International
Journal of
**Health
Science**

MENTAL HEALTH: HARMS ARISING FROM THE ENVIRONMENT

Adelcio Machado dos Santos
PhD in Engineering and Knowledge Management (UFSC). Post-Doctorate in Knowledge Management at UFSC. Lecturer, researcher and advisor of the Graduate Programs in Development and Society and in Education at the Universidade Alto Vale do Rio do Peixe (UNIARP)
Caçador/SC/Brazil

1

Abstract: The relationship between the environment, man and society strengthens its ties when it is verified that, in a short period, the environmental issue has been absorbed by the most diverse sectors of society. Study with the objective of identifying how systemic thinking can help balance the individual's mental health in relation to the problems arising from the environment. This is a qualitative study, a systematic literature review, of complete articles, published online between 2000 and 2020. In a stable, economically settled and socially harmonious environment, the individual is disease-free. Individuals who do not formulate mental health problems are increasingly seeking assistance from social and human services. Cases of mental suffering increase considerably, many related to anxiety and depression, psychiatric disorders of a society that lives more and more under pressure. The health-mind connection appears as one of the most striking aspects of this social phenomenon, which must be analyzed in the light of Systems Thinking. It is concluded that the binomial environment – mental health is directly linked to the dynamics of population growth and the moral obligation towards other living beings and future generations.

Keywords: Environment. Mental health. Systemic Thinking.

INTRODUCTION

The relationship between the environment, man and society strengthens its bonds when it is verified that, in a short period, the environmental issue has been absorbed by the most diverse sectors of society. Thousands of people around the world are involved in events that seek to reorganize the environment and different ecosystems. (UNEP, 2021; LIMA, 1999).

The environment receives two approaches as a social problem, the first reaffirms the concern and social mobilization for environmental protection generated by the conditions of degradation of the environment and the variables that interfere with its destruction. The second is the reformulation of the sociology of social problems, shifting attention from objective conditions to the social process of building the environment that has been generating a social problem, especially mental problems. (UNEP, 2019; LIMA, 1999; BARCIOTTE, SACARO JUNIOR, 2012).

For Professor Claudia Mayorca, professor at the institutuion: Universidade Federal de Minas Gerais, conceptualizing mental health is not an easy task, it involves a lot of knowledge, doubts and feelings about the subject. The World Health Organization (WHO) conceptualizes mental health as well-being, in which man develops personal strategies to be able to deal with stressful situations in his life, maintain a productive life and contribute to the society in which he lives. (UFMG, 2016).

The United Nations (UN) defends man's dependence on ecosystems, just like people, the planet needs to be healthy. (UNEP, 2021) In the modern world, the need for new ways of teaching, thinking and acting is increasingly observed. With technological changes, it is necessary an educational system that first and foremost makes science reach the less favored, it is necessary to understand disciplines such as: physics, chemistry, mathematics and biology.

Knowledge is the basis for man to become aware that his health depends on the environment in which he lives. People's mental well-being depends on several factors such as the reduction/elimination of pollution, if it is believed that some pollutants may be related to mental illnesses (depression, anxiety, dementia and suicide), the despised lead in the environment leads to a decrease in intelligence, behavioral difficulties and learning problems.

(UNEP, 2019). The construction of a healthy society goes through an environment of dynamic interpretation and that promotes the mental sanity of the social man. (OLIVEIRA, 2012).

Systems Thinking can be understood as the ability to perceive, model and evaluate the consequences of actions in an expanded way in time and space. (OLIVEIRA, 2012). It can also be seen as a way of thinking and constructing thought, in the cognitive sense, in which the processing of this knowledge is influenced by a systemic base language.

From the entire panorama presented, it is possible to infer a gap between action and theory between mental disorders resulting from an imbalance in the environment. The study aims to identify how systemic thinking can help balance the individual's mental health in relation to the problems arising from the environment.

DEVELOPMENT

Brügger (1998, p. 63) states that:

> "Pollution, extinction and misuse of natural resources are, above all, symptoms – just as fever is a symptom, not a disease – of a greater crisis: the crisis of paradigm and civilization".

LITERATURE REVIEW

In an integrated understanding of this social and organizational universe, Systems Thinking presents itself as a promising possibility, since it seeks to understand these macro and micro views, according to a whole greater than the sum of the segmented understandings, understandings that still predominate in studies on such universe. (SILVA, 2015).

In this context, the social and organizational universe resembles the universe as it is known, both in structural form and in its dynamics. There are also similar visions, in the comparison between the two universes, for the understanding of the micro and macro level, considering that everything is a single process that is in constant movement and change, in extremely interdependent and complementary contexts. (SILVA, 2015).

According to Santos et al. (2007) in the 60s, Peter Senge presented the approaches related to the Fifth Discipline, which serve as a basis for Systems Thinking. Some transformations that have occurred with education in recent times influence and modify thinking and doing education.

Alternatives for understanding organizations are particularly challenging among organizational studies, although organizations exist, there are not sufficiently consistent understandings that unite the macro and micro organizational universe. (SILVA, 2015).

For Lima et al. (2021) social indicators contribute to the organization of health services, assessing advances, setbacks and stagnation in various parts of society. The WHO Comprehensive Mental Health Action Plan 2013-2020, which outlined four overarching objectives:

> more effective leadership and governance for mental health; the provision of comprehensive and integrated mental health and social care services in community settings; implementation of promotion and prevention strategies; and strengthening information, evidence, and research systems. (WHO, 2013).

Based on Systemic Thinking based on Peter Senge's ideas, we seek to increase systematic teaching methodologies. Especially because the systemic approach deals with the complexity of the systems, the realism of the models, and the problem-solving capacity, helping to solve mental health problems.

As the system is simplified, it loses realism, but becomes more resolvable. In contrast, as the realism of the proposed model increases,

the system becomes more complex and more difficult to solve. (SILVA, 2015).

The definition of a problem emerges within a certain social and cultural scenario, at first it is recognized that all demands are important, however the social and political dynamics highlight the attributes and problems that are considered problematic social conditions for the population. Together with the cultural context, structural elements, in Brazil the organization of the State and the Federal Constitution, also configure that the government has the duty of the people's health, including mental health. (BRASIL, 2001; FUKS, 2000).

The dispute around the definition of social problems has a dimension in the local/contextual historical heritage, responsible for generating the repertoire of available cultural resources. (SHIKI, 2004; CUNHA and AUGUSTIM, 2014). The symbolic resources contained in the laws are too abstract to define the meaning of the environment and the environment. They just establish general conflicts.

In the sense of the environment, as a social problem, it is not generated exclusively by categories that define it, it also depends on the configuration of the contours of the environmental problem within the scope of local disputes. The problems related to the environment are exhaustively exemplified in terms of land disputes, real estate issues, the threat of the destruction of popular housing, as the core of the city's environmental problem, mental and social health, when it comes to the environment. (FUKS, 2000).

At the 65th World Health Assembly, in resolution WHA 65.4 on mental disorders and the need for a comprehensive coordinated response between the health and social sectors, a comprehensive action plan for mental health was prepared with a focus on four pillars: promotion, prevention, treatment and rehabilitation. The man who has his place in society finds vulnerable situations and environments where he is exposed. (WHO, 2013). Therefore, it is observed that there is an advance regarding the concern about the environment, being exhaustively discussed, due to the degradation of nature and consequent decline in the quality of life, both in cities and in the countryside. Among other reasons, this situation stems from poor environmental management by the public and private sectors. Social development encompasses other dimensions besides the ecological one, ultimately implying a better quality of life and mental and social health.

The economic value or opportunity cost of environmental resources is often not observed in the market through the price system. Thus, Motta (2006) points out that, however, like other goods and services on the market, its economic value derives from its attributes, with the peculiarity that these attributes may or may not be associated with use. The uses and non-uses of environmental resources contain values that need to be evaluated in order to make choices between uses and non-uses. Leisure is part of the individual's life, we are increasingly witnessing the degradation of outdoor areas, space used by the population, free of charge, to relieve the stress experienced in everyday life and promote mental health.

In the UN report (2020) cites the study carried out at the Cincinnati Children's Hospital Medical Center in the United States on the high levels of pollution from road traffic and the high level of anxiety. It emphasizes the need for green areas and corridors, a way to provide healthy environments for the mental health of drivers and the population, the use of clean energy such as electric and non-motorized transport.

The environmental issue emerged three decades ago, with reports on water pollution, fish mortality, visual pollution linked to

outdoor advertisements, air pollution and the disturbances caused by diseases. (SAINTS, 2021). According to Branco (2004), the very term preservationism applied only to protection against soil erosion.

The presence of man is linked to the preservation and maintenance of the natural conditions of the environment for the quality of life of future generations. (PELEGRINI, 2006). Technologies have advanced and brought better quality to man's life, especially in everyday activities, however this advance makes technological products quickly disposable and replaceable. The painful impact of the destruction of the environment, through constant impacts, triggers insecurity, in addition to anxiety and depression, a condition such as panic disorder and post-traumatic stress, which can make the preservation of human beings unfeasible. (MEIRELLES, 2019).

Nowadays, the environmental issue, in addition to being of interest to scientists, health professionals, legal professionals and ecologists, is also being analyzed by society in general.

The environmental issue is becoming an obligatory subject in classrooms, in discussions of regional, national and international policies, in the agendas of executives, this fact is happening as a result of a relationship between the environment and economic development, which ended up modify the critical point of life in society.

METHODOLOGY

This is a qualitative study of systematic literature review.

For this purpose, we chose as a search source the *Scientific Eletronic Library Online* (SciELO) to locate articles published in full, online, between the years 2000 to 2020, using the terms mental health, systemic approach, environment.

The 11 (eleven) articles from the years 2009; 2012; 2013; 2014; 2015; 2017; 2020; 2021; were downloaded *online*, read in full, and important facts about the research topic were noted. The data found were analyzed and discussed in the light of other relevant bibliography available.

RESULTS ANALYSIS

For Montibeller Filho (2004) it is highlighted that in principle, considered in isolation, a concrete social formation can present itself positively in relation to sustainable development. However, in general, environmental economists are not explicit in relation to the most relevant issue, since it is consistent with a humanist vision, namely, the probability of achieving a new pattern of development on a planetary scale, under capitalism.

In this context, sustainability is a terminology that has recently gained popularity and that, in general, means the use of a certain natural resource in such a way that it remains continuously available. However, the term is used loosely and misleadingly in certain circumstances. Thus, Zilberman (1997) points out that this term is defined as the guarantee that future generations will have equal opportunities to access the resources currently offered by the planet.

There is also the argument, according to the same author, that sustainability refers to types of development that are economically viable, do not harm the environment and are socially just. However, it is necessary to learn how to maintain environmental resources so that they continue to provide benefits to the human population and other forms of life on the planet.

In a stable, economically settled and socially harmonious environment, the individual is disease-free. Individuals who do not formulate mental health problems are

increasingly seeking assistance from social and human services. The psychologist needs to deconstruct the objective and apolitical expert role, building a sustainable alliance with clients. (SOTERO and RELVAS, 2012).

In reality, social sustainability has lost its value to the detriment of a system that generates inequalities, with land concentration in the hands of a few, expelling a large part of the population to the outskirts of cities, generating misery, poverty, licit and illicit drug abuse, violence, unemployment, among many other social ills. (NEY and HOFFMANN, 2009). It is urgently necessary to formulate a social plan that includes education, health, work, income, housing, retirement for current and new generations.

It is substantial that environmental problems and the urban crisis are evaluated in an integrated, interdisciplinary and global way, disregarding the existence of political borders between different nations. (CUNHA and AUGUSTIM, 2014). That is, the preservation of the environment to guarantee the quality of life is a matter of global responsibility, which requires joint work by the most diverse countries.

The increasing awareness of society for the benefit of environmental preservation has been causing pressure from non-governmental entities and communities on governments and companies so that they admit responsibility for the damage caused to the environment, so that then an administration is carried out. focused on ecological awareness. (CUNHA and AUGUSTIM, 2014).

Cases of mental suffering increase considerably, many related to anxiety and depression, psychiatric disorders of a society that lives more and more under pressure. Some patients have other clinical comorbidities, others experience unemployment and the female gender experiences anxiety in relation to the opposite sex. (GULLICH et al., 2013).

The subject is complex and involves political, economic and social factors in societies. Mental health is part of general health, encompasses physical, mental and social aspects, in addition to socioeconomic factors. (WHO, 2013).

So that environmental damage does not reach greater proportions, that is, irreversible damage, it will be essential that everyone unite. The problems that surround the country's environmental reality determine that immediate solutions are taken, even if they are partial, preliminary and uncertain. Environmental education will be directly essential to raise awareness in society and this way, achieve a more active participation.

Currently, we are experiencing the coronavirus pandemic that created an environment with environmental risk factors for man and brought mental health problems to health workers and the general population. Online psychology consultations and group care approaches to deal with the increase in patients suffering from quarantine loneliness, depression and / or anxiety disorders. These are diseases that cause numerous problems and require a systemic approach. (CAMPOS et al., 2020).

In the course of recent years, the appearance of a new social reality has been observed, which was formed from technological advances in all areas of scientific knowledge. However, economic development, which provides an increase in wealth for some, has an undesirable effect, and instead of increasing, it ends up reducing the quality of life of the population.

It is up to the psychologist, from the point of view of postmodern systemic therapies, not to be a neutral agent, but to have a conscious and ethical position. The systemic approach emerged in the 1950s from dissatisfied professionals such as psychology developed, approaching Systemic Family Therapy, seeing

the family as several micro systems that function from the general characteristics of the family. (CELESTINO and BUCHER-MALUSCHKE, 2015).

The adoption of a more adequate environmental policy with stricter laws, inspection, appropriate and permanent environmental monitoring, greater investments in research into ecologically sustainable solutions for environmental problems and fiscal support for companies, will be the most viable option to dominate the detriments and impacts negative impacts on the environment. However, in environmental education it is still necessary to attend to ethical values, that is, to respect the values that are part of the local human culture. (BILERT, 2014).

It must be noted, according to Grün (1996), that it is essential to implement a hermeneutic approach to seek the ethical and political dimension of environmental education. According to this perspective, the conception of environmental education needs to go beyond the epistemological threshold, producing an environmental approach through thematization of areas of knowledge in an ethical-historical point of view that extends beyond the curriculum. This is due to the fact that everything transmitted in schools influences the way students understand the existing relationships between culture and the environment. (GRUN, 1996).

The systemic approach contemplates that the *habitatus* of the individual, group and modern society is the family, school, work, social groups and mass culture, where interaction takes place in all places with mental processes triggered by the interaction environment. With struggles between agents, power relations, distribution of economic, cultural and social forms in social segments. (CELESTINO e BUCHER-MALUSCHKE, 2015).

Therefore, when using a global approach, based on an extensive interdisciplinary perspective, environmental education designates a reality within which the existence of a profound interdependence between the natural environment and the artificial environment is distinguished. Thus, according to Cheney apud Grün (1996), it is evident that human beings are socially constructed and subjects and communities are bioregionally constructed.

In the course of recent years, the appearance of a new social reality has been observed, which was formed from technological advances in all areas of scientific knowledge. However, economic development, which provides an increase in wealth for some, has an undesirable effect, and instead of increasing, it ends up reducing the quality of life of the population.

Environmental education, based on an interdisciplinary approach, helps to explain the link between acts in the present and consequences for the future. Therefore, environmental education needs to be directed to the local community, arousing people's interest so that they participate in an active process, which seeks to solve problems within the context of the peculiarities that characterize the specific reality of a given community. (GRUN, 1996).

The issue of preserving the environment is a factor that acts directly on the quality of life and mental health of the population. Thus, aspects that guarantee quality of life will only be ensured if local progress allows community members to live with dignity, respecting the guarantees dictated by human rights and preserving the environment for future generations.

Therefore, it emerges that the quality of life, in addition to depending on respect for human rights and human dignity, also depends on respect for the environment,

whose destruction results in consequences that directly affect human life. In turn, respect for the environment is linked to the development of public policies and economic practices that guarantee sustainable development, that is, the production of technologies that do not contribute to environmental degeneration. (CUNHA and AUGUSTIM, 2014).

The environment and the individual do not get sick alone, the physical and social reality contributes to clinical and mental illness as well as to the cure of both. What will determine the completion of the process is personal dynamics and financial resources. (SOUSA and COSTA, 2017).

FINAL CONSIDERATIONS

It is true that the solution to a large part of environmental problems basically involves environmental education, collective actions, awareness and engagement of the population, which at the same time is the way to address issues of preservation of biodiversity, water sources, territorial occupation and many other problems.

The binomial environment – mental health is directly linked to the dynamics of population growth and the moral obligation towards other living beings and future generations. The main challenge of development is to meet the needs and aspirations of an ever-increasing population.

In the systemic approach, the focus of care goes beyond the sick individual, it advances in terms of family dynamics, secondarily, not least, is the environment in which one lives where the mental illness is born.

REFERENCES

BARCIOTTTE, M. L.; SACCARO JÚNIOR. A importância da educação ambiental na gestão dos resíduos sólidos. **Repositório do Conhecimento do IPEA**, Brasília, ed. 74, n. 9 p. 1-2, 2012. Disponível em: http://repositorio.ipea.gov.br/handle/11058/9139

BILERT, V. S. de S. Educação ambiental como instrumento de desenvolvimento sustentável: perspectivas contemporâneas no ensino superior. **C&D-Revista Eletrônica da Fainor**, Vitória da Conquista, v.7, n.1, p.73-93, jan./jun. 2014.

BRANCO, S. M. **O meio ambiente em debate.** 3. ed. rev. e ampl. São Paulo: Moderna, 2004. (Coleção Polêmica).

BRASIL. [Constituição (1988)]. **Constituição da República Federativa do Brasil**. Brasília: Centro Gráfico, 2001.

BRÜGGER, P. Visões estreitas na educação ambiental. **Ciência hoje**, v. 24, n. 141, p. 62-65, ago. 1998.

CAMPOS, M. R. SCHRAM, J. M de A.; EMMERICK, I. C. M.; RODRIGUES, J. M. Carga de doença da covid-19 e de suas complicações agudas e crônicas: reflexões sobre a mensuração (DALY) e perspectivas no Sistema Único de Saúde. **Cad. Saúde Pública**, Rio de Janeiro, n. 36, v. 11 p. 1-14, 2020. Disponível em: https://www.scielosp.org/article/csp/2020.v36n11/e00148920/pt/ Acesso: 26 abr. 2021.

CELESTINO, V. R. R.; BUCHER-MALUSCHKE, J. S. Um novo olhar para a abordagem sistêmica na psicologia. **FACEF Pesquisa: Desenvolvimento e Gestão**, Franca, v.18, n.3, p.318-329, 2015.

CUNHA, B. P.; AUGUSTIM, S (org.) **Sustentabilidade ambienta**l: estudos jurídicos e sociais. Caxias do Sul: Educs, 2014.

FUKS, M. Definição de agenda, debate público e problemas sociais: uma perspectiva argumentativa da dinâmica do conflito social. **BIB**, Rio de Janeiro, n. 49, p. 79-84, 1. sem. 2000. Disponível em: https://www.anpocs.com/index.php/bib-pt/bib-49/510-definicao-de-agenda-debate-publico-e-problemas-sociais-uma-perspectiva-argumentativa-da-dinamica-do-conflito-social/file. Acesso em: 20 ago. 2020.

GULLICH, I.; RAMOS, A. B.; ZAN, T. R. A; SCHERER, C.; SASSI-MENDONZA, R. A. Prevalência de ansiedade em pacientes internados num hospital universitário do sul do Brasil e fatores associados. **Rev. Bras. epidemiol,** Brasília, v. 16. n. 3, p. 644-657, 2013. Disponível em: https://www.scielo.br/j/rbepid/a/nX9YYS4s7k76ZwcPGX7QvLn/?format=pdf&lang=ptAcesso em 30 mar. 2021.

GRÜN, M. **Ética e Educação Ambiental:** a conexão necessária. Campinas: Papirus, 1996. (Coleção Magistério: Formação e Trabalho Pedagógico).

LIMA, G. da C. Questão ambiental e educação: contribuições para o debate. **Ambiente. soc.**, Campinas, n. 5, pág. 135-153, 1999. Disponível em http://www.scielo.br/scielo.php?script=sci_arttext&pid=S1414-753X1999000200010&lng=en&nrm=iso. Acesso em: 20 ago. 2020.

LIMA, I B. de; BARNARDI, F. A.; YAMADA, A. B.; VINVI, A. L. T.; RIJO, R. P. C. L.; ALVES, D.; FUREGATO, A. R. F. O uso de indicadores para a gestão dos serviços de saúde mental. **Rev. Latino-Am. Enfermagem** [online], Ribeirão Preto, v. 29, e3409, 2021. Disponível em: https://www.revistas.usp.br/rlae/article/view/184974. Acesso em 30 mar. 2021.

MEIRELLES, J. M. L. de. Meio ambiente e saúde mental: uma perspectiva jurídica da solidariedade. XVI Congresso Nacional de Pesquisa e Pós-Graduação em Direito (COPENDI), Belo Horizonte, 15 a 17 de 2007, **Anais** [...], p. 191-205. Florianópolis: Fundação Boiteux, 2008. Disponível em:

https://s3.amazonaws.com/conpedi2/anteriores/XVI+Congresso+Nacional+-+Belo+Horizonte+(15%2C+16+e+17+de+novembro+de+2007).pdf Acesso em 30 mar. 2021.

MONTIBELLER FILHO, G. **O mito do desenvolvimento sustentável:** meio ambiente e custos sociais no moderno sistema produtor de mercadorias. 2. ed. Florianópolis: UFSC, 2004.

MOTTA, R. S. da. **Economia ambiental.** Rio de Janeiro: FGV, 2006.

NEY, M. G.; HOFFMANN, R. Educação, concentração fundiária e desigualdade de aprendizagem no meio rural brasileiro. **Rev. Econ. Sociol. Rural** , Brasília, v. 47, n. 1, pág. 147-181, mar. 2009. Disponível em http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0103-20032009000100006&lng=en&nrm=iso. Acesso em: 22 de ago. 2020.

OLIVEIRA, K. O. **Pensamento Sistêmico**: bases epistemológicas e paradigmáticas da construção do conhecimento nas ciências da administração. Montevidéu, p. 1-12, 2012. Disponível em: https://www.kelipereiradeoliveira.com/site/wp-content/uploads/2018/07/basesepistemologicaseparadigmaticasdaconstrucaodoconhecimentonascienciasdaadministra88204.pdf. Acesso em: 20 ago. 2020.

ORGANIZAÇÃO MUNDIAL DA SAÚDE (OMS). **Plan acción sobre salud mental 2013-2020**. Genebra: OMS, 2013. Disponível em: https://apps.who.int/iris/bitstream/handle/10665/97488/9789243506029_spa.pdf;jsessionid=B2BDA10152374FB1F5D27AC5E8220A9D?sequence=1 Acesso em: 10 abr. 2021.

PELEGRINI, S. C. A. Cultura e natureza: os desafios das práticas preservacionistas na esfera do patrimônio cultural e ambiental. **Rev. Bras. Hist.,** São Paulo, v. 26, n. 51, pág. 115-140, jun. 2006. Disponível em http://www.scielo.br/scielo.php?script=sci_arttext&pid=S0102- 01882006000100007&lng=en&nrm=iso. Acesso em: 20 ago. 2020.

SANTOS, A. M. dos; OTANI, N.; FRANZONI, A. M. B.; MELO, P. A. de. Pensamento sistêmico na educação: imprescindibilidade na era do conhecimento. *In:* IV CONFERÊNCIA SUL-AMERICANA EM CIÊNCIA E TECNOLOGIA APLICADA AO GOVERNO ELETRÔNICO, 20, 21, 22 de novembro de 2007, Palmas **Anais** [...].

Palmas: Centro Universitário Integrado de Ciência, Cultura e Arte – CUICA – UFT, 2007.

SANTOS, A. M. dos; FREIBERGER, R. L.; MENDES, D. Meio ambiente e saúde – Análise à luz do pensamento sistêmico. **Archives of Health**, Curitiba, v. 2, n. 2, p. 198-207, 2021. Disponível em: https://latinamericanpublicacoes.com.br/ojs/index.php/ah/article/view/273 Acesso em: 10 maio 2021.

SHIKI, S. de F. N. Alguns elementos para o debate: desenvolvimento local sustentável. *In*: RUSCHEINSKY, A. (org.). **Sustentabilidade:** uma paixão em movimento. Porto Alegre: Sulina, 2004.

SOTERO, L.; RELVAS, A. P. A intervenção com clientes involuntários: complexidade e dilemas. Psicologia & Sociedade, São Paulo, n. 24, n.1. p. 187-196, 2012. Disponível em: https://www.scielo.br/j/psoc/a/9RdjBbNcwSTZpdLM4PpjnpK/abstract/?lang=pt. Acesso em: 10 nov. 2020.

SOUSA, A. E. de; COSTA, L. F. A. da. Abordagem sistêmica comunitária: avaliação de um serviço socioterapêutico de saúde mental em Fortaleza. Conhecer: debate entre o público e o privado, Fortaleza, v. 7, n. 18, p.318-329, 2017. Disponível em: https://docplayer.com.br/66031306-Abordagem-sistemica-comunitaria-avaliacao-de-um-servico-socioterapeutico-de-saude-mental-em-fortaleza.html Acesso em: 10 nov. 2020.

SILVA, Maria das Graças Miranda Ferreira. **A relação das categorias pluralismo e ecletismo epistemológico com a produção do conhecimento na história da educação**. Tese (Doutorado em Educação) - Centro da Educação, Universidade Federal da Paraíba, João Pessoa, 2015.

UNION ENVIRONMENT PROGRAMME (UNEP). **Investimentos em soluções baseadas na natureza precisam triplicar até 2030**, alerta novo relatório da ONU. 2021. Disponível em: https://www.unep.org/pt-br

UNION ENVIRONMENT PROGRAMME (UNEP**). Cuidar do meio ambiente colabora com a saúde mental**. 2019. Disponível em: https://www.unep.org/pt-br/noticias-e-reportagens/story/cuidar-do-meio-ambiente-colabora-com-saude-mental

UNIVERSIDADE FEDERAL DE MINAS GERAIS (UFMG). **Relatório conclusivo da comissão instituída pelo reitor para constituir uma agenda de discussão e propor diretrizes para uma política institucional de saúde mental no** âmbito da **UFMG**. Belo Horizonte: UFMG, 2016. Disponível em: https://www.ufmg.br/online/arquivos/anexos/Relatorio%20da%20Comiss%E3o%20de%20Saude%20Mental%20da%20UFMG%2010-03-17.pdf