

Review of literature on the development of adolescent identity and social media

Identity involves a feeling of purpose and continuity which comes from an individual's commitment to alternative roles, beliefs, values, and goals (Mannerström et al., 2018). The literature has suggested that the process of identity development occurs throughout adolescence (individuals aged 11-19; Allen et al., 2014), and it is a time of confusion, reflection (Sebre & Miltuze, 2021), and emotion (Michikyan & Suarez-Orozco, 2016). One of the key dimensions considered amongst this developmental literature is the impact of social media (SM) use. According to researchers, such as Manago (2015), youths are currently growing up amid a surge in internet usage, which is constantly positioning them at the centre of SM sites. However, research is indicating a deeper influence that these sites have on today's society, in comparison to traditional media (Gündüz, 2017). As such, questions are being risen by researchers regarding the implications of SM usage on adolescent's identity development (Cyr et al., 2014). Therefore, this literature review will critically evaluate research which has addressed the issue already and highlight any areas which could be further explored.

The literature surrounding identity development signifies that it is a core task for adolescents (Granic et al., 2020). For example, a classic account of adolescent identity development was proposed by Erik Erikson (1968, as cited in Buckingham, 2008), who believed adolescence is a critical time for identity formation. Erikson proposed that it occurs through eight stages, each represented by a psychological conflict, which can either be successfully resolved, allowing for an individual to progress onto the next stage, or unsuccessfully resolved, causing maladaptation (Buckingham, 2008). Erikson suggested that during these conflicts, adolescents are required to reflect on their beliefs and values, address their future goals, and consider their sexual identity. Adolescents will ask themselves questions such as "who am I?" and "who do I want to be" (Sebre & Miltuze, 2021). Erikson stated that this is partially a psychological process; however, other factors, such as interpersonal relationships and social interactions, can play key roles (Buckingham, 2008).

Furthermore, the literature has shown that nowadays, the majority of adolescents use SM daily; therefore, a significant proportion of their social interaction is experienced online (Lenhart, 2015, as cited in Michikyan & Suarez-Orozco, 2016). In fact, statistics produced by the Office for National Statistics (2017) revealed that during 2017, 96% of respondents aged 16-24 use SM, which was an increase of 6% compared

to 2011. However, as touched upon, many researchers (e.g., Michikyan & Suarez-Orozco, 2016; Cyr et al., 2014) have signified that this usage can introduce various risks for adolescent identity development.

For example, the literature by Erikson (1959) suggested that to develop a strong identity, adolescents must receive positive recognition of their achievements. However, according to Christofferson (2016) this is commonly provided through SM nowadays. A study by Cipolletta et al. (2020), explored the impact of Instagram use on adolescent's identity formation, using a sample of 40 Italian adolescents aged 11-16. The participants were interviewed and each completed repertory grids (Cipolletta et al., 2020). The findings revealed that identity formation was influenced by the receipt of feedback on Instagram; for example, lower self-acceptance and social desirability, and increases in social isolation were caused by not receiving 'likes' (Cipolletta et al., 2020). Furthermore, the regression model demonstrated that female adolescents, and those who edited photos, were less likely to be self-accepting. These findings support the literature by Erikson, by indicating that a lack of approval can hinder identity development, and adds to the existing literature, through demonstrating that feedback given on SM can have more of an impact than using the sites themselves (Cipolletta et al., 2020). Consequently, interventions should consider this when promoting healthy identity development, and future research could focus more on investigating this aspect.

One of the limitations of this study was the small, homogeneous sample. Consequently, this negatively impacts the reliability and generalisability of the results. Future research should be encouraged to use larger, more diverse samples, and this could also increase the likelihood of producing different results. Additionally, future research could involve a control group of youths who do not use Instagram (Cipolletta et al., 2020); however, this may be difficult to achieve since Instagram is such a popular platform. Nevertheless, the results are likely to be generalisable to other SM sites, such as Facebook and Twitter, since they share similar features, such as likes, comments, and followers/friends.

Despite the criticism, some literature has demonstrated that SM can positively influence adolescent identity development (Uhls et al., 2017). For example, research has indicated that adolescents are actively forming and modifying their identity through the opportunities provided by online spaces (Galarneau, 2011, as cited in Michikyan & Suarez-Orozco, 2016), such as Facebook, Twitter, and Instagram. Michikyan et al. (2014, as cited in Michikyan & Suarez-Orozco, 2016) highlighted that these platforms enable youths to express their alternative characteristics, including their real, desired, and false selves,

through sharing images, statuses, and aspects of their lives. According to an article by Cyr et al. (2014), for adolescents who find difficulty in the process of identity development, knowing the existence of these online spaces that enable them to express whoever they are, or want to be, can bring them a level of comfort.

Moreover, a study by Shafie et al. (2012) investigated 185 Malaysian adolescents' choice of profile pictures, usernames, languages, and Facebook profiles, to understand how adolescents explore and form their identities on SM (Shafie et al., 2012). The findings demonstrated that university students tend to share images and information that reflect their real identities and ideal identities on SM (Shafie et al., 2012). This highlights that adolescents find comfort in using SM to express themselves; therefore, supporting that the identity development process can largely occur online. Nevertheless, other results indicated that males were more comfortable using their real names and photos on SM, in comparison to females (Shafie et al., 2012), suggesting a gender difference in identity expression on SM. Importantly, this appears to be a gap in the literature that future research should investigate. Furthermore, the limitations of this study should be considered. For example, a small, homogeneous sample was used, which decreased the reliability and generalisability of the results. Future studies should gather a larger sample of adolescents from diverse backgrounds (Shafie et al., 2012). Additionally, although Facebook was the chosen site to be explored due to being the most popular amongst the sample, alternative results could have been produced if other SM sites were explored.

Furthermore, the literature has highlighted that as part of a health identity development, adolescents should seek intimacy with peers (Uhls et al., 2017). According to Michikyan & Suarez-Orozco (2016) SM provides countless opportunities for adolescents to connect with a diverse range of people, with whom they may confide in to make meaning of certain life experiences. In fact, other literature has revealed that two thirds of adolescents report forming new friendships through SM, and more than 90% of youths use the platforms to connect with offline friends everyday (Lenhart, 2016, as cited in Uhls et al., 2017). Borca et al. (2015) added that adolescents have also reported that SM has aided them in having better understandings of their peers' feelings, and thus feeling more connected with them. Therefore, it is suggested by the literature that SM can guide peer support and approval, which is critical during identity development (Best et al., 2014).

In continuation, a study by Davis (2013) explored the impact of friendship and online communication with adolescent's sense of identity. The research involved assessing 2079 Bermudian adolescent's online communication, identity expression, friendship quality and self-concept clarity (Davis, 2013). The findings supported previous literature in revealing that online communication with friends can positively influence adolescent's sense of identity, by aiding the development of a stable and distinct sense of self, and improve friendship quality, which in turn, increases self-concept clarity (Davis, 2013). However, it should be noted that due to the cross-sectional and observational nature of the study, it lacked the ability to draw causal conclusions regarding adolescent's digital media use, peer relationships and sense of identity (Davis, 2013). Additionally, using a homogeneous sample (Bermudian adolescents) produced ungeneralisable results, and some of the distinct socioeconomic and cultural differences of Bermudians may have impacted the findings (Davis, 2013). Therefore, future research should conduct cross-cultural studies which explore online communication, friendships, and identity in adolescents from various countries. Nevertheless, the sample size should be praised since it would have increased the reliability of the results.

On the other hand, other studies have shown that using SM for communication can heighten the emotions experienced during identity development. For example, Cyr et al. (2014) conducted a cross-sectional and correlational study involving a sample of 268 high school students. There was a relatively even male to female ratio, and all participants were of white ethnicity. The purpose of the study was to explore whether the use of online communication, such as SM is negatively associated with identity development. The researchers created and used a technology usage scale to measure time spent using SM, and the preference of using SM for communication, the Ego Identity Process Questionnaire (EIPQ; Balistreri et al., 1995) to measure identity status, and the Identity Distress Survey (IDS; Berman et al., 2004) to measure distress linked with unresolved identity issues. The researchers found that time spent using communication technology, was linked to greater identity distress. Cyr et al. (2014) added that despite not finding a direct association with the process of identity development, online communication can impact levels of anxiety often experienced during the process; thus, it indirectly impacts it.

Some of the limitations of this study include the use of self-report measures such as the EIPQ and IDS, which are subject to lying, exaggeration and socially desirable answers (Costa & McCrae, 2008). This can potentially hinder the accuracy of the results; therefore, future studies should use collateral sources like

parents, teachers, and peer-ratings for some of the dimensions explored (Cyr et al., 2014). Furthermore, the cross-sectional and correlational nature of the study does not allow for any causal conclusion to be made; therefore, a longitudinal study may be of use (Cyr et al., 2014). Furthermore, an all-white sample should be criticised, since the results may be an inaccurate representation of the identity development experiences of adolescents of different ethnicity. Nevertheless, the sample size was of significance, with an even number of males and females, meaning the results should be relatively reliable and generalisable to a wider population.

Continuing with the indirect effect of SM on identity development, literature has demonstrated an association between increased SM use and poor mental health. Namely, Lin et al. (2016) and Rosen et al. (2013) found that adolescents who spent a lot of time on SM suffered with symptoms of depression. Similarly, Kaur and Bashir (2015) found a link between SM use and increased depression, stress, and suppression of emotions. However, much of this research is of a cross-sectional nature, and lacks analytic techniques assessing the changes over time (Coyne et al., 2020). In a more recent longitudinal study, Coyne et al. (2020) followed 500 adolescents over an 8-year period, to explore the association between time spent using SM with anxiety and depression. Between the ages of 13 and 20, participants completed a self-report questionnaire once a year to report their daily SM usage (Coyne et al., 2020). Depression and anxiety were also measured yearly, using the self-reported Centre for Epidemiological Depression Scale for Children (CES-DC; Weissman et al., 1980), and the Spence Child Anxiety Inventory (SCAI; Spence, 1998) (Coyne et al., 2020).

Coyne et al. (2020) explained that between subject analyses indicated that time spent on SM was associated with anxiety and depression, which corroborates the body of literature suggesting that SM can cause mental health issues (e.g., Kaur & Bashir, 2015; Rosen et al., 2013; Lin et al., 2016). Nevertheless, this study is not without its limitations. For example, the use of self-reports to measure SM usage could be a disadvantage due to past research suggesting that most adolescents under-report their usage (Andrews et al., 2015). Additionally, the study involved a non-clinical sample, meaning depression and anxiety were self-reported; therefore, there could be a degree of bias, inaccuracy, and unreliability within the results (Coyne et al., 2020). Nevertheless, the study should be praised for assessing participants over a significant period of time, which accounts for any individual changes, and increases the likelihood of drawing a causal conclusion.

In relation to this literature, other research has shown that the mental well-being of adolescents can impact their identity development (Wiley & Berman, 2013), suggesting that SM could be an indirect effect of a difficult identity development process, or even the formation of an unhealthy identity. For example, a study by Wisdom et al. (2006) found that adolescents' experience of depression involved finding it difficult to maintain an identity. Moreover, a more recent study by Demir et al. (2010) investigated the association between depression and sense of identity in a sample of 61 adolescents with depressive or physical symptoms. The researchers measured depression using the Beck Depression Inventory (BDI; Beck et al., 1961) and the Hamilton Depression Rating Scale (HDRS; Hamilton, 1960). Participants were re-evaluated on their eighth week of taking antidepressants (Demir et al., 2010). The researchers explained that the depressed adolescents scored higher on the sense of identity scale (higher scores signify increased identity confusion), in comparison to non-depressed adolescents. However, after successful antidepressant treatment, depressed adolescents demonstrated a decrease in their identity confusion (Demir et al., 2010).

The findings from the Demir et al. (2010) study highlighted the role of depression in causing identity confusion and distress within adolescents. More importantly though, previous literature indicated that depression is a common result of SM (Rosen et al., 2013; Lin et al., 2016; Kaur & Bashir, 2015; Coyne et al., 2020; therefore, the combination of these studies would strongly suggest an indirect association between SM and identity distress. Nevertheless, the study by Demir et al. (2020) should be criticised for its small sample since this decreases the reliability and validity of the findings. Having said that though, the results were concordant with previous research findings (e.g., Çuhadarolu, 1999, as cited in Demir et al., 2020). Additionally, the use of the popular BDI should be praised since meta-analyses of its psychometric properties have highlighted its high internal consistency and content validity, and its effective differentiation between depressed and nondepressed individuals (Richter et al., 1998).

In conclusion, the literature suggests that with the majority of adolescents spending a significant amount of time on SM these days (Manago, 2015), much of their identity development occurs online. However, as demonstrated throughout this review, this poses many risks to the process, since various research has associated SM with identity confusion and distress (Cyr et al., 2014), social isolation and lower self-acceptance (Cipolletta et al., 2020), and mental health disorders, such as depression and anxiety (Coyne et al., 2020). However, on the other hand, other literature highlights some of the positive aspects of SM which can aid adolescents in forming health identities. For example, Michikyan & Suarez-Orozco (2016) discussed how SM provides adolescent with the ability to explore various identities and express

themselves freely, while Best et al. (2014) highlighted that it enables adolescents to gain support and approval from their peers, which is a critical aspect of developing a strong identity (Erikson, 1968, as cited in Buckingham, 2008).

Therefore, after carefully analysing the literature, it is necessary to address future ideas. For example, parents, teachers, and health care providers should be encouraged to have discussions with children and adolescents regarding their SM usage, in attempts to raise awareness about its benefits and risks to their identity development (Uhls et al., 2017). Additionally, Uhls et al. (2017) suggested that when introducing new SM targeted at adolescents, policy makers should consider the developmental risks for adolescents and be encouraged to fund educational programmes which teach digital literacy and how to avoid the risks of SM to identity development. Moreover, from an exploratory perspective, future researchers should consider conducting longitudinal studies, since adolescents' characteristics, perceptions, and SM usage are highly likely to change over time (Long & Chen, 2007). Additionally, other future studies should address the gender differences found in certain studies previously discussed (e.g., Shafie et al., 2012), as well as further investigating the impact of feedback given on SM on adolescent identity development.

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