Adolescents with Symptoms of Depression, Anxiety or Both: An Analysis of This Information

Community's Needs, Behaviors, Environment, Support System and Services

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ABSTRACT:

This paper evaluates the current research and literature surrounding adolescents facing depression, anxiety or both. Scholars writing on this subject include psychologists, educators, statisticians and library professionals. Together, these scholars have concluded that adolescent behavior is part of a generally tumultuous stage of growth (Hall, 1904), dependent on sense of accomplishment and control (Lehikoinen et al., 2017) and a complex reaction to good and bad sides of media (Torre, 2020). Educators provide strategies for improving mental health during adolescence, including cooperative physical exercise (Conley et al.), increased governmental funding (Mahomed, 2020), and the human right to good mental health (Mahomed 2020). Library professionals discuss how the library is already serving adolescents with depression and anxiety: using social media as an educational tool (Magee et al.) and creating "makerspaces" (Pisarski, 2014). The common theme through these studies is that the library is uniquely suited to act upon each conclusion drawn by these scholars. The library is increasingly becoming a key influence on adolescents and their mental health. However, a gap within this conversation is teenage attendance in the library. I argue that library professionals should further research ways to reach teens with all severities of anxiety and depression. For these teens, attending social gatherings or going outside their comfort zone to try something new can be especially difficult (CDC, 2018). Yet in the library, these adolescents' attendance and participation in activities is essential to getting the help the library has to offer.

INTRODUCTION:

This information community consists primarily of adolescents experiencing symptoms of depression, anxiety or both. Connected to this community are the parents, family members, friends, trusted adults and educators who interact with these adolescents regularly and contribute to their world view. The goal of studying this group is to better understand depressed or anxious adolescents' needs, wants and behaviors, as well as their interactions with the people around them, in order to help them improve their mental health. With this understanding, library professionals can provide relevant, engaging resources and navigation tools that best help these adolescents grow into the adults they want to become. It is important to research this community because depression and anxiety can be hard to recognize, and without prior knowledge or training, it is difficult to determine how to best assist depressed or anxious individuals.

LITERATURE REVIEW:

The literature surrounding adolescents with symptoms of depression, anxiety or both can be organized into thematic subcategories: early foundational research, adolescent behavior, the relationship between adolescents, technology, social media and mental health, adolescent depression and anxiety on a global scale, and methods of support proposed by librarians and educators.

Early, Foundational Research on Adolescence:

G.S. Hall, first in the United States to receive a doctorate in psychology in 1878, extensively studied and wrote on the topic of adolescence. Psychologists today continue to cite his work and build upon his findings. Hall summarizes adolescence with his coined phrase "storm and stress."

Hall argues that teenage behavior can be explained in three categories: conflict with parents, mood disruptions, and risk behavior (Hall, 1904, pp. 41). The critical part of Hall's argument is that the "storm and stress" period is normal in adolescents. Rather than viewing teenage misbehavior as wrong, Hall instead calls for parents to expect this behavior, and to view adolescent "storm and stress" as a sign of necessary growth (Hall, 1904, pp. 50).

Dozens of psychologists have responded primarily in dismissal of Hall's arguments surrounding adolescents. Jeffrey Arnett connects these responses into a century-long conversation and evaluates them. Arnett acknowledges that some aspects of Hall's conclusions are outdated, including his assessment of storm and stress as "universal and biological," and mood changes as direct results of sexual development (Arnett, 1999, 321). However, Arnett argues that the heart of Hall's research, that adolescent struggle is normal, still stands as a reliable cornerstone in adolescent psychology today (Arnett, 1999, pp. 318).

Adolescent Behavior, Both General and Information-Seeking:
Since Hall introduced the concept of "storm and stress," scholars have continued to study changes in adolescent behavior and mental health. Lehikoinen et al. (2017) focuses on teens' temperament toward different accomplishments in order to understand how teenagers interpret their behavior. By measuring teens' self-reported responses and their biological nervous system reactions after accomplishing different tasks, Lehikoinen and his group find that teens' sense of control over the accomplishment of a task was key to their satisfaction, more so than the difficulty of a task. This basic emotional pattern in teen behavior, personal accomplishments resulting in self-earned satisfaction, is useful for librarians providing support for adolescents.

Stunden et al. (2020) conducted a study on the "help-seeking behaviors" of adolescents in need of information on mental health. Stunden et al. found that adolescents are highly vulnerable to mental health issues, "yet they are one of the least likely demographic groups to seek help" (Stunden et al., 2020, n.pag). The adolescents in this study were tested by which of four "focus group" types they signed up for: formal, social (peers and friends), digital, and self-guided mental health education. A significant number of the adolescents in this study were unresponsive: out of 110 students, 24 did not attend any focus group. The twelve focus groups (three per type) had an audience range of four to nine adolescents, indicating that none of the four methods of information-seeking behavior stood out against the others.

The Relationship Between Adolescents, Technology and Mental Health:

Magee et al. (2019) conducted a study on the relationship between teens and social media in 2019. Thirteen teenagers participating in Magee's study were instructed to self-report the content they searched on social media. The teens in this study reported using Facebook most, and listed "education" as their primary reason for going on social media. This testing method is questionable at best. Because of the small sample size, and the question of honesty and privacy, these test results are not reliable. Still, Magee et al. conducted this study to "…enable the library to support teens' healthy social development" by offering social and digital services of teens' preference (Magee et al., 2019, pp. 4).

Torre et al. (2020) conducted a study on the relationship between teens, mobile technology and social media. Out of seven tests Torre conducted, two reported a statistically significant relationship between teens, social media and depression. The other five tests reported mixed results. While teens can connect with like-minded individuals more easily on social

media, they also risk an increased exposure to bullying or hurtful messages. Torre concluded that more research should be done in this area for stronger evidence for social media positivity or negativity.

Frontini et. al (2020) argue that technology and social media can help promote healthy behavior in adolescents. This group conducted a test among 165 adolescents who used an app called "mHealth" to improve their health. Of these adolescents, 38.2% stopped using the app and cited a "lack of interest" as their reason. This result is reflective of Dresang's radical change theory, which states that adolescents are hyperactive multitaskers because they have access to a wide range of sources offering similar services (Dresang, 2009). This study also reveals a gap in adolescent mental health research: many scholars propose activities and programs as solutions to the adolescent mental health struggle, yet they do not detail how to ensure adolescent participation in these solutions.

Methods of Support Proposed by Librarians and Educators:

Deborah Takahashi's book *Serving Teens with Mental Illness in the Library: A Practical Guide* serves as a reference point for librarians unfamiliar with mental illness. Takahashi contends that mental illness impairs teens' ability "to function and thrive in today's world" and that librarians can help teens regain this ability (Takahashi, 2019, xviii). Takahashi walks her readers through recognizing mental illness, interacting with teens with mental illness, and empowering these teens with tools, resources and communities that inspire change. She supports the steps in her book with their application in libraries around the US. Takahashi offers what few other professionals do: proven step-by-step instruction for the beginner in mental health training.

Alyssa Pisarski is also a librarian with solutions for serving adolescents in the library. Pisarski argues that tweens specifically "fall between the cracks" at the library, which is geared to serve children and adults (Pisarski, 2014, 13). Pisarski proposes "makerspaces" as an effective developmental tool essential to tweens' growth in the library. While Pisarski doesn't address mental health, her article contributes to librarians' understanding of teen identity and motivation at a critical age. The "makerspace" is a real-life application of Char Booth's theory that intrinsic motivation outweighs mandatory attendance, and Dr. Stephen's assessment of the discovery learning theory, that "students explore their learning environments rather than listen passively to teachers" (Booth, 2018; Stephens, Lecture 10). What Pisarski's solution offers is the space for tweens to set their own goals and accomplishments, which is reminiscent of Lehikoinen et al., who concluded that control is the determining factor in teenage accomplishment satisfaction.

METHODOLOGY:

Conducting research on adolescents experiencing symptoms of depression, anxiety or both proved a difficult, complex task. To fully research this information community involved pursuing multiple schools of thought that link into a unique, interdisciplinary web of adolescent mental health information. I first researched the general psychology of adolescents to better understand what scholars observed in the behavior, relationships and emotions of the general adolescent. I also considered the research of scholars that have different relationships with adolescents, mainly psychologists, educators and librarians. With a fuller overall picture of the adolescent years, I researched the current statistics on mental illness. This research provided the necessary context to properly research ways that libraries can provide assistance and support for adolescents facing symptoms of depression, anxiety or both. I was also able to evaluate proposed

solutions in the library based on their appeal to the general adolescent population and involved adults attending the library.

DISCUSSION:

Prevalence of Mental Illness on an International Scale:

The World Bank and the CDC provide statistics on adolescent mental health across the world. On the site Our World in Data, these statistics are gathered into interactive data charts, which reveal that all 230 recorded countries or regions report a rate of adolescent depression between one and eight percent. The countries with the highest rates of adolescent depression are New Zealand, Australia, the United States and Greenland. There is a much wider range of anxiety rates among these countries and regions. The highest rates of anxiety are seen in Iran, the Netherlands, France and the United States. Additionally, the rates of depression and anxiety either doubled or tripled in all countries from the first teen age category, from ages ten to fourteen years, to the second, from ages fifteen to nineteen years (Our World in Data, 2017). Both rates of anxiety and depression have risen in the past ten years.

These statistics show that this is a global information community. They also support scholars' arguments that increased support, funding and solutions for mental health issues are needed. Additionally, something significant to adolescent mental health happens between the two teen age categories, the first from 10-14 years old, and the second from 15-19 years old. This change observed in adolescent mental health also supports the need for additional research on this information community.

Diversity and Intellectual Freedom in Adolescents' Information-Seeking Behaviors:

Marcia Bates discusses how the connection between the patron and the information they seek is invisible, either to the patron, the library professional or both. The way information is represented can influence how patrons interpret it, and may motivate or prevent patrons from engaging with different material (Bates, 1999). This concept of an invisible connection applies to adolescents and the adults studying them. Scholars frequently report mixed findings on adolescents' responses to mental health treatment (Stunden et al., 2020; Torre et al., 2020). Others that rely on self-reporting for results fail to realize that adolescents may not want to share their personal motivations with adults or authority figures (Magee et al., 2019).

Another reason why information-seeking behavior may be hindered or misunderstood is because some families lack the means to access readily available information. Andersen & Jiang with the Pew Research Center (2018) report that 15% of families in the United States do not have access to high-speed internet. This is not discussed often in studies. The library can provide internet access and computer usage to adolescents without it, but this limited availability still has an effect on their information-seeking behavior. While other adolescents can access the internet anytime, anywhere, and in private, these adolescents have to go to the library, a public space, to seek out information on the internet.

Adolescent Technology and Media Use, Effects on Mental Health, & Applications in the Library:

Adolescents with depression, anxiety or depression use social media and video games to form communities and share information. On these platforms, adolescents can find niche communities with like-minded individuals, and create new material to share with others, both of which are highly beneficial for those facing mental health issues (Shirky, 2017; Torre et al., 2020).

However, social media sites have been shown to expose adolescents to bullying, pressure them into achieving perfection based on the seemingly perfect digital profiles of their peers, and limit their sense of privacy (Valkenburg & Piotrowski, 2017).

Video games are another media form that adolescents use to find communities, seek information, and create new material. Boom et al. (2020) suggest that video games enable adolescents to "learn through play" because they enable discovery learning. Video game players have reported strengthening their decision making skills, their willingness to explore new places, and their knowledge of different academic subjects, mainly history (Boom et al., 2020). However, video games are another contested platform for adolescent interaction. Ward (2010) is part of a larger argument that video game playing leads to antisocial, aggressive and violent behavior. This platform is a complex scene like social media, with the potential for both good and bad interactions.

For a large number of public libraries, in cities including Canon City, Marin County, New Orleans, and Brooklyn, embracing the positive aspects of technology and social media has benefitted their adolescent patrons. These public libraries, and many others, have "teen tech centers" that ensure adolescents can explore the positive effects of using technology. In a controlled environment, adolescents can learn to use computers, coding programs, and STEM subjects. These same libraries utilize social media to provide digital support by offering music playlists, e-book recommendations, virtual events and more. Pisarski (2014) expanded on the "teen tech center" by shedding light on "makerspaces." Pisarski's call for a designated "place for the tween" in the library is based on the conclusion supported by the ALA: that the tween is overlooked compared to other library patron groups (ALA, 2012). Whether this designated space

is called a teen room, teen tech center or makerspace, These spaces promote adolescent inclusion, creation, and discovery learning through technology and social media.

Research Gap: Adolescent Attendance in the Library

What is missing from the conversation regarding adolescent mental health support is a discussion of adolescent attendance in the library. Increasing the percentage of adolescents who come to the library and participate in different library services is a different skill than planning adolescent activities and services. Often this distinction is ignored or implied. Increasing attendance is rarely discussed outright. Dresang (2009) argues that adolescents are hyperactive due to their being inundated with information. In order to compete with the other sources of information adolescents seek, libraries should strengthen their ability to draw adolescents to participate in library activities. Additionally, this research doesn't acknowledge the full functionality spectrum of mental illness. The CDC lists a symptoms of anxiety as: fear of places with lots of people, fear of separation from family, and sudden episodes of extreme fear (CDC, 2018). These symptoms, depending on the severity, can interfere with adolescents' ability to enter a potentially crowded or busy public library.

Future Resources and Services for This Information Community:

The contributions of Takahashi and Pisarski, among other librarians, show that library professionals are aware that their field has room to grow in its support of adolescent mental health. The next step for scholars and librarians is to research and practice direct connection with adolescents in the community.

With the sudden international switch to virtual content, libraries are in a great position to provide services, activities and other materials for adolescents whose mental health normally bars them from going to places with frequent social activity. The Marin Public Library has already begun offering virtual makerspace classes including "Laser cutting," "3D print design," and "Intro to Python." These courses are several weeks long and offer live, synchronous check-ins on a weekly basis. However, these courses do have fees. Other libraries like the New Orleans Public Library offer free stand-alone workshops for teens to attend virtually.

From these virtual programs, a unique dilemma has risen: if these public libraries are focusing on virtual programs now, how will these programs compete with in-person programs once libraries reopen in the future? It is possible that both programs may reach different audiences. Those preferring in-person social interaction will attend in-person, and those who find in-person interaction intimidating may choose the virtual version of the program. A promising possibility is that the virtual programs familiarize new adolescent patrons to the library, and as a result, these patrons become more inclined to attend the library's in-person events upon reopening in the future. This way, adolescents with depression or anxiety that is too debilitating for crowded, social places like the library can more gradually become familiar with the library's services. Still, more work and research needs to be done to find additional ways of accommodating these patrons.

CONCLUSION:

Adolescent behavior has only become a research subject in the past century. "Adolescents" are a broad group of unique individuals with mixed and at times contradictory information-seeking behaviors and needs. Mental health is a variable that further complicates adolescents'

information-seeking behaviors and needs. For example, adolescents have responded positively to multiple, different kinds of mental health treatment (Stunden et al., 2020), and have reported both positive and negative interactions with social media (Torre et al., 2020). Another interesting aspect of adolescent behavior is their inability to accurately portray or state their emotions and motivations (Magee et al., 2019). This is not a fault of adolescents, but reflective of their relationship with adults, parents, and authorities. In teens' self-reporting in tests, it is difficult for scholars like Magee et al. to separate adolescents' private motivations from their motivation to tell authority figures what they want to hear. Still, scholars have detected general patterns in adolescent behavior that provide ways for librarians and other professionals to provide support (Lehikoinen et. al, 2017).

Also, a large portion of US public libraries already focus on adolescent mental health services and resources and are looking for new ways to grow. Librarians offer mental health training for other library professionals, and propose programs like makerspaces and digital applications. Still, there is room to grow in librarianship. These proposed methods of support are unlikely to reach all adolescents with mild, moderate and severe depression or anxiety. More findings on adolescent participation and on library outreach results would help close this research gap.

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