The relationship between depression and anxiety and life fulfillment in full-time school students in Ceará

La relación entre la depresión y la ansiedad y la realización en la vida en estudiantes de escuela a tiempo completo en Ceará

A relação entre depressão e ansiedade e a realização na vida em estudantes de escolas de tempo integral no Ceará

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Abstract

The presence of a multidisciplinary team is crucial for fostering comprehensive mental well-being in full-day schools. This article highlights the significance of collaboration among diverse professions to address various aspects of students' mental health. Optometry, psychology, occupational therapy, physical education, and nutrition are pivotal in promoting a holistic approach to mental health. Optometrists contribute by assessing visual health, recognizing the impact of unaddressed visual issues on academic performance and mental health. Psychologists focus on emotional assessments and interventions, empowering students to navigate stress and anxiety through coping skills and resilience building. Occupational therapists engage students in activities that enhance socioemotional skills and foster a sense of accomplishment. Physical education instructors and nutritionists promote healthy lifestyle habits, with regular physical activity and a balanced diet integral to students' mental well-being, influencing mood and concentration positively. The collaboration of these disciplines forms a comprehensive support system, where optometry addresses visual health, psychology addresses emotional health, occupational therapy enhances practical skills, and physical education and nutrition cultivate healthy lifestyles. This integrated approach underscores the interconnectedness of these professions and their collective impact on students' overall mental health and academic success. By adopting a multidisciplinary strategy, educational institutions can create an environment that prioritizes mental well-being, nurturing students who are not only academically proficient but also mentally resilient and empowered. This paper emphasizes that a holistic approach involving various health and educational professionals is essential in creating supportive and effective learning environments in full-day schools.

Keywords: Multidisciplinary approach; Mental health promotion; Full-day schools; Holistic well-being.

Resumen

La presencia de un equipo multidisciplinar es crucial para fomentar el bienestar mental integral en las escuelas de jornada completa. Este artículo destaca la importancia de la colaboración entre diversas profesiones para abordar diversos aspectos de la salud mental de los alumnos. La optometría, la psicología, la terapia ocupacional, la educación física y la nutrición son fundamentales para promover un enfoque holístico de la salud mental. Los optometristas contribuyen evaluando la salud visual, reconociendo el impacto de los problemas visuales no abordados en el rendimiento académico y la salud mental. Los psicólogos se centran en las evaluaciones e intervenciones emocionales, capacitando a los estudiantes para superar el estrés y la ansiedad mediante habilidades de afrontamiento y fomento de la resiliencia. Los terapeutas ocupacionales involucran a los alumnos en actividades que mejoran las habilidades socioemocionales y fomentan el sentido del logro. Los instructores de educación física y los nutricionistas promueven hábitos de vida saludables, en los que la actividad física regular y una dieta equilibrada forman parte integrante del bienestar mental de los alumnos, influyendo positivamente en el estado de ánimo y la concentración. La colaboración de estas disciplinas forma un sistema de apoyo integral, en el que la optometría se ocupa de la salud visual, la psicología de la salud emocional, la terapia ocupacional mejora las habilidades prácticas y la educación física y la nutrición cultivan estilos de vida saludables. Este enfoque integrado subraya la interconexión de estas profesiones y su impacto colectivo en la salud mental general y el éxito académico de los estudiantes. Al adoptar una estrategia multidisciplinar, las instituciones educativas pueden crear un entorno que dé prioridad al bienestar mental, cultivando estudiantes que no

sólo sean competentes académicamente, sino también mentalmente resilientes y empoderados. Este documento hace hincapié en que un enfoque holístico que implique a diversos profesionales de la salud y la educación es esencial para crear entornos de aprendizaje favorables y eficaces en las escuelas de jornada completa.

Palabras clave: Enfoque multidisciplinar; Promoción de la salud mental; Escuelas de jornada completa; Bienestar holístico.

Resumo

A presença de uma equipe multidisciplinar é fundamental para promover o bem-estar mental abrangente em escolas de período integral. Este artigo destaca a importância da colaboração entre diversas profissões para abordar vários aspectos da saúde mental dos alunos. Optometria, psicologia, terapia ocupacional, educação física e nutrição são fundamentais para promover uma abordagem holística da saúde mental. Os optometristas contribuem com a avaliação da saúde visual, reconhecendo o impacto de problemas visuais não resolvidos no desempenho acadêmico e na saúde mental. Os psicólogos se concentram em avaliações e intervenções emocionais, capacitando os alunos a lidar com o estresse e a ansiedade por meio de habilidades de enfrentamento e desenvolvimento de resiliência. Os terapeutas ocupacionais envolvem os alunos em atividades que aprimoram as habilidades socioemocionais e promovem um senso de realização. Os instrutores de educação física e os nutricionistas promovem hábitos de vida saudáveis, com atividade física regular e uma dieta equilibrada, essenciais para o bem-estar mental dos alunos, influenciando positivamente o humor e a concentração. A colaboração dessas disciplinas forma um sistema de suporte abrangente, no qual a optometria trata da saúde visual, a psicologia trata da saúde emocional, a terapia ocupacional aprimora as habilidades práticas e a educação física e a nutrição cultivam estilos de vida saudáveis. Essa abordagem integrada ressalta a interconexão dessas profissões e seu impacto coletivo sobre a saúde mental geral e o sucesso acadêmico dos alunos. Com a adoção de uma estratégia multidisciplinar, as instituições educacionais podem criar um ambiente que priorize o bem-estar mental, nutrindo alunos que não sejam apenas academicamente proficientes, mas também mentalmente resilientes e capacitados. Este documento enfatiza que uma abordagem holística que envolva vários profissionais da saúde e da educação é essencial para a criação de ambientes de aprendizagem favoráveis e eficazes em escolas de período integral.

Palavras-chave: Abordagem multidisciplinar; Promoção da saúde mental; Escolas de período integral; Bem-estar holístico.

1. Introduction

In the state of Ceará, there is the implementation of full-time schools, aiming to expand the educational process and explore new learning opportunities, such as projects, workshops, and experiences, which actively involve the school community. Moreover, this approach aims to provide those involved in the implementation of the full-time program in Ceará schools the chance to experience different educational methodologies simultaneously (SEDUC/CE, 2023).

Thus, the adoption of full-time schools is a strategy supported by those who want the formal education offered in public institutions to promote a comprehensive education for workers' children, respecting their potential, learning rights, and development. Throughout the day, students follow a routine and participate in practices that promote an interdisciplinary approach from Monday to Friday, from 7:30 am to 5 pm, with the support of specialized pedagogical teams committed to the Comprehensive Education proposal (SEDUC/CE, 2023; WHO, 2014).

On the other hand, anxiety is a condition inherent to human existence, because it assumes a protective function in order to avoid possible losses in difficult or new situations. However, the advent of new information technologies, potential advancement of the modern world, expectations and pressures to deal with various information and tasks simultaneously make it difficult for people to adapt to this new scenario (APA, 2021; AOTA, 2021; CDC, 2021).

Anxiety disorders are among the most common psychiatric disorders in adolescence, with a prevalence between 10% and 30%. Therefore, when addressing the term adolescence, the vulnerability to which the adolescent is subject is also analyzed, because in the student's daily life are found perceptive statements and natural behaviors aimed at the pressure they suffer in the family, social and school context (NASP, 2021).

It is worth noting that high school students have high levels of anxiety, which may lead to destabilization and school failure, especially when students place school life as a decisive component in their lives. That is, this generates high pressure and expectation and makes the student space a cause of psychological suffering (WFOT, 2021).

College students who regularly attend classes and sleep well are more likely to get good grades. Attending class increases students' interactions with instructors and classmates and provides structured time to cover major learning points. Sleeping well is also important for optimizing cognitive performance and readiness to learn. Inadequate sleep impairs attention and memory processes, which can prevent students from reaching their full learning potential in the classroom (i.e., presenteeism) (Jorm et al., 2007).

In addition, feeling tired and oversleeping are often cited as reasons why college students skip classes. The effects of absenteeism and presenteeism on grades can have long-term consequences on students' employment opportunities, job performance ratings, and salary. Therefore, universities should adopt practices that improve students' attendance rates and sleep behavior to position them to succeed in the classroom and the workforce (Jorm et al., 2007).

Also in this regard, morning classes are associated with poorer academic performance due to shorter sleep and therefore lower class attendance. Early starts to classes can be detrimental to students' sleep and daytime functioning (Jorm et al., 2007).

In conclusion, our research aims to analyze and question whether full-time study is really effective for adolescents, since they demand more sleep time, high anxiety index, and consequently adverse results in their cognitive performance.

2. Methods

The scientific articles collected were made in two different databases, PubMed and ScienceDirect, according to the method of an integrative review (SNYDER, 2019). On both platforms, the descriptors "Multidisciplinary approach", "Mental health promotion", "Full-day schools", "Holistic well-being" were searched. PubMed's database results were cut to select articles published between 2012 and 2022. Referred research exhibits 20 results, of which 09 were excluded after reading the titles and none were excluded after reading the abstract. Exclusions occurred, respectively, because the titles or abstracts did not refer to the searched terms. These exclusions resulted in a total of 11 articles selected after reading the titles and abstracts. On ScienceDirect's database, the research was made with the same descriptors, however, that only returned results between the years 2021 and 2022. This search returned 199 results, some of which were excluded also according to the relevance of their titles and abstracts. Of the 199 results, 154 were excluded after reading the titles and others 06 were excluded after reading the abstracts. After these cuts were made, 39 ScienceDirect's databases of scientific articles were selected at the end. With the consolidation of articles searched on both platforms, out of a total of 219 articles, 50 were selected. In order to enrich the discussion, 15 articles were manually selected and added to the search, according to their relevance.

3. Results

Next, Figure 1 shows a flowchart of selection process.

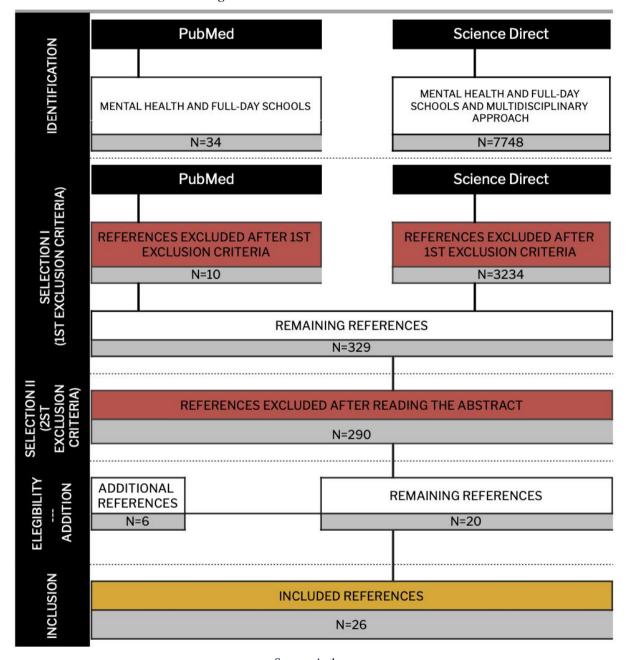


Figure 1 - Flowchart of article selection.

Source: Authors.

Full Time School

The implementation of full-time schools has been a relevant issue in the Brazilian educational context. In recent years, this educational model has gained prominence as an approach to improving the quality of teaching, offering more opportunities to students and tackling socio-economic challenges (APA, 2021; CDC, 2021).

The full-time school aims to provide students with a more comprehensive and enriching learning environment, extending the time dedicated to educational activities beyond traditional classes. This approach makes it possible to include a

variety of extracurricular activities, such as sports, art, music, cultural activities, language classes and science projects. This diversification of the curriculum not only enriches the students' educational experience, but also contributes to the development of socio-emotional skills, creativity and a sense of responsibility (APA, 2021; CDC, 2021; NASP, 2021; WFOT, 2021)

One of the main advantages of full-time schools is their potential to reduce educational inequalities. By offering activities beyond the academic curriculum, full-time schools can provide equal access to extracurricular opportunities for all students, regardless of their socio-economic background. This can contribute to reducing disparities in the development of skills and competencies, broadening students' future prospects (AGDH, 2019; CAOT, 2021).

In addition, full-time schooling can also help working parents by providing a safe and productive environment for their children for more hours of the day. This can be especially significant in low-income families, where parents often face difficulties in ensuring a suitable environment for their children's studies after regular school hours (AGDH, 2019; CAOT, 2021).

However, the successful implementation of full-time schools also faces challenges. These include the need for adequate infrastructure, substantial financial investment, teacher training to deal with extracurricular activities and the need for efficient curation of the activities on offer. In addition, it is essential to ensure that the quality of teaching is not compromised for the sake of increased school time (WHO, 2014).

In summary, full-time schooling can be a promising strategy for promoting a more complete and inclusive education in Brazil. However, its implementation requires careful planning, substantial investment and a collective commitment to providing students with enriching learning opportunities. With the right balance between the academic curriculum and extracurricular activities, full-time schooling has the potential to create citizens who are better prepared for the challenges of the 21st century (WHO, 2014).

Full-time school and anxiety

Anxiety in full-time education is a growing concern in today's educational landscape. While this model has the potential to offer a more comprehensive and enriching education, it can also create an environment conducive to the development of anxiety in some students. Academic pressure, increased responsibilities and constant school attendance can all contribute to the manifestation and intensification of this mental health problem (NIMH, 2021).

The transition to full-time school often brings with it higher expectations of student performance. With more time dedicated to the school environment, academic demands can increase, leading to intensified pressure to achieve good results. This pressure can be especially felt by students who already have perfectionist tendencies or who struggle to cope with high expectations (NASP, 2021; WFOT, 2021; Jorm et al., 2007).

In addition, the intense routine of full-time school can result in a constant feeling of being busy, leaving little room for rest and free time. This can contribute to mental overload, making it difficult for students to relax and disconnect from school obligations. As a result, anxiety can manifest itself as excessive worry, difficulty concentrating, insomnia and irritability (NASP, 2021; WFOT, 2021).

Social interaction also plays a role in full-time school anxiety. For many students, spending more time at school means increased social interactions and possible relationship challenges. The pressure to fit in, compete and maintain friendships can be a significant trigger for anxiety, especially among adolescents who are navigating the complexities of interpersonal relationships (WFOT, 2021).

To address anxiety in full-time schooling, it is crucial to implement appropriate support strategies. This includes providing resources for emotional education and stress management skills, promoting learning environments that are inclusive

and encouraging, and creating opportunities for students to share their concerns with teachers and mental health professionals (WFOT, 2021).

Ultimately, full-time school can be beneficial for many students, but it is essential to recognize that it can also increase the risks of anxiety. By adopting a holistic approach that considers both the academic development and mental well-being of students, schools can work to minimize the negative impacts of anxiety and create a learning environment that is healthy and productive for all.

Full-time school and depression

The adoption of full-time schools brings with it the promise of a more complete and enriching education, but it can also be fertile ground for the development of depression in some students. The intensified academic pressure, high expectations and constant presence at school can contribute to the emergence and worsening of this mental health problem among young people (WHO, 2020; Patalay et al., 2017).

One of the factors that can contribute to depression in full-time schools is the increasing academic demand. With more time dedicated to school, students can face an increase in assignments and assessments, which can put an emotional strain on those who already struggle to cope with pressure. Competition for academic excellence in an environment where performance is constantly assessed can lead to a sense of inadequacy and the perception that an individual's worth is intrinsically linked to their academic achievements (WHO, 2020; Green et al., 2002).

In addition, full-time school can limit free time and opportunities for relaxation. The intense routine can leave students with few opportunities for extracurricular activities, hobbies, physical exercise and moments of relaxation. These activities are essential for emotional well-being and mental balance, and their absence can contribute to feelings of exhaustion and sadness, characteristics of depression (AOA, 2021; CAOT, 2021).

The social aspect also plays a role in the relationship between full-time schooling and depression. Spending more time at school can increase social interactions, but it can also lead to greater exposure to conflict situations and interpersonal challenges. In addition, the lack of time to cultivate friendships outside the school environment can increase feelings of social isolation and aggravate feelings of depression (AOA, 2021; CAOT, 2021; WHO, 2020).

To address depression in full-time schools, it is essential to implement preventative and supportive strategies. This involves providing emotional education programs, training for teachers and staff to identify early signs of depression, and creating an environment where students feel comfortable sharing their concerns (CDC, 2021).

In summary, while full-time school can offer educational advantages, it is important to recognize that it can also increase the risks of depression among students. By adopting approaches that prioritize both academic success and mental well-being, schools can contribute to promoting a healthy and balanced education that respects students' emotional and psychological development.

Coping strategies to promote mental health in full-time schools

The implementation of full-time schools brings with it challenges not only related to academic performance, but also to students' mental health. The increased demands and pressure can contribute to the emergence of problems such as anxiety and depression. However, there are effective coping strategies that schools can adopt to promote students' mental health in this environment (AOTA, 2021; CDC, 2021).

Integrated Emotional Education: Including emotional education programs in the curriculum can help students develop the skills to recognize, express and regulate their emotions. By learning to deal with stress, anxiety and other emotions in a healthy way, students will be better prepared to face academic and personal challenges (AOTA, 2021).

Mindfulness and Relaxation Activities: Incorporating mindfulness practices and relaxation techniques into everyday school life can help students reduce stress and anxiety. Meditation, mindful breathing and other techniques can be taught as tools for coping with moments of pressure (APA, 2021).

Encouraging a Balance between Study and Leisure: Establishing a healthy balance between study time and leisure time is fundamental for students' mental health. Promoting the importance of extracurricular activities, physical exercise and moments of relaxation can help prevent overload and burnout (AGDH, 2019).

Individualized Support and Guidance: Making psychological guidance or counselling services available to students can be valuable. Having a safe space to share concerns, receive guidance and learn coping strategies can help prevent more serious mental health problems (WHO, 2014).

Fostering Social Connection: Creating a school environment where social connection is valued can help combat isolation and loneliness. Activities that promote interaction between students, such as discussion groups, clubs or collaborative projects, can strengthen social bonds (NIMH, 2021).

Open communication: Encouraging open and honest communication about mental health can reduce the stigma associated with these issues. Talks, workshops and educational activities on mental health can help create a more understanding and supportive environment (WFMH, 2021).

Involve parents and guardians: Engaging parents and guardians in mental health promotion is crucial. Holding informational events, workshops and offering resources for family members to better understand the challenges faced by students can strengthen support at home (CAOT, 2021).

Training for Educators: Enabling teachers to recognize signs of mental health problems and to know how to approach these situations in a sensitive and effective way is fundamental. Training can help identify students who need help and refer them to the appropriate professionals (NIMH, 2021; Patel et al., 2018).

By adopting these strategies, full-time schools can create an environment that not only promotes academic performance, but also prioritizes students' mental health and well-being. By investing in emotional education, social support and the development of coping skills, schools can help students deal more effectively with stress, anxiety and other emotional challenges that may arise.

The role of the multidisciplinary team in promoting mental health in full-time schools

The presence of a multidisciplinary team in the promotion of mental health in full-time schools is a determining factor for the holistic well-being of students. Different professions play complementary roles, contributing to comprehensive and effective approaches (WFOT, 2021; CAOT, 2021).

Optometry, for example, plays a vital role in checking students' visual health. Untreated visual problems can affect academic performance and cause discomfort, which can have a negative impact on mental health. Identifying and correcting these problems contributes to a healthier learning environment (WFOT, 2021).

Psychology takes a central role in providing emotional assessments and interventions. Psychology professionals work with students to address anxiety, stress and emotional issues, helping to develop coping skills and resilience. In addition, occupational therapy plays a role in promoting balance and building socio-emotional skills through practical and interactive activities (APA, 2021).

Physical education and nutrition professionals are also crucial, promoting healthy exercise and eating habits. These aspects are intrinsically linked to mental health, as regular physical activity and a balanced diet positively influence students' mood and concentration (CDC, 2021).

The collaboration between these professions forms a complete support system. While optometry works on visual health, psychology works on emotional health, occupational therapy strengthens practical skills and the physical education and nutrition team encourages a healthy lifestyle. Together, these disciplines ensure a school environment that not only boosts academic performance, but also promotes students' mental health and general well-being.

4. Conclusion

Studying mental health in full-time schools is crucial to equip students with the tools to face emotional challenges. This promotes well-being by reducing stress and anxiety, while improving the school environment. It also prepares students to deal with academic and social pressures, fostering healthy relationships and resilience. Investing in students' mental health contributes to more complete learning and a more balanced future.

Conflict of interest

The authors declare that they have no conflicts of interest. All authors read and approved the final manuscript.

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Referências

Ahmadi, N., Nabavi, S. M., Hajsadeghi, S., & Moghadami, M. (2015). Relationship between occupational therapy, health and well-being. *Acta Medica Iranica*, 53(11), 691-695.

American Association for Pediatric Ophthalmology and Strabismus. (2021). What is pediatric ophthalmology? https://aapos.org/patients-and-public/eye-conditions/what-is-pediatric-ophthalmology

American Occupational Therapy Association. (2021) Occupational therapy and mental health. https://www.aota.org/Practice/Health-Wellness/Mental-Health.aspx

 $American\ Optometric\ Association.\ (2021).\ \textit{Children's vision}.\ https://www.aoa.org/healthy-eyes/eye-and-vision-conditions/childrens-vision-conditions/childrens-vision-conditions/childrens-vision-conditions/childrens-vision-conditions/childrens-vision-conditions/childrens-vision-conditions/childrens-vision-conditions/childrens-vision-conditions/childrens-vision-conditions/childrens-vision-conditions/childrens-vision-conditions/childrens-vision-conditions/childrens-vision-conditions/childrens-vision-conditions/childrens-vision-conditions/childrens-vision-conditions/childrens-vision-childre$

American Psychological Association. (2021). How psychologists help with mental health. https://www.apa.org/topics/mental-health/how-therapists-help

Australian Government Department of Health. (2019). Health and wellbeing. https://www.health.gov.au/health-topics/health-and-wellbeing

Canadian Association of Occupational Therapists. (2021). Occupational therapy and mental health. https://www.caot.ca/site/aboutot/otandmh?nav=sidebar

 $Centers \ for \ Disease \ Control \ and \ Prevention. \ (2021). \ School \ health \ guidelines \ for \ promoting \ healthy \ eating \ and \ physical \ activity. \\ https://www.cdc.gov/healthyschools/npao/promoting-healthy-eating.html$

Escolas de Ensino Médio em Tempo Integral (EEMTI). Secretaria da educação do estado do Ceará. 2023. Disponível em: https://www.seduc.ce.gov.br/escolas-de-ensino-medio-em-tempo-integral-eemti/

Green, J., & Goldwyn, R. (2002). Annotation: Attachment disorganization and psychopathology: New findings in attachment research and their potential implications for developmental psychopathology in childhood. Journal of Child Psychology and Psychiatry, 43(7), 835-846.

Jorm, A. F., & Kelly, C. M. (2007). Improving the public's understanding of the terms 'mental disorder' and 'schizophrenia': A randomized controlled trial. Psychological Medicine, 37(11), 1627-1636. doi:10.1017/S0033291707001129

Literature review as a research methodology. Journal of Business Research, 104, 333-339.

Mrazek, P. J., & Haggerty, R. J. (1994). Reducing risks for mental disorders: Frontiers for preventive intervention research. National Academies Press.

National Association of School Nurses. (2021). Mental health in schools. https://www.nasn.org/nasn-resources/practice-topics/mental-health

National Association of School Psychologists. (2021). School psychologists: Providing mental health services. https://www.nasponline.org/standards-and-certification/professional-conduct-ethical-practice/providing-mental-health-services

National Institute of Mental Health (NIMH). (2021). Child and adolescent mental health. https://www.nimh.nih.gov/health/topics/child-and-adolescent-mental-health/index.shtml

Patalay, P., Gage, S. H., & Goodman, A. (2017). Mental health and wellbeing trends among children and young people in the UK, 1995–2014: Analysis of repeated cross-sectional national health surveys. *Psychological Medicine*, 47(6), 1275-1285.

Patel, V., Flisher, A. J., Hetrick, S., & McGorry, P. (2007). Mental health of young people: A global public-health challenge. The Lancet, 369(9569), 1302-1313.

Patel, V., Saxena, S., Lund, C., Thornicroft, G., Baingana, F., Bolton, P., & Lancet Global Mental Health Group. (2018). The Lancet Commission on global mental health and sustainable development. *The Lancet*, 392(10157), 1553-1598.

The Lancet. (2020). The state of mental health services: Learnings from the COVID-19 pandemic. The Lancet, 396(10247), 1315.

Thomas, D. P., Martin, C. K., Heymsfield, S., & Redman, L. M. (2019). Effect of dietary adherence on the body weight plateau: A mathematical model incorporating intermittent compliance with energy intake prescription. *The American Journal of Clinical Nutrition*, 110(4), 872-879.

U.S. Department of Education. (2019). Every Student Succeeds Act (ESSA). https://www.ed.gov/essa

World Federation for Mental Health. (2021). World Mental Health Day. https://wfmh.global/world-mental-health-day/

World Federation of Occupational Therapists. (2021). Occupational therapy and mental health. https://www.wfot.org/programmes/mental-health/

World Health Organization. (2014). Mental health: a state of well-being. https://www.who.int/features/factfiles/mental_health/en/

World Health Organization. (2020). Mental health in schools: A resource and training pack for teachers and other professionals. https://www.who.int/mental_health/media/en/712.pdf

World Health Organization. (2020). Promoting mental health: Concepts, emerging evidence, practice. https://www.who.int/mental_health/evidence/best_practice_guidance/en/