



Measuring Mobile Media Use

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Extended Abstract (Poster Presentation)

The smartphone represents the pinnacle of mobile media devices. Given the infrastructure, people can now use instant messengers, social media, web browsers, video platforms and countless other services through constant Internet connection anytime and anywhere. The smartphone introduced drastic changes to the ways people engage with media and communication in general. Most prominently, the possibilities outlined led to the phenomenon of constant connectedness. The smartphone affords a mode of use where the device is only rarely switched off, use episodes are very short, but very frequent, and interpersonal communication episodes are part of a single, ongoing, fluid stream of messages (e.g., Vorderer & Kohring, 2013).

This trend leads to methodological challenges in all fields employing measurements of the use of such devices. Just like the use of other media, smartphone use is still operationalized with self-reported measures of quantity (duration and frequency) in most research. Unfortunately, plenty of studies have also shown that such self-reports diverge rather strongly from results of more elaborate methods like tracking or the Experience Sampling Method (ESM) (e.g., Boase & Ling, 2013). It is furthermore debatable whether even accurately measured quantity is a sufficient metric for smartphone use: "In a 24/7 media world, does it even matter how much time [...] people spend with media?" (Rideout, 2016, p. 139)

I argue that the ways we use smartphones and their capabilities justify rethinking the conceptualization of that use. I propose involving three exemplary qualitative dimensions in the measurement of smartphone use and assessing them with advanced methods.

Gratification Diversity: While single needs could already be satisfied with the use of other media, the smartphone distinguishes itself by being able to satisfy all of them. The more diverse the motives that lead to smartphone use are, the more purposes the device consequently serves in the user's life (Barkhuus & Polichar, 2011). The diversity of motives and respective apps and app categories used can be assessed using ESM during or shortly after use episodes.

Habitualization: The more habitualized smartphone use is, the more integrated into different situative contexts and relevant the device is within the user's living environment. Unconscious initiation is a necessary condition of habitualized behavior. The execution, however, may take place either unconsciously or consciously. This is why it is important to grasp unconscious initiation using the Response-Frequency Measure (RFM) that makes respondents answer intuitively rather than consciously (Naab & Schnauber, 2016).

Context diversity: Smartphones can be used virtually anywhere without compromising on performance and they provide many features related to location. They enable permanent connectivity and reachability, independent of specific contexts, which is a defining feature of mobile media. The more diverse and numerous places of use are, the more the device's benefits are leveraged and the higher its use should therefore be rated. Places of use can be assessed

using ESM. In randomly activated questionnaires, users can indicate where they currently are right on their phones (e.g., Sandstrom, Lathia, Mascolo, & Rentfrow, 2017).

My proposal suggests that smartphone use needs to be measured with indicators of quantity as well as quality. Just like self-reported measures of quantity are barely valid, the same might apply to quality. Therefore, the quality dimensions should be juxtaposed with self-reported versions of the same measures. Also, it can be expected that monitoring one's own smartphone use through dedicated apps moderates differences between self-reported and advanced measurements as this makes the use more salient to the user (Figure 1).

A pilot study for testing this conceptualization is scheduled for fall 2021.

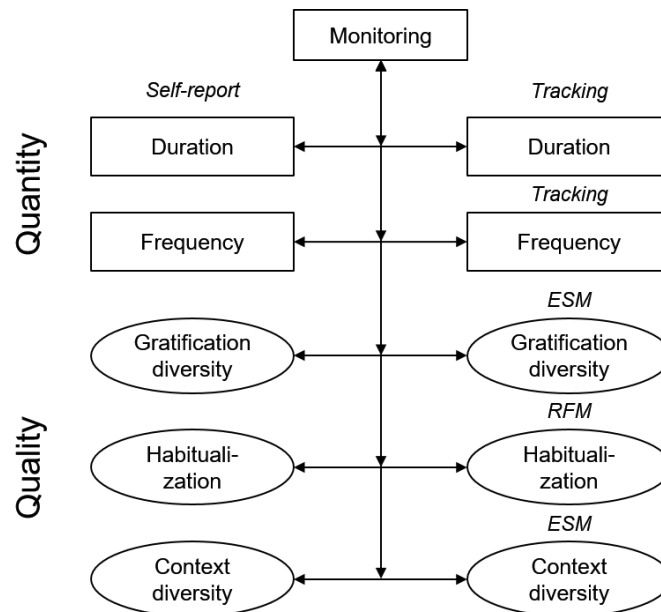


Figure 1: New conceptualization of smartphone use involving measures of quantity and quality

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