior?

This work makes a theoretical contribution by developing an explanation of social media behaviors, which expands on prior social media research. Secondly, we make an empirical contribution by identifying traits (relevant to social media behavior) that are found in certain social contexts. Finally, we also make a contribution to practice by showing how certain samples differ from a more general population. Namely, students and those actively job-seeking in the workforce are in a more uncertain time of life, are more self-focused and have specific social needs. This has implications for studying social media behavior of these individuals.

Related Literature

This work draws from multiple bodies of literature. Drawing on psychosocial developmental theory (Erikson 1959; Newman and Newman 2006), we identified the social needs of the interviewees in order to identify social media behaviors that they perform. The theory supports the idea that individuals in their later adolescence (18-24 years old, college age) would have their own unique set of social needs and so perform age specific online social behaviors.

In addition, many scholars have investigated the role of personality traits in shaping social media use, such as narcissism, a specific "personality trait reflecting a grandiose and inflated self-concept" (Buffardi and Campbell 2008, p.1304). Self-absorption and an egotistical frame of reference, along with "attention-seeking and validation" needs are common (Marshall et al. 2015). Ackerman et al. (2011) identified three types of narcissism: Leadership/Authority, Grandiose Exhibitionism and Entitlement/Exploitativeness. Many social media studies have used this characterization of narcissism and found it to be related to increased self-disclosure (Bergman et al. 2011; Buffardi and Campbell 2008; Ryan and Xenos 2011; Weiser 2015). Only more recently have studies shift their focus from posting and disclosure behavior to feedback such as Likes (Marshall et al.

2015; Scissors et al. 2016). Our study bridges this gap between the research showing narcissism encourages self-focused social media behavior, and the nascent literature on the type of feedback people hope for.

Lastly, we emphasize the importance of transitions in life phases in shaping personality traits. Indeed, the literature suggests that times of anxiety and uncertainty result in egocentric reasoning (Newman and Newman 2006; Todd et al. 2015) and that specifically, starting college is a trigger for the (re)emergence of egocentrism (Schwartz et al. 2008). In this paper, we take a first step towards understanding how such transitions shape one's social media usage. This allows us to go beyond the *what* of social media behavior, to understand the *why* and *how*.

Research Method

We opted for the richness of semi-structured interviews that allow us to understand the participant from a holistic viewpoint. Our exploratory study requires that we understand a broad range of individuals at different life stages, but in an in-depth level and from an ecological perspective. The interview questions were very open-ended and aimed at understanding their behaviors and interactions on social media, and especially their motivations and the social context in which they are embedded. We also had participants ground their accounts by telling us about actual recent usage (for example, by looking in their Activity Log and reporting their recent activity). This allowed us to later more confidently code their level and type of social media activity.

We conducted our analysis in two phases. The first phase consisted of a grounded theory analysis utilizing open-coding, constant comparison and sampling until theoretical saturation. This led us to identify egocentric attitudes exhibited by interviewees and to see that they were commonly associated with specific life phases characterized by uncertainty.

In phase two, we turned to the relevant literature on narcissism, life phases and social media behavior. Although narcissism has been connected to self-disclosure, our phase one findings and the extant literature suggests that there may be factors contributing to the development of narcissistic attitudes. Specifically, social needs associated with life phases such as those characterized by uncertainty. Furthermore, we connect how these attitudes shape subsequent interactions beyond the initial self-disclosure. Recent research has begun to investigate simple one-way feedback such as "Likes", in contrast to interactional forms of feedback such as comments. In summary, based on theory and previous empirical findings, we identified relevant factors to further analyze in this phase. This includes social needs (from psychosocial developmental theory), social context (e.g. the university environment), egocentrism, gender and age.

We chose to use qualitative comparative analysis (QCA) because the relationship between these factors may be complex and need to be considered together rather than in isolation. The qualitative analysis technique is especially suited to when the researcher wants to stay close to the data but for a larger number of interviews that would be difficult to keep in his or her working memory. It allows the researcher to study the complex interplay between attributes of one individual, treating the individual in a holistic way, and also detect patterns by making comparisons between individuals. Refer to Ragin (2014) to learn more about QCA.

Sample. We conducted semi-structured interviews with individuals aged 18 and older in the United States who accessed social media at least weekly, distributed across the following developmental stages: late adolescence (18-24), early adulthood (25-34), middle adulthood (35-59), and late adulthood (60+). To achieve this type of stratified sampling, we recruited participants from multiple sources (also using snowball sampling): a private midsized university in the northeastern United States, the local community, industry participants, and the researchers' extended personal networks. For this paper, we focus on 40 participants representing students and those in the workforce (evenly split between student/workforce, and each group balanced between male/female). The sample was composed of full- and part-time undergraduate and graduate students, (65% late adolescence, 25% early adult, 10% mid adult) and members of the workforce (15% late adolescence, 20% early adult, 35% mid adult, 30% late adult). Interviews were conducted mostly summer of 2015 and concluded by April 2016.

Coding. Once we had identified the relevant constructs in phase 1, we created calibrated measures of these constructs to use in our phase 2 analysis. It is important to calibrate the measures used in QCA so that they match theoretical and substantive criteria *external* to the data. Calibrated measures allow us to classify attributes based on conceptual and external criteria. We based our definitions of narcissism on Ackerman et al. (2010). *Exhibitionist narcissists* are proud of their appearance, want others to know about and to give them attention. *Leadership narcissism* leads to individuals who feel they have authoritative knowledge and stand out. *Socioemotional support* is described as the feeling of being "cared for and loved, esteemed and valued" (Newman and Newman 2006). Need for i*nstrumental support* involves more tangible goals such as "information, advice, transportation, and assistance with meals and daily activities, finances, and health care" (p.528, Newman & Newman 2006). Research on *social affirmation* and one-way feedback such as "Likes" is still relatively new, so we turn to research that shows a third of Facebook users want likes from those not close to them (e.g. want likes from acquaintances) to calibrate our measure (Scissors et al. 2016). *Social exchange* such as commenting is shown to build relationships and increase social capital (Scissors et al. 2016) so we look at interviews who emphasize engaging with others. Lastly, we draw on national statistics showing 66.4% of Facebook users post less than once a week (Hampton et al. 2012). As a conservative estimate, we classified *frequent self-disclosure* as posting about myself at least weekly.

Results

The measures from the previous sections manifest in specific ways amongst our interviewees. We found that those

demonstrating exhibitionist narcissism often post about themselves, trying to make their lives seem exciting. They felt others want to know about them and their activity. Participants exhibiting this trait often stated how they felt a need to share and let people (or the world) know about them: "I need to express myself" and "I just assume they want to know what I'm doing". This type of narcissism we found to be associated with students who needed socioemotional support from their broader social network. People expressed this need "to be heard", "to be cared" for, to "have my presence" felt by others. Notably, they wanted this attention from "a lot of people", not just specific people. In fact, one interview described how getting "a sense of everyone cares about me" on social media is much better than meeting up to "talk with someone, it is just one-to-one".

This exhibitionism and need for socioemotional support led to frequent self-disclosures and placing an importance on social affirmation that comes from those disclosures. One interviewee expressed: "if you ever [are] bored or you feel alone, you`ll be able to [see] that this person two seconds ago was just looking at me, at my picture. That is kind of nice, it is a good feeling." The one-way feedback was what they valued above any more engaged conversation. Participants often strategized to maximize the number of Likes their post receives. They would post at optimal viewing times, "track how many likes we've got per each minute", and even remove and repost unsuccessful content. We further observed the narcissistic approach to valuing social affirmation. Namely, individuals who craved attention from others but did not want to give it themselves. For example, one interviewee who valued social affirmation explained how "when it is my birthday, I really look forward for this day. I check Facebook every hour for congratulations. It really means a lot for me. When I see someone else's birthday coming on, I do not post anything." He is unmotivated to reciprocate, and attributes this reluctance to laziness.

We also found interviewees who exhibited leadership/authority narcissism. These individuals often emphasized that they want to craft their "personal brand" and show how they are knowledgeable in their profession and professional area of interest. For example, they would use social media "because I want to be involved in entrepreneurship, in leadership so I am using actually social media to create my own picture, my own personality." They wanted people to think of them when needing guidance in that professional or other area of interest. Many of these interviewees were especially focused on finding a job or developing career opportunities, which is another life phase characterized by anxiety (Newman and Newman 2006). This leads us to infer that egocentrism in the job-seeking phase of life manifests more as the leadership type narcissism.

Many of these individuals expressed a need for instrumental support from their broader social networks: "I see who is connected to someone at the company, where I am applying. So, they could probably get me connected and help me." The need for instrumental support manifest as the need to obtain job/career-related support. This need was observed in both students and those in the workforce.

We noticed a pattern where individuals exhibiting leadership narcissism and who needed instrumental support highly valued engaging with others in dialogue and two-way interactions. Dialogue allowed them to show their professional competency by engaging with others in a public way. It was also a way to build a relationship and lay the foundation for reaching out for professional advice or job recruiting. Certain interviewees were adamant about using the commenting features on social media and were offended or annoyed by people who did not respond meaningfully (through on or offline conversation) or those who used single-click feedback such as Likes.

Attributes			Num	Consistency	Supported?
Exhib	SocioEmo	Student			
Yes	**Yes**	**Yes**	**8**	**1.00**	**Yes**
Yes	Yes	No	3	0.67	No
Yes	No	Yes	2	0.50	No
No	No	Yes	9	0.11	No
No	No	No	16	0.00	No

*Table 1. **Frequent Self-Disclosure** (solution coverage = 0.62)*

Attributes			Num	Consistency	Supported?
Exhib	SocioEmo	Student			
Yes	**Yes**	**Yes**	**8**	**1.00**	**Yes**
Yes	Yes	No	3	0.00	No
Yes	No	Yes	2	0.00	No
No	No	Yes	9	0.00	No
No	No	No	16	0.06	No

*Table 2. **Value Social Affirmation** (solution coverage = 0.80)*

Attributes			Num	Consistency	Supported?
Leader	Instrument	Work FT			
Yes	**Yes**	**Yes**	**6**	**1.00**	**Yes**
No	Yes	Yes	3	0.67	No
No	No	Yes	17	0.18	No
No	Yes	No	2	0.50	No
No	No	No	12	0.00	No

*Table 3. **Value Social Exchange** (solution coverage = 0.50)*

Tables 1-3 show the combinations of attributes observed in at least 2 of our interviewees (i.e. we used a frequency threshold of 2). The column *Num* shows how many individuals exhibited each combination of attributes. This allowed us to only consider patterns that occur for more than a single individual. The Supported column shows whether a given combination of attributes is sufficient to exhibit the given behavior. This is determined by checking that the consistency score is above an accepted threshold (commonly 0.8, meaning at least 80% of users exhibited this behavior).

Table 1 shows that the combination of Exhibitionist narcissism, Need socioemotional support, and being a Student lead to frequent self-disclosure. Table 2 shows that this same combination of attributes also leads to valuing social affirmation such as Likes. No other combinations meet the consistency threshold. Table 3 shows how Leadership/Author-

ity narcissism, Need instrumental social support, and Working fulltime result in valuing social interaction such as interacting through comments. In all three combinations that were supported, the coverage was at least 50% or higher (e.g. cases represent 50% of all who exhibited the outcome).
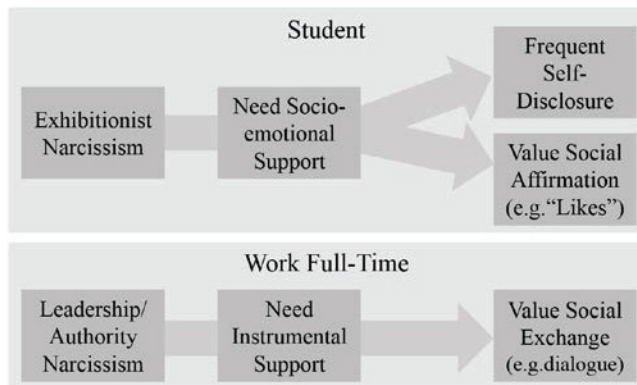

Figure 1. Summary of Results

Discussion and Conclusion

In line with the literature, we find that exhibitionist narcissism leads people to post more about themselves. However, we further the scholarship by 1) going beyond disclosure to focus on how exhibitionists in need of socioemotional support in a student environment consistently value social affirmation in the form of one-way feedback, 2) identifying different types of narcissism that are prevalent in different life phases, 3) finding that different types of narcissism lead individuals to value different types of social media interactions – social affirmation versus establishing authority through social interaction, and 4) We show how student life is a peculiar life phase that transcends age and developmental stage to shape social needs and resulting social media behavior.

Interestingly, the exhibitionist trait almost always co-occurred with the need for socioemotional support and was exhibited by students. This supports the idea from psychosocial developmental theory that suggests life stages of uncertainty, such as being a student, increases egocentrism. Our empirical results further illustrate that a specific type of need for socioemotional support is characteristic of student life, along with a specific type of exhibitionist narcissism. Future research should investigate whether other life phases typically associated with need for socio emotional support (perhaps also when moving to a new environment and needing to establish new relationships) is also associated with exhibitionism, or if that is only peculiar to the student environment. Given the uniqueness of student life, it would also be important to understand whether the academic environment in general (faculty, staff) creates a unique social context that would affect social media behaviors.

We further found that the leadership/authority narcissism trait occurred for those in the workforce who are anxious to find a new job or launch a new career. We observed that this

life stage can occur as students seek to join the workforce, but also later in life as individuals are seeking to make career shifts. This trait may continue to become more pervasive as individuals are transitioning careers and jobs much more often than a generation ago.

In conclusion, we have identified two life phases associated with uncertainty that exhibit egocentric tendencies and increased social needs. The behavior of individuals in these life phases is different than others. This work lays the foundation for future research to identify life phases as an important part of understanding social media behavior.

References

Ackerman, R. A., Witt, E. A., Donnellan, M. B., Trzesniewski, K. H., Robins, R. W., and Kashy, D. A. 2011. "What Does the Narcissistic Personality Inventory Really Measure?," *Assessment*, (18:1), pp. 67–87

Benski, T., and Fisher, E. 2013. *Internet and Emotions*, Routledge.

Bergman, S. M., Fearrington, M. E., Davenport, S. W., and Bergman, J. Z. 2011. "Millennials, narcissism, and social networking: What narcissists do on social networking sites and why," *Personality and Individual Differences*, (50:5), pp. 706–711

Buffardi, L. E., and Campbell, W. K. 2008. "Narcissism and Social Networking Web Sites," *ResearchGate*, (34:10), pp. 1303–14

Erikson, E. H. 1959. "Identity and the life cycle: Selected papers," *Psychological Issues*, (1), pp. 1–171.

Hampton, K., Goulet, L. S., Marlow, C., and Rainie, L. 2012. "Why most Facebook users get more than they give,"

Marshall, T. C., Lefringhausen, K., and Ferenczi, N. 2015. "The Big Five, self-esteem, and narcissism as predictors of the topics people write about in Facebook status updates," *Personality and Individual Differences*, (85), pp. 35–40

McKinney, B. C., Kelly, L., and Duran, R. L. 2012. "Narcissism or Openness?: College Students' Use of Facebook and Twitter," *Communication Research Reports*, (29:2), pp. 108–118

Newman, B., and Newman, P. 2006. *Development Through Life: A Psychosocial Approach*, Cengage Learning.

Ragin, C. C. 2014. *The Comparative Method: Moving Beyond Qualitative and Quantitative Strategies*, Univ of California Press.

Ryan, T., and Xenos, S. 2011. "Who Uses Facebook? An Investigation into the Relationship between the Big Five, Shyness, Narcissism, Loneliness, and Facebook Usage," *Computers in Human Behavior*, (27:5), pp. 1658–1664

Schwartz, P. D., Maynard, A. M., and Uzelac, S. M. 2008. "Adolescent egocentrism: A contemporary view," *Adolescence*, (43:171), pp. 441–448.

Scissors, L., Burke, M., and Wengrovitz, S. 2016. "What's in a Like?: Attitudes and Behaviors Around Receiving Likes on Facebook," in *Proceedings of the 19th ACM Conference on Computer-Supported Cooperative Work & Social Computing*, CSCW '16, New York, NY, USA: ACM, pp. 1501–1510

Todd, A. R., Forstmann, M., Burgmer, P., Brooks, A. W., and Galinsky, A. D. 2015. "Anxious and egocentric: How specific emotions influence perspective taking," *Journal of Experimental Psychology: General*, (144:2), pp. 374–391

Weiser, E. B. 2015. "#Me: Narcissism and its facets as predictors of selfie-posting frequency," *ResearchGate*, (86), pp. 477–481