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UNEMPLOYMENT,
HEALTH, AND SLEEP:
DOES UNEMPLOYMENT
AFFECT SLEEP?
SOME EXPLORATORY
CONSIDERATIONS FOR
A RESEARCH-ACTION
PROJECT

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Abstract: This article explores literature published between 2015 and 2021 considering the theme of "unemployment and sleep" with starting question: Does unemployment affect sleep? Besides, a sociological framework of the theme "unemployment" is presented in relation to the social history of "employment" and "work". First, we address the relationship between work and unemployment and the relevance of the debate. Secondly, we treat their connection with the health of those live in unemployment situations. Later, we debate the relationship between unemployment, and sleep, even though the literature is scarce. The final discussion aims to contribute to the advancement of sleep studies in relation to other social phenomena. We propose that the connection between Health Psychology, and Social Sciences may help to consolidate knowledge and to promote coordinated interdisciplinary actions with research and practice of help interventions. The history of science reveals that dialogue between scientific disciplines is a dynamic path that biopsychosocial complexity thanks in response to human, cultural, and societal needs.

Keywords: "Unemployment"; "Work"; "Employment"; "Health"; "Sleep"; "Participatory action research intervention".

INTRODUCTION

Unemployment is a socioeconomic phenomenon of industrial and post-industrial societies; it disturbs the personal and family life of those who suffer from it, and it disturbs economic life. The uncertain times of globalization and difficulties in access to the job market were exacerbated by the Covid 19 pandemic.

Dubiez increased for unemployed young people and adults regarding entering or returning to the labor market. Sleep, a vital and involuntary human survival mechanism, is affected by positive and adverse events during our waking hours. However, sleep also influences, in its diversity of functions, our body and the way we interact with the external environment.

The same does not occur with regard to the study of the relationship between unemployment and health. The exploration of the literature on the theme "unemployment and sleep" revealed the lukewarmness of existing academic production. The same does not occur with regard to the study of the relationship between unemployment and health. With expertise on the study of unemployment and its cultural, and social outlines we decide to contribute to the study of the dyad unemployment and sleep. The contributions by Blanchflower, D. G. & Bryson, A. (2019; 2020; 2021) were extremely particular, its exhaustive relevant. In bibliography deserved careful attention, as well as the analysis of data relating to the USA, whose robustness constitutes an unparalleled contribution. Our thanks to the authors.

METODOLOGY

Review of scientific literature published in English and Portuguese between January 2015 and July 2021 in journals indexed in Scopus and part of the literature reviewed by Blanchflower, D. G. & Bryson, A. (2020; 2021).

Total articles analyzed: 52.

Total articles considered in the final writing of this work, including a Working Paper: 32.

Total books considered in the final essay: 3 Reasons for exclusion of the remaining articles:

- a) the research theme was "work" and not "unemployment".
- b) the research topic was "unemployment" without considering sleep.

- c) Articles not available in full.
- d) Articles were prior to the defined time frame.

WORK, EMPLOYMENT AND UNEMPLOYMENT: THREE COMPLEX CONCEPTS

In western human civilization, the notion of work has been constructed as a fundamental element of the human condition, with varied and contradictory cultural attitudes in relation to its value, purpose and forms of organization, since the most remote antiquity.

The notion of unemployment depends on the idea that each society has of work. For Freud (1929/2002) work integrates the principle of life and love; it involves necessity and sublimation. Work is the cement of collective life (1929/2002).

"unemployment", The expression historically recent, invented in the transition of the 20th century. XIX to the century. XX, emerges with the weight of salaried work in productive activity; entails the modern conception that separated the workplace and the place of residence, as well as bureaucratic and industrial organizations and institutionalization of a "job market"; it also implies the recognition of social rights in modern States that allow compensation to individuals of working age and who, wanting a job, cannot find it. Unemployment also depends on social acceptance of the idea of employment as a criterion for sharing

prosperity. It is with the birth of the Welfare States that rights and duties are consecrated to the unemployed condition (Marçano, I., 2015).

Long-term unemployment (LLD)¹ constituted a major problem in Europe in the 1980s and 1990s: it increased dramatically in European countries and most of the major OECD countries, with the exception of Japan and the United States.

More recently, in Portugal and in other countries, the confinement, due to the COVID-19 pandemic, caused a shock in the labor market: unemployment increased and employment decreased. In 2020, the ILO (International Labor Organization) realized the impact of COVID-19 on existing inequalities in the world and the risk of the labor market moving towards greater geographic and demographic inequality, more poverty and less "decent" jobs.

The expansion of teleworking, in some activities, was the socioeconomic response to the extension of the COVID-19 pandemic. However, unemployment has increased worldwide, in EU member countries, namely in Portugal.

Portuguese legislation published in 2019, for the purposes of applying for hiring support measures created by the State, (for example, Ordinance Number over 45 years of age"), but also introduces the notion of "very long-term unemployment" (DMLD): "people who are 45 years of age or over and who are registered as unemployed with the IEFP, I.P, for 25 months or more".

^{1.} In Portugal, Article 4 of Decree-Law number: 64-C/89 of 27-02-1989 defines the concept of long-term unemployed and equivalent: "1 - Long-term unemployed are workers available for work and looking for a job who have been unemployed for more than twelve months and registered with employment centres". "2 - Persons aged no less than eighteen years, available for work and looking for their first job, who have been registered with employment centers for more than twelve months, are treated as long-term unemployed". "3 - For the purposes of the provisions of the previous number, workers who have never been hired for an indefinite period are considered to be in a situation of first employment".

In the Portuguese case², we considered the indicator "underuse of work", which aggregates, in addition to the unemployed, people that INE classifies as inactive (because they are not actively looking for a job or because they are not immediately available to accept a job). In October 2022, there were 609.3 thousand people in this condition, a number higher than the previous month by 6.5 thousand people (1.1%) and lower than the same period of 2021 (14.4 thousand people; 2.3 %). Thus, the rate of underutilization of work was estimated by INE at 11.4%, a value higher than that of the previous month (0.1%)and lower (0.3%) than that of the same month of 2021.

The theme of unemployment has attracted the attention of different areas of research: economists (Pipper, 2016; Austin, Glaeser & Summers, 2018) in an attempt to clarify its origins, trends and equations to control it, without forgetting the focus on productivity; sociologists interested in knowing the experiences of unemployment and its impact on family, social and economic life; of psychologists who wanted to clarify its impact on mental and psychological life.

Sociologist Paul Lazarsfeld and his collaborators, in a multidisciplinary team, constitute a classic and pioneering reference when studying the life of unemployed people and their families in a small German town, during the crisis of the 1930s. Later, in the 1960s, French sociologists advanced with studies when unemployment took hold, profusely and lastingly, in French society; classic examples are the studies by Ledrut and Schnapper, among others.

In the history of research in Psychology, it must be noted that, in the 1930s, Hall already addressed the relationship between attitudes and unemployment and, in the 1970s, Harrison concluded by demoralization, when the experience of unemployment is prolonged, while Hayes tried to understand the unemployed and the need to manage personal change when a job is lost.

The dominant social norm "work" and "job" has consequences in the lives of those who elude paid work and stable employment. Everyday life changes when unemployment hits. Yes, the unemployment impacts on individuals. But unemployment also impacts on social structures, like the family on first place (Austin, Glaeser & Summers, 2018). Domestic housing often has less financial resources. The individual's social status and dignity are injured by job loss, with an impact on their sociability and personal and family organization. However, forms of nonemployment have different meanings and there is a hierarchy of social statuses depending on their distance from employment. Thus, work, employment and unemployment, their consequences and experiences are not unique, but plural (Marçano, I., 2015). Such facts are sufficient justification for exploring the literature on the impact of unemployment on health and the consequences of unemployment on the sleep of those who experience it.

UNEMPLOYMENT AND HEALTH

There is an abundance of scientific literature on the impact of unemployment and job loss on individual health, pain and well-being (Afolalu et al., 2018). Blanchflower and Bryson

^{2.} In Portugal, the increase went from 6.5% in 2019 to 6.9% in 2020, but was below the European Union average (7.1%). The Algarve region recorded the highest rate in the country (Eurostat, 2021). EU statistics for October 2022 pointed Euro area unemployment at 6.5%, and EU at 6.0%. In October 2022, the provisional estimate of the National Institute of Statistics (INE) reported an unemployment rate in Portugal of 6.1%, corresponding to 316.6 thousand unemployed people. The rate is identical to that recorded in September and 0.2% lower than in the same month of 2021. However, INE recorded eight thousand fewer people with work (0.2%) than in September of this year. Furthermore, the inactive population increased by 0.4% in October, accounting for 10.4 thousand more people than in the previous month. This data results, mainly, from the "increase in the number of inactive people available, but who are not looking for a job (7.6 thousand; 6.4%)", explains the INE.

(2019: 1) state "unemployment hurts" and justify the reasons why we are concerned about unemployment³: "it increases susceptibility to poor nutrition, illness, mental stress, and loss of self-esteem as a path to depression".

Other studies point to the negative effects of unemployment on health, a decrease in the wage level (while the length of unemployment increases) and the weakening of the moral strength of individuals. An in-depth and prolonged study, statistical and qualitative, with the same population cohort of men and women, allowed identifying nuances in the psychosocial phases of unemployment (Marçano, I., 2016) from the exploration of Harrison's moral curve (1976):

Shock (not necessarily for everyone); pessimism (I); optimism; pessimism (II). However, the identified phases are not necessarily a chronology of successive stages. Other environmental and personal variables can mediate the perception of unemployment and influence the reaction to unemployment: getting a new job quickly or not; level of financial sustainability; repetition of the unemployment situation; occupation of "empty" time with satisfactory job replacement activities; degree of integration and family support; social networks independent of work; personal and family value attributed to work; opportunity to transition into retirement; age and personal psychological characteristics (Marçano, I., 2015: 166).

analysis of life histories in unemployment is a crucial source of information to better understand experiences of unemployment by those who experience it and their perceptions in relation to themes such as the organization of daily life and activity, sleep, occupation of time and life familiar.

According to Hahn E. et al. (2015) unemployment is a remarkable event in

human life and causes a huge drop in life satisfaction; trend that, in their study, persisted for at least 3 years after the event. In addition, they conclude that, on average, individuals did not reach the previous level of satisfaction again, even for those who got a job. The variability in coping with unemployment can be explained in part by personality traits, but also by the duration of unemployment. A higher level of "conscience," in people with short spells of unemployment, reinforced the negative effect of unemployment, while "extroversion" softened the effect.

SLEEP AND HEALTH

Sleep is a fundamental function of human survival and physical and mental health. Involuntary, complex, biologically rooted and dependent on internal body factors (genes and hormones), sleep also needs external factors. Sunlight is essential for the synchronization of circadian rhythms for sleep and for maintaining the physiological balance of the human body. The best way to study sleep functions is to assess the impact of sleep deprivation. Sleep is also sensitive to events that occur during wakefulness. Thus, the way in which the day goes by influences sleep; and good or bad sleep (in quantity and quality) also influences the day.

Consequently, we asked whether the involuntary experience of unemployment influences sleep.

The relationship between sleep and health has been extensively studied. Short sleep duration (less than 7 hours per night) is associated with a greater likelihood of diseases: for example, diabetes (Shan, Ma and Xie et al 2015), coronary heart disease (Wang et al, 2016), depression, (Zhai, Zhang, and Zhang 2015) and hypertension (Wang et al 2015), among others.

^{3.} Study based on the research series of the Behavioral Risk Factor Surveillance System (BRFSS).

In addition, insufficient sleep is also harmful to social well-being and the economy: falling GDP and lower productivity (Hafner *et al*, 2017).

The current phase of the Covid pandemic has deserved a lot of academic attention from the biomedical sciences, when sleep is considered particularly relevant to face stressful situations (Paiva, T.: 2021) and calamity.

SONO UNEMPLOYMENT AND SLEEP

The literature on the relationship between unemployment and sleep is thin and focuses on the impact of the macroeconomic labor market. Furthermore, the results are not always congruent. Statistical analyzes at the macro level on the use of time in unemployment show contradictory results, despite the exploration of the same source. Antillón et al. (2015) concluded that the increase in the unemployment rate was statistically correlated with the increase in sleep duration. However, Ásgeirsdóttir and Ólafsson (2015) found no consistent relationship between unemployment and sleep duration. The authors used different methodologies and none of the studies explicitly examined the sleep duration of unemployed citizens.

Maeda et al. (2019), in Japan, concluded that unemployed men and women were more likely to have insomnia than employed ones. For Knabe et al. (2010) unemployed Germans sleep almost one hour more than employed people.

However, there is little evidence regarding the impact of unemployment on sleep. Blanchflower and Bryson (2020; 2021) analyzed data on a total of more than 3.5 million individuals in the US (2006-2019) and revealed patterns of sleep disruption that vary according to labor market situation. The authors observed sleep measured by hours in a day and by days in a month. They also

measured whether sleep is disturbed over a fortnight, along with the perception of problems falling asleep (sleep latency) or, the contrary, oversleep. Blanchflower and Bryson (2019: 2) conclude that "the short-term unemployed have more short- and long-term sleep than the employed"; in addition, the data show that the unemployed are more likely to suffer from sleep disorders. The authors also differentiate short-term and long-term unemployment and conclude that sleep disturbances are greater for the long-term unemployed and for the unemployed who say they are unable to work.

CONCLUSIONS AND FINAL REFLECTIONS

This work tries to answer the initial question "Does unemployment affect sleep?" by exploring of recent literature regarding the complex relationship between "unemployment, health, and sleep". First, we address the relationship between work, employment, and unemployment and the relevance of the debate. Subsequently, we deal with its connection with the health, and sleep of those who live in situations of unemployment.

As we discussed in previous surveys, unemployment attacks everyday personal and family life; disturbs the organization of time and space; has financial impact; it weakens the social status of those who suffer from it, while learning a new social role is designed, made possible by the creation of social rights in modern states: the social role of the unemployed.

In fact, the experience of unemployment implies changes in everyday individual and family life. Consequently, it is likely that being unemployed also disturbs sleep.

The complex relationship between unemployment and health has deserved much investigation, especially in the health sciences, as well as the relationship between sleep and health. However, dyad sleep and unemployment have received less attention. Besides, sleep has been studied mainly by the health sciences.

The reviewed studies lack agreement on results and use different methodologies that make comparability difficult.

We consider it likely that unemployment is a variable whose relationship with sleep implies an assessment of the relationship with other variables, such as: gender, age, education, socioeconomic level, health, marital status and area of residence. Depending on the person, sleep patterns can be conditioned by age, sex, health status, and environmental and personal changes (Berger et al., 2019).

The review of the scientific literature allows us to conclude that unemployment is a social and economic problem with an impact on psycho-sociological and family well-being.

In a previous work (Marcano, I., 2015) we identified stages in the psychological breakdown process of unemployed people. We think of unemployment reactions as a dynamic process in transition between phases as opposed to a static approach. The mere opposition of the "shock" phase to the "optimism" phase seems simplistic.

The sparse research results relating to the relationship between unemployment and sleep stimulate our interest in pursuing careful research in the Psychosociology of Health and Sleep on what seems to emerge as a complex relationship.

As so, we want to go further. We are planning a participatory action research intervention.

Aim: To design and implement a plan among involuntary unemployed people to -

a) assess the sleep impact of unemployment;b) improve sleep education and awareness of self-empowerment to change.

Design and Method: The improvement plan will be designed in collaboration with 3 professionals, and 3 involuntary unemployed people.

Involuntary unemployed people will be asked to fill out a psychological questionnaire scale about self-sleep: Pittsburgh Sleep Quality Index – Portuguese version (PSQI-PT).

Conditions: To be part of the education of sleep and empowerment group implies an unsatisfaction self-reported sleep, measured using the de Pittsburgh questionnaire scale; besides, the agreement to participate is a must.

4 groups with 20 persons each (involuntary unemployed people) reporting self-sleep poor quality will be organized considering gender, age, school education levels, and health problems reported.

Time Schedule: 2023 and 2024.

Duration of each group activity: 3 months

This study proposal takes a methodological approach based on participatory action research concerning sleep education, and empowerment to change. We may say that it is not a common among adult population.

Type of intervention: a cognitive, and sociocultural approach to get self-skills on sleep, and empower to change life situation.

Emphasizing the importance of sleep in life and life in sleep will allow emphasizing health and educating the resilience and ability of every unemployed person to adapt to the challenges of the physical and social environment.

REFERENCES

Afolalu, E.F. Ramlee, F. & Tanga, K.Y. (2018). Effects of sleep changes on pain related health outcomes in the general population: A systematic review of longitudinal studies with exploratory meta-analysis. *Sleep Medicine Reviews*, (39), 82–97.

Antillón, M., Lauderdale, D. S. & Mullahy, J. (2015). Sleep behavior and unemployment conditions. *Economics & Human Biology*, (14), 22-32.

Austin, Benjamin A., Glaeser, Edward L. & Summers, Lawrence H. (2018): *Jobs for the Heartland: Placed-Based Policies in 21st Century America. Working Paper 24548*. National Bureau of Economic Research, Massachusetts, EUA. http://www.nber.org/papers/w24548

Berger, A. M., Kupzyk, K. A., Djalilova, D. M., & Cowan, K. H. (2019). Breast cancer collaborative registry informs understanding of factors predicting sleep quality. Supportive care in cancer, 27, 1365–1373. https://doi.org/10.1007/s00520-018-44

Blanchflower, D. G. & Bryson, A. (2021). Unemployment and Sleep: Evidence from the United States and Europe. *Economics & Human Biology*, 43, December 2021, 101042.

Blanchflower, D. G. & Bryson, A. (2020). *Unemployment disrupts Sleep*. Working Paper 27814, http://www.nber.org/papers/w27814.

Blanchflower, D. G. (2019). Not Working: Where Have All the Good Jobs Gone? Princeton University Press. https://doi.org/10.2307/j.ctvc77cd9.

Cabrera Jaime, S., Martinez, C., Gonzalo Bachiller, V., Zarza Arnau, N., Martin Maldonado, L., Belén Manrique Palles, A., Artiga Sarrion, I., Tierno Sanchez, N., Julià Torras, J., Sancho, J. M., & Cabrera Jaime, L. (2022). Participatory action research intervention for improving sleep in inpatients with cancer. Journal of Clinical Nursing, 00, 1–12. https://doi.org/10.1111/jocn.16279

Exelmans, L., Van den Bulck, J. (2016). Bedtime mobile phone use and sleep in adults. Social Science and Medicine, (148), 93-101.

Frasquilho, D., Matos, M.G. et al. (2016). Unemployment as a source of mental distress to individuals and their family: Unemployed parents' perceptions during the economic recession. *International Journal of Social Psychiatry*, 62(5), 477-86. DOI: 10.1177/0020764016650469 (IF=1.15)

Freud, S. (1929/2002). O Mal-Estar da Civilização. Imago. Rio de Janeiro.

Guza, E., Gao, L., & Lippke, S. (in press). Internet behavior and satisfaction with sleep, health, quality of life and physical activity self-efficacy as components of subjective well-being: Findings from an online survey [Accepted manuscript]. *Europe's Journal of Psychology*. http://doi.org/10.23668/psycharchives.5068

Hahn E., Specht J. et al. (2015). Coping with Unemployment: The Impact of Unemployment Duration and Personality on Trajectories of Life Satisfaction. *European Journal of Personality*, 29(6), 635-646. doi:10.1002/per.2034

Kidwai, A., & Sarwar, Z. (2015). Psychological impacts of unemployment-evidence from the literature. Review of Integrative Business and Economics Research, 4(3), 141.

Kossen, C., & McIlveen, P. (2018). Unemployment from the perspective of the psychology of working. *Journal of Career Development*, 45(5), 474-488.

Kwok, C.S., Kontopantelis, E.; Kuligowski, G. et al. (2018), Self-reported sleep duration and quality and cardiovascular disease and mortality: a dose-response meta- analysis, *Journal of the American Heart Association*, 7(15).

João, K. A. D. R., Becker, N. B., Jesus, S. N., & Martins, R. I. S. (2017). Validation of the Portugal version of the Pittsburgh Sleep Quality Index. *Psychiatry Research*, 247, 225–229.

Maeda, M., Filomeno, R. et. al. (2019). Association between unemployment and insomnia-related symptoms based on the Comprehensive Survey of Living Conditions: a large cross-sectional Japanese population survey'. *Industrial Health*, 57(6),701–710.

Marçano, I. (2016, June 27-29). What about feelings? Psychological well-being and unemployment in Portugal [Paper presentation], *European Society for Health and Medical Sociology*, 16th Congress, Genève, Switzerland. https://www.unige.ch/sciences-societe/socio/fr/recherche/healthy-lives-technologies-policies-and-experiences.

Marçano, I. (2015). Amantes do Sr. Trabalho. Desemprego(s) em Portugal, Ed. Colibri.

Niekamp, P. (2018). Economic conditions and sleep. Health Economics, 28, 437-442.

OIT (2020). Impacto do COVID-19 nas desigualdades no mundo do trabalho, 17 de abril de 2020. https://www.ilo.org/lisbon/sala-de-imprensa/WCMS_741916/lang--pt/index.htm

Paiva T., Reis C., Feliciano A. *et al.* (2021). Sleep and Awakening Quality during COVID-19 Confinement: Complexity and Relevance for Health and Behavior. *International Journal of Environmental Research and Public Health.*; 18(7):3506. https://doi.org/10.3390/ijerph18073506

Piper, A.T. (2016), Sleep duration and life satisfaction. *International Economic Review*, 63, pp. 305-325.

Zhai, L., Zhang, H. e Zhang D. (2015). Sleep duration and depression among adults: a meta-analysis of prospective studies. *Depression and Anxiety*, 32(9), 664–670.

Portuguese Legislation and statistics: Decreto-Lei nº 64-C/89 de 27-02-1989. Portaria n.º 112-A/2019 de 12-04-2019. Portal do INE https://www.ine.pt/xportal/

Eurostat Statistics
Eurostat, the statistical office of the European Union
133/2022 – 1 December 2022
https://ec.europa.eu/eurostat
eaaa1272-82e4-2456-ed30-e6f29f801bd8 (europa.eu)