INFORMATION LITERACY: ITS RELEVANCE TO YOUTH MENTAL HEALTH IN DEVELOPING COUNTRIES

*Udena Ruwindu Attygalle

Colombo South Teaching Hospital, Kalubowila, Sri Lanka

*Corresponding email: udenaa@gmail.com

Abstract: Information literacy is an overarching concept that incorporates many of the diverse literacy areas important for adolescent mental health. Adolescents are in a sensitive stage in their development, where they are susceptible to the possible emotional and cognitive adverse effects of the huge amount of information they have to deal with. For them, the ability to access the most useful information, critically evaluate it, reflect on it and being able to use it for the benefit of oneself and others is vital. As adolescents in developing countries are being rapidly exposed to information from various types of social media and ways of living that require the abilities described in information literacy, looking at teaching these skills in formal and informal ways is important.

Key Words: Adolescents, Developing Countries, Mental Health, Information literacy,

INTRODUCTION

The current times being described as the "information age", highlights the importance of information and its management in today's world. Being able to interact with information to one's own and others benefit, has become a vital aspect of 21st century living. The huge amount of information one has to deal with everyday can be overwhelming, and make us susceptible to misinformation. While how information is handled has been a topic of interest and study in fields such as the library sciences and Information Technology (Lloyd, 2003; Park et al., 2020), it appears to be also relevant to mental health. This is especially true for adolescents, who are at a biological and social developmental stage that can make them vulnerable to information related adverse effects. For example, studies have found that adolescents are more likely to share information content, if it connects with their interests, regardless of its

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truthfulness (Herrero-Diz et al., 2020). As such if the information is newsworthy, regardless of the nature of the content, this information is more likely to be shared among young people (Herrero-Diz et al., 2020), sometimes leading to adverse emotional and social consequences.

From a biological perspective the adolescent brain has still not achieved full maturity. The prefrontal cortex that is involved in emotional regulation is still developing in adolescence. These areas are also involved in executive functions such as planning, organisation and impulse control and tend to mature later in life (Bove et al., 2016). This has been put forward as an explanation for the impulsive and emotional decision making seen in adolescence. In current times this can lead to decision making without proper analysis or reflection about the information they receive.

From a social developmental perspective, adolescent self-differentiation, which is conceptualised as the development toward an autonomous self, distinct from others, is also a part of adolescent development. This process is especially affected by peer and social influences (Freeman & Almond, 2009), which today is not limited by geographical constraints, and includes the cyber space as well. Adults, especially in developing countries not being able to provide guidance in this new space, due to their own lack of knowledge and experience in dealing with cyber issues makes adolescents more vulnerable to information received through these new media. This is compounded by most developing countries not having cyber regulatory and monitoring systems in place as well.

Furthermore, it has been found that many of the major mental health conditions have their beginnings in this stage in life. A review found that roughly half of all life-time mental health disorders start by the mid-teens and three-fourths by the mid-20s (Kessler et al., 2007). While mental health issues are related to genetic susceptibilities, many of these conditions are triggered by environmental factors, of which information in its many forms can be a major factor. Consequently, how adolescents deal with, and handle information is an important aspect of adolescent mental health and wellbeing. As such, it is useful to explore the concept of information literacy, which deals with how one interacts with information.

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Information literacy is a term used to describe the ability to access, evaluate, organise and, use information in order to learn, problem solve and make decisions in both formal and informal learning contexts. The concept is also connected with the concepts of critical and reflective thinking. The American library association describes being information literate as, the ability to recognize when information is needed, and have the ability to locate, evaluate, and use effectively the needed information (Presidential Committee on Information Literacy: Final Report, 2006). It further describes information literate persons as "those who have learned how to learn". They know how to learn because they know how knowledge is organized, how to find information and how to use information in such a way that others can learn from them. They are people prepared for lifelong learning, because they can always find the information needed for any task or decision at hand (Presidential Committee on Information Literacy: Final Report, 2006). These very same qualities are also extremely important for the mental wellbeing of adolescents.

In short information literacy describes an overarching literacy essential for twenty-first century living. Today, information literacy is inextricably associated with information practices and critical thinking in the information and communication technology environment we all live in (Bruce, 2002). While it is considered as part of a lifelong learning process, it is also actively taught in many educational settings around the world (Eisenberg & Berkowitz, 1990). Many countries have paid attention to information literacy skills and many government initiatives too have encouraged the acquisition of these skills (Gresham, 2006). However, it has been suggested that that it is not merely teaching a set of skills that is important but rather a process that should transform both learning and the culture of communities for the better (Bruce,2002). However, both formal teaching, and the culture of being information literate are absent in many developing countries.

Information Literacy as An Overarching Literacy Relevant to Adolescent Mental Health
It is said that non information professionals may sometimes fail to grasp the role of information literacy in their specific domains (Forster, 2015). In the field of mental health and more specifically adolescent mental health, while literacy related to many separate areas have been studies

and found to be important, most of this emphasis how adolescents deal with information. As such the concepts of information literacy may be the overarching feature in many of these. Although how information literacy is related to mental health has been discussed in different contexts (Kavanaugh, 2021) how information literacy could be an overarching concept that is important to adolescent mental health has rarely been explored.

Internet and Media Literacy

When considering internet use, the ability to critically analyse information may be more important that literacy in the skills of using the internet itself. A study suggested that there are two separate dimensions of Internet literacy: Internet skill literacy and Internet information literacy. The later was the one that was intricately related to an adolescent's engagement in civic activities (Kim & Yang, 2015). Overall, the findings suggest that an adolescent who can critically understand and effectively evaluate online information is more likely to become an active participant in the betterment of society than one who lacks such skills.

Digital and Media literacy are related concepts that again include a broad spectrum of tasks including fairly granular tasks, such as copying and pasting digital content, and more complex work, such as critical analysis and synthesis of information accessed through a variety of ways (Turner et al., 2017). Again, the later more complex work is related to information literacy. Developing digital and media literacy has been found to be one of the most viable intervention strategies to minimize media's negative consequences and maximize its positive influences on beliefs, attitudes, and behaviours in adolescents (Turner et al., 2017).

Mental Health Literacy

This concept has been defined as the ability to recognise specific mental health disorders, knowing how to seek mental health information, knowledge of risk factors, causes of self-treatments, professional help available, and also, attitudes that promote recognition and appropriate help-seeking (Jorm, 2000). Similarly, when considering the concept of mental health literacy, not only the ability to recognise mental health problems, but being able to reflect on that knowledge analyse it, and take

appropriate action is important, especially in the case of adolescents (Attygalle et al., 2017)

Emotional Intelligence/Literacy

Emotional intelligence has been defined as the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions (Salovey & Mayer, 1990). Studies have found that emotional literacy interventions tailored to groups of "at risk" school children may be useful in reducing specific profiles of internalizing symptoms. It has been found that programs targeting these skills may be helpful in reducing the likelihood that depressive symptoms and loneliness will be maintained over time (Davis et al., 2019).

Importance of Information Literacy for Adolescent Mental Health

When considering all these literacy types important for adolescent mental health, a common aspect is the ability to critically analyse and use information for one's own and others benefit. If this information is defined broadly, it can be information from outside-in the form of a social media feed or discussions among peers, and also information from within-in the form of internal physical and emotional signals and recognising how we react to situations. Being able to reflect on this information as a part of a continuous learning process is an important overarching conceptualisation of information literacy.

The effects of the influx of social media on adolescents has been mainly studied in the areas of depression, body image disorders, eating disorders and externalizing disorders (Nesi, 2020). However, most studies have been conducted in developed countries. Overall social media use has been found to have a small but significant negative effect on the mental health of adolescents. In addition, cyber victimisation, social exclusion, comparison with others, conflict and drama are all areas that can lead to emotional issues in adolescents (Nesi, 2020). Although a sense of connectedness has been suggested as a major benefit that social media offers to adolescents (Anderson & Jiang, 2018), systematic reviews have suggested that greater time spent on online social networking can promote self-harm behaviour and suicidal ideation in vulnerable adolescents (Menom et al., 2018).

Dealing with issues such as body image issues relate to evaluating the source of information critically and contextually, while incorporating only selected information into one's knowledge base. When information related to relationship issues are taken, in addition to critical analysis of external information, the ability to recognise and analyse information from within us (i.e., our emotions) is also important. Being able to reflect on this information, and being able to see things in context and critically analyse and information, whilst holding back from impulsive decision making, is an important part of good mental wellbeing. The commonly used term critical thinking and its related aspect decision making have both been discussed as being overlapping with the concepts of information literacy (Weiner, 2011). As such, to be able to take advantage of the benefits of these platforms and to avoid their disadvantages, adolescents will need to interact with social information using the skills of information literacy.

In another study, problematic smart phone use was reported in approximately one in every four children and young people (Sohn et al., 2019. This was accompanied by an increased risk of poorer mental health (Sohn et al., 2019) internet addiction and internet gaming disorders and even difficulties in executive functions such as attention and long-term planning have been cited as issues arising from this excessive virtual connectivity (Gentile et al., 2017). Some of these issues like addiction are related to determining what information is needed, and being selective in accessing and using information at a user level. However, guidance at a policy level is also important to determine the boundary between helpful and harmful technology use and to outline harm reduction strategies (Sohn et al., 2019).

It has also been suggested that self-harm, can be understood in the context of reduced and or a temporary loss of mentalizing capacity, particularly in the context of interpersonal stress (Allen et al.,2008). This is an especially important mental health concern among adolescents (Burton, 2019). Mentalizing is defined as the mental activity that enables us to perceive and interpret human behaviour in terms of intentional, motivational and emotional mental states (e.g., needs, desires, feelings, beliefs, goals, purposes, and reasons) (Allen et al., 2008). In this context the ability to correctly understand and analyse interpersonal and intrapersonal information, reflect on it, and take action accordingly can

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be seen as related to the concept of information literacy, as it involves dealing with contextual information.

The Situation in The Developing World

The World Bank estimated that in 2016 that among the poorest 20 percent of households, nearly 7 out of 10 are likely to have a mobile phone. It also suggested that the poorest households are more likely to have access to mobile phones than to toilets or clean water (World Bank, 2020). It is also estimated that Worldwide 774 million people, including 123 million youth, cannot read or write. This illiteracy can often be traced to the lack of books. Findings in a UNESCO report show that in countries where illiteracy rates are high and physical text is scarce, large numbers of people read full-length books and stories on rudimentary small screen devices (West & Chew, 2014). As such there are many benefits from these devices that have made otherwise inaccessible information readily available to many in the developing world. However, this sudden influx of information from the virtual world, when the physical, relational and cultural environment around them may still not be ready for this information has led to mental health concerns as well. While these problems are similar to those reported in other parts of the world (Ganesan et al., 2018; Kulkarni et al., 2019), there is a paucity of knowledge and understanding on the negative effect of these influences and the interventions necessary.

In Sri Lanka while the department of census and statistics through a survey estimated that more than two out of five persons (aged 5-69) are digital literate, digital literacy was defined as: a person could use computer, lap top, tablet or smart phone on his/her own. (*Computer Literacy Statistics – 2019 (Annual)*, 2019)). Thus, while statistics show that many are digitally literate, it may be that many are not skilled in the use of digital information in an analytical and reflective way, as these skills were not assessed. Another study in Sri Lanka demonstrated that even though many in underprivileged populations are using mobile phones, most of the computer-based communication facilities available in phones are 'inaccessible' to such users. It argued that Internet access and computing capabilities, as they have been built into phones, assume prior interaction with computers and the Internet (Wijetunga, 2014). Thus, those who do not already have these skills may be susceptible to

misinformation or information that they do not need, being unable to filter this information.

However, given the importance of engaging youth in mitigating potential harms from social media, a prohibitionist approach would be counterproductive. The American Academy of Paediatrics in fact describes online relationships are part of typical adolescent development (American Academy of Paediatrics, 2018). As such today's youth, especially in developing countries need access to proven individual and systemic interventions to help them navigate the challenges brought about by use of smart phones and social media, and use social media in a manner that safeguards their mental health (Abi-Jaoude et al., 2020).

Improving information literacy from a young age as an overarching literacy, to mitigate the effects of misinformation and improve the ability to see things in context in the "information age", can reduce its unwanted emotional effects and in turn reduce vulnerabilities towards mental health issues. While incorporating these skills into formal learning is important, developing these skills in everyday life situations may be even more important. Information literacy has been described as a lifelong learning process, rather than a skill acquired only through formal learning (Presidential Committee on Information Literacy: Final Report, 2006).

Alvermann described the need to keep adolescents' interests and needs foremost in mind when designing literacy instruction at the middle and high school level (Alvermann, 2002). While the education system in many developing nations have adopted aspects of information literacy and other literacies such as media and emotional literacy into their teaching systems (Gresham, 2006), developed nations appear to lag behind. Traditional learning aims at the acquisition of knowledge and skills, (Abdhulla, 2017), while modern learning concentrates on its applicability in this information age. Many developing countries still concentrate on the acquisition of knowledge without looking at its applicability. The need for moving away from this rote learning has also been emphasised by global organisations such as UNESCO (*The Global Learning Crisis, Why Every Child Deserves a Quality Education*, 2013).

However, some countries in the developing world have already started integrating information literacy skills to their school curriculums. The

Philippines is one of the few countries in the region, to officially integrate Media and information literacy in its formal basic education curriculum (UNESCO Office Bangkok and Regional Bureau for Education in Asia and the Pacific, 2020). This learning of skills to manage information from a young age can also reduce many adolescent mental health issues both directly and indirectly

CONCLUSION

Information literacy appears to be an overarching concept that incorporates many of the diverse literacy areas such as emotional literacy, media literacy and mental health literacy, which are important for adolescent mental health. The ability to access the most useful information, critically evaluate it, reflect on it and being able to use it for the benefit of oneself and others is becoming increasingly important in this information age. Adolescents are in a sensitive stage in their development, where they are susceptible to the possible emotional and cognitive adverse effects of the huge amount of information they have to deal with. For them, being able to handle not only information from their external world but also information related to their internal states, such as emotions and thoughts is important. As adolescents in developing countries are being rapidly exposed to information and ways of living that require the abilities described in information literacy, looking at teaching these skills in formal and informal ways is important.

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