

This study investigated whether levels of extraversion influence the frequent use of social media (SMU). Participants were assigned to high- and low-extraversion groups, and an independent-samples t-test was conducted to examine differences in social media use between the groups. The results indicated that there was no significant difference in social media use between individuals with high and low levels of extraversion, $t(32) = -1.02, p = .32$. These results suggest that extraversion may not be associated with frequent social media use. This contrasts with the view that extraverts engage more with social interaction, including online. These findings add to the mixed research within this area and may reflect changes in how social media is used, such as passive browsing. Overall, the results suggest that the relationship between personality and social media use is complex.

Social media use is a huge part of everyday life for most people, with widespread prevalence documented across multiple studies and regions (Jungselius, 2024). With communication, interaction, information sharing, and self-expression online. Platforms such as Instagram and Facebook allow others to stay connected from afar (Ellison et al., 2007). As social media use has grown, researchers have become interested in understanding the psychological factors that influence how and why people use social media (Kuss & Griffiths, 2011; Nadkarni & Hoffmann, 2012). One factor is personality, particularly the trait of extraversion, which is commonly associated with sociability, confidence and interpersonal interaction. Understanding how personality relates to social media use may help explain differences in online behaviour and engagement patterns.

Extraversion is one of the five major dimensions within the five-factor model of personality, a well-known model used to explain individual differences (Costa & McCrae, 1999; John & Srivastava, 1999). People who score higher in extraversion tend to enjoy social situations and be more outgoing, whilst those who score lower in extraversion, known as introverts, tend to be quieter and prefer fewer social environments. For this reason, it has been suggested that extraverts may use social media more to communicate, maintain relationships, and receive social feedback through likes and comments (Correa et al., 2010; Burrow & Rainone 2017). This could be really appealing to those who enjoy seeking social engagement and external stimulation.

Previous research supports this theory; Costa et al. (2010) found that extraversion is associated with greater online use, including posting and interacting with others. Amichai-Hamburger and Vinitzky (2010) reported that extraverts are more active on social media. However, not all findings are consistent. Some studies suggest that introverts may also use social media regularly, especially for passive consumption rather than interacting (Ryan & Xenos, 2011). Beyens et al. (2020) suggest a possible explanation for these different findings is that social media offers a range of engagement options, such as active interaction

or passive consumption, which may appeal to both personality types (Orchard et al., 2014). This inconsistency indicates that the relationship between extraversion and social media use may be more complex than originally assumed.

Based on the link between extraversion and social media use, and empirical findings suggesting greater online activity among extraverts, this study aims to determine whether individuals who score higher in extraversion report higher social media use than those with lower levels. The

study will focus on self-reported usage levels, including time spent on platforms and interaction frequency. It is hypothesised that participants with higher extraversion will report significantly greater social media use than those with lower extraversion.

Thirty-four undergraduate students were recruited using convenience sampling. The sample consisted of 13 males, 19 females and 2 non-binary participants. Their ages ranged from 18 to 69 years ($M = 29.26$, $SD = 11.33$). All participants voluntarily participated in this study and provided informed consent prior to participation.

A between-subjects design was used to investigate differences in social media use based on levels of extraversion. Extraversion was measured, and participants were categorised into low and high groups based on the sample mean. The independent variable (IV) was extraversion level (low vs high), and the dependent variable (DV) was social media use. A t-test was conducted to determine whether there was a statistically significant difference in social media use between the two groups.

Participants were recruited via the Experiment Management System (EMS) through a link distributed by the lead researcher. Upon accessing the online study, participants were presented with an information sheet (see Appendix B) and a consent form (see Appendix C). Participants were required to read this information and provide informed consent before proceeding.

Following consent, participants completed a series of demographic questions, including age and gender. They then completed the extraversion questionnaire, followed by the social media use questionnaire (see Appendix D).

Upon completion of all measures, participants were presented with a debriefing statement (see Appendix E) outlining the aims and hypotheses of the study and reiterating their right to withdraw their data. Participants were then given the option to submit their responses by selecting a final submission button. Once the study was completed, participants were thanked for their participation.

This study examined whether individuals with higher extraversion levels report greater social media use than those with lower levels. It was hypothesised that extraverts would show significantly higher usage. However, these results did not support this prediction, as no significant difference was found between the two groups. Extraverts had a slightly higher mean score, but the difference was not statistically significant. Therefore, the hypothesis is rejected.

The results of the study continue to add to research that the relationship between social media use and extraversion is complex. Whilst some studies have found a link between extraversion and higher levels of interaction and online activity (Amichai-Hamburger & Vinitzky; Costa et al., 2010), the current results are more consistent, showing no clear difference in overall usage between personality types (Ryan & Xenos, 2011). This suggests that extraverts and introverts use social media similarly.

One explanation for this was that different social media platforms offer a variety of interaction options, from liking and commenting to passively scrolling through content. Previous research

had suggested that extraverts are more likely to engage in active use, such as maintaining relationships online through communication (Correa et al., 2010; Burrow & Rainone, 2017). In contrast, introverts may prefer passive consumption to direct communication. As suggested by Beyens et al. (2020) and Orchard et al. (2014), the different types of engagement could explain why overall usage differs, even if behaviour patterns do not.

Another explanation could possibly be that social media is prevalent and is part of everyday life for many people. Jungselius (2024) highlights the widespread use of social media across regions, which may reduce the influence of personality traits such as extraversion. Facebook and Instagram, social media platforms, allow interaction and passive use which appeals to both introverts and extraverts (Ellison et al., 2007). Meaning, differences in total usage will be barely noticeable.

However, there are some limitations. The sample size was small ($N = 34$), which may have limited the ability to detect significant differences. Participants were also divided into low- and high-extraversion groups, which may oversimplify personality traits, as they are usually measured on a continuum (Costa & McCrae, 1999). This may have limited the analysis's sensitivity. The study also relied on self-reported social media use, which may not always be accurate and can introduce bias.

Future research should explore differences in how social media is used rather than focusing solely on its use. Studies could examine active versus passive consumption, preferred platforms, or the reasons people use social media. Larger samples and detailed personality measures may also improve the validity of the findings.

In conclusion, this study found no significant differences in social media use between introverts and extraverts. This suggests that extraverts may not strongly predict overall use. Instead, personality differences may be more important for understanding how people engage with social media than how much they use it.