Who Benefits Most From Using Social Media, the Socially Rich or the Socially Poor?

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Abstract

Research has shown that some individuals benefit from using social media because it may help them to obtain social capital. This article questions who are most likely to benefit: the socially rich (i.e., individuals with a preference for social interaction, support, or without interpersonal problems) or the socially poor? It is hard to provide a definite answer to this question: Previous empirical studies have yielded mixed findings and were difficult to compare due to varying conceptualizations and analytic approaches. To better understand the complex interplay between individuals' social media use and social capital, we discuss the added value of within-person analyses and person-specific designs.

Keywords. Social Network Site Use (SNS use), psychosocial functioning, rich-get-richer hypothesis, poor-get-richer hypothesis, heterogeneity

1. Introduction

The rapid rise of social media use in today's society is paralleled by an equally rapid rise in public concerns regarding potential harmful effects. Likewise, empirical studies focused on whether social media use negatively affects individuals' well-being have increased in the past years [1-5]. Overall, research has shown that associations between social media use and subsequent changes in well-being, such as happiness and depression, are non-existent to small [6-8]. Some studies even suggest that social media use may be beneficial because it promotes social resilience factors that may protect people against decreases in well-being [9]. Meta-analyses [10-12] and reviews [13-16], for instance, suggest that those adolescents and adults who use social media use to a greater extent have higher levels of social capital in terms of stronger links with acquaintances and friends [17].

One unanswered question is which individuals are likely to benefit most from using social media. Who attains social capital, who builds close relationships, and who receives social support while using social media? Currently, two hypotheses are typically juxtaposed: the socially rich-get-richer (or social enhancement) hypothesis versus the poor-get-richer (or social compensation) hypothesis. We review empirical evidence for these hypotheses by focusing on three types of indicators of social richness and poorness. These indicators tap into the preference of social interactions (i.e., extraversion and introversion), problems in interpersonal relationships (i.e., loneliness and social anxiety), and social support [18, 19]. Individuals with a preference for social interactions, with support, or without interpersonal problems are considered as socially rich. Those without a preference of social interactions, without support, or with interpersonal problems are defined as socially poor. After providing an overview of the literature, we present a roadmap for future research. We argue that study designs should be adapted to recent theoretical insights that media effects (a) take place within persons and (b) that these intra-individual effects may also differ from person to person. As such, we argue that certain socially rich and certain socially poor individuals may get richer due to their social media use, whereas others may get poorer.

2. The Rich-Get-Richer and Poor-Get-Richer Hypotheses

Social media, such as Instagram, Facebook, Snapchat, and TikTok have been defined as all "computer-mediated communication channels that allow users to interact with narrow and broad audiences in real time or asynchronously" [20]. Social media offer the opportunity to stay in almost constant touch with friends and family [21, 22]. This accessibility of social media forms the basis of the rich-get-richer hypothesis: Individuals who already have a rich offline social network are particularly likely to use social media as an avenue to further strengthen their social capital by offering additional supports online [23, 24]. The rich-get-richer hypothesis therefore states that individuals with the highest existing levels of support, a preference for social interactions, and without problems in social relationships would benefit most.

In contrast, according to the poor-get-richer hypothesis, socially poor individuals, who may have the most to gain from online interactions, should benefit the most from social media use in terms of (online) social capital. Social media conversations are asynchronous, which means that users do not have to respond directly [25]. Moreover, text-based interactions contain less cues such as voice or audio than real-live conversations. Via social media, individuals therefore have increased control over what, when, and how they disclose information [25, 26]. The hyperpersonal communication theory describes that these features of social media help individuals to optimize their self-presentation [27]. The poor-get-richer hypothesis therefore states that especially "socially poor" individuals may feel more at ease to disclose intimate personal information in online contexts than in offline contexts. This online self-disclosure may, in turn, enhance their social capital and compensate for the lack of in-depth relationships in their offline social lives [26, 28-30].

3. Empirical evidence for the rich-get-richer and poor-get-richer hypotheses

Although the number of studies on social media have exploded in the past years, surprisingly little research has examined the rich-get-richer and poor-get-richer hypotheses. Among those that have examined these hypotheses, findings have been mixed. For example, in one of the first studies during the early days of internet, Kraut et al [19] examined whether the association between internet use and changes in social capital across six months (i.e., community involvement and family communication) was moderated by adolescents' and adults' social richness (i.e., extraversion and high social support) and poorness (i.e., introversion and low support). In line with the rich-get-richer hypothesis, they found that internet use was related to increased social capital among extraverted and supported individuals and to decreased capital among introverted and unsupported individuals.

Further support for this hypothesis was found by Cheng et al. [18] who synthesized 161 studies on the associations between adolescents' and adults' social richness and poorness (i.e., extraversion, social anxiety and loneliness) and online social capital (i.e. material or immaterial resources that individuals obtain from their online social connections). In support of the rich-get-richer hypothesis, their meta-analysis revealed that extraverted individuals ($r = .21$) and those low in loneliness ($r = .22$) had higher levels of online social capital than non-extraverted and lonely individuals. No positive association between social anxiety and online social capital was found, which would have supported the poor-get-richer hypothesis.

Other studies, however, have supported the poor-get-richer hypothesis. For example, a cross-sectional mediation analysis revealed that greater perceptions of the breadth and depth of online communication among socially anxious (i.e., socially poor) versus non-anxious adolescents were related to an increased tendency to use online communication and higher levels of friendship closeness [31]. Likewise, longitudinal research revealed that especially among poor (i.e., shy) adolescents, having online exclusive friendships increased the likelihood to form conjoint and offline-exclusive friendships eight months later [32].

To further increase the complexity, findings from another study pointed at both a poor-get-richer and poor-get-poorer effect [33]. Specifically, longitudinal analyses of a two-wave panel study showed that socially poor adolescents (i.e. high on loneliness) were particularly likely to use social media in both active and passive ways. A poor-get-poorer effect was found given that passive social media use was related to decreased social support. However, they also found a poor-get-richer effect given that active Facebook use was related to increased social support.

Taken together, a definite answer to the question of whether the socially rich or the poor benefit most from social media remains largely unanswered. An ill-defined mix of conceptualizations and analytical approaches have been used to test the hypotheses. Specifically, studies differed in their operationalizations of richness, poorness, and social capital and used different analytical approaches (e.g., linear regression; mediation; moderation) to analyze their cross-sectional or longitudinal data. Thus, similar to recent narrative reviews [34-38], we are unable to reach an overall conclusion and, instead, conclude that more aligned research approaches are required. One way to investigate the rich-get-richer and poor-get-richer hypotheses in a more systematic way could be to adapt the design of studies to the most recent insights in theories of development and media effects.

4. A roadmap for future research on the rich-get-richer and poor-get-richer hypotheses.

Theories of development and media effects assume that social media may cause changes in social capital (i.e., getting richer) at the individual level, hence, these mechanisms take place within persons [e.g., 39, 40]. Second, these 'media effects' vary from individual to individual [39]. These more recent theoretical insights have important implications for how we study the rich-get-richer and poor-get-richer hypotheses. In the next section, we first review the evidence for these insights and explain how methodological advancements offer

new possibilities for examining the rich-get-richer and poor-get-richer hypotheses.

4.1 A within-person perspective on the rich-get-richer and poor-get-richer hypotheses.

Recently, social media researchers have stressed the need to conceptualize effects of social media as a within-person phenomenon [39, 40]. For example, it may be that adolescents feel lower levels of social support than they would typically do after passively using social media and higher levels of support after actively using social media [33]. To unravel whether and when adolescents get richer over time, it is important to get insight in such within-person social media effects on social capital. Assessing how individuals fluctuate in social capital and whether this is linked to their social media use [41, 42] can be done with daily diaries, experience sampling studies, within-person experiments, observation research, or longer-term longitudinal studies [41, 43, 44]. One of the unique features of such designs is the possibility to disentangle within-person variance from between-person variance (see Figure 1a and Figure 1b). For example, an experience sampling methodology (ESM) study examined social media use and social capital (i.e., friendship closeness) multiple times per day [45]. Although adolescents who used social media to a greater extent than their peers felt themselves on average closer to their friends (i.e., positive between person association), adolescents felt less close when they used social media in the previous hour than when they did not use social media (i.e., negative within-person association). Hence, the group-level between-person association was positive, but the actual media-effect was negative.

Even though many social media scholars stress the added value of within-person studies [46-48], the majority of research on the rich-get-richer hypothesis has still relied on between-person associations of social media use with (online) social capital. This research is well-suited to understand the extent to which individual differences in social capital and social media use are related. However, gaining insight in the “getting richer” part of the hypotheses requires examination of the effect of social media use on intra-individual changes in social capital over time. As such, the question “*Do individuals actually get richer at the short- and longer-term due to using social media?*” requires insights at the within-person levels, which is currently not yet common. Such within-person insights could be combined with between-person insights to reveal to what extent the within-person effects of social media use on social capital depend on individual dispositions such as indicators of social richness and poorness.

4.2 A person-specific perspective on the rich-get-richer and poor-get-richer hypotheses.

A second critical concern with existing survey method studies is that, even when they were within-person, they predominantly derived one average effect for the population or subpopulation of socially rich versus poor individuals. However, without an actual test of heterogeneity within subgroups, the implicit methodological assumption is that there is a homogeneous set of social media effects across all socially rich and poor individuals [8]. This assumption is unlikely to hold. Like other complex forms of human behavior, the interplay between social media and social capital is heterogeneous [43] – while one socially rich person may benefit another may be harmed. Modern theories on development, such as the differential susceptibility to media effects model [49] and ecological theories of development [50], both propose that a unique combination of dispositional, developmental, and socio-contextual characteristics determines a person’s own unique responses to social media use, which may vary over time. Even seemingly homogeneous groups of socially rich or poor individuals vary on different indicators of social richness and poorness as well as other dispositional, developmental and contextual variables, and so do their experienced social media effects [45]. For example, lonely individuals (who are often considered as socially poor) differ from each other in their preference for social interactions and the amount of social support that they receive. Assuming that an overall effect may hold for all socially rich and poor adolescents within a subgroup may therefore lead to one-size-fits-all fallacies [44].

Acknowledging causal effect heterogeneity [44] – the idea that every individual may

be uniquely affected by using social media - leads us to abandon the debate whether the average socially rich or the average socially poor person benefits most. Both hypotheses may be true, yet only for certain (socially rich and poor) individuals. Instead of juxtaposing the hypotheses, this idea encourages us to examine to what extent the apparently homogenous groups of socially rich and poor individuals are heterogeneous by embracing a more nuanced type of question: *Which socially rich and poor individuals benefit from using social media in terms of social capital and which do not?* Answering this question warrants that we obtain closer insights in the extent to which overall effect sizes per (sub)group are applicable to the experiences of one single individual within that group based on within-person experiments or intensive longitudinal data collections [43, 51, 52].

One possible design is to test how effects differ from one person to another is to analyze person-specific ($N=1$) effects first before they are aggregated [39]. After having identified those who benefit and those who does not (see Figure 1c), both groups could be compared on a wide range of indicators of social richness and poorness (see Figure 1d) as well as other relevant constructs (e.g., type of social media use or developmental stage). This so-called bottom-up approach [39] could help to identify how many socially rich or poor individuals respond in a certain way. It also helps to acknowledge that individuals could be rich according to certain indicators but poor according to others. Although it should be noted that person-specific approaches have recently been criticized for their lack of generalizability [53] (for a detailed response to this critique, see Valkenburg, 2022 [54]), they are often combined with analyses at the aggregated level to unify the strengths of both types of knowledge [52].

5. Conclusion

By reviewing existing empirical work on the rich-get-richer and poor-get-richer hypotheses, we found mixed findings. Whereas some studies found that the rich got richer, others suggest that the poor got richer. Here we postulate that the answer may differ per individual, as well as across developmental stage and context. We propose that future research on the rich-get-richer and poor-get-richer hypotheses could help us to move from subgroup insights to individual level understanding. Whereas some effects may be universal, obtaining insights into person-specific patterns may help us to better tailor social media prevention and intervention programs to the needs of individuals. Such findings could also identify those (socially rich and poor) individuals who are in need of intervention and provide them with person-specific supports.

Author Contributions

J. Loes Pouwels: Conceptualization, Writing – First draft preparation, **Loes Keijsers:** Conceptualization, Writing – Reviewing and Editing, **Candice Odgers:** Conceptualization, Writing – Reviewing and Editing.

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Figure 1

Conceptual Illustration of Different Analytical Approaches to Examine the Association Between Social Media Use and Social Capital

Fig. 1a Between-person association

- **Aim:** Examining the association between individual differences in social capital and social media use
- **Method:** Individuals are measured once ($t = 1$)
- **Example:** Individuals who use more social media (on average), experience more social capital as compared to others

Fig. 1b Within-person association

- **Aim:** Examining the effect of social media use on intraindividual changes in social capital over time
- **Method:** Individuals are measured repeatedly ($t \geq 3$)
- **Example:** Individuals experience less social capital (t) after using more social media ($t-1$)

Fig. 1c Person-specific associations

- **Aim:** Examining how the effects of social media use on intra-individual changes in social capital vary from person to person
- **Method:** Individuals are repeatedly measured with many measurement occasions across a short time window ($t \geq 50$)
- **Example:** Individual experiences less social capital, individual experiences more social capital, and for no individual change is observed after using social media (t-1)

Fig. 1d Bottom-up Approach

Step 1: Examining how many adolescents get richer or poorer in terms of social capital

Step 2: Comparing those who get richer and those who get poorer on various indicators of initial levels of social richness and poorness