

World Journal of Advanced Research and Reviews

eISSN: 2581-9615 CODEN (USA): WJARAI Cross Ref DOI: 10.30574/wjarr Journal homepage: https://wjarr.com/



(RESEARCH ARTICLE)



Quality of life and work engagement of Brazilian immigrants in an Asian country

Guilherme Akira Otani 1,*, Carlos Antonio Negrato 1, Leandro Yukio Mano 2 and Alessandra Mazzo 1

- ¹ Department of pediatric dentistry, orthodontics and public health, Faculty of Dentistry Bauru, University of São Paulo, Bauru, SP, Brazil.
- ² Technological Development Scholarship in Information and Communication Technology from the National Council for Scientific and Technological Development (CNPq) Level A, São Paulo, SP, Brazil.

World Journal of Advanced Research and Reviews, 2023, 20(02), 357-365

Publication history: Received on 30 September 2023; revised on 06 November 2023; accepted on 08 November 2023

Article DOI: https://doi.org/10.30574/wjarr.2023.20.2.2283

Abstract

Objective: to measure and correlate the quality of life with the work engagement of brazilian immigrants during their period of stay in an asian country. Method: quantitative and descriptive study, carried out from October to November 2020, with sample recruitment in "snowball sampling". 157 brazilian immigrants were contacted. Those over 18 years of age who had stayed in the country for at least 2 months were included. Research Ethics Committee approval was obtained.

Results: 63 young adult brazilian immigrants, men and women, with high schooling, high workload and good income were selected. Quality of life presented varied results, indicating different experiences in the period. Work engagement's scores were average. The correlation between the scales did not indicate robust correlations between their domains.

Conclusion: the study indicated the influence of the country's culture on both components. New studies of preparatory interventions for brazilian immigrants about the country's language, society's functioning, and labor issues can positively impact the quality of life and work engagement of these individuals during their stay in the country.

Keywords: Emigrants and Immigrants; Japan; Occupational Health; Quality of Life; Work Engagement.

1. Introduction

The emigration movement of Brazilians who go to Japan in search of jobs with greater financial returns began in the 1980 and continues to this day. These are the so-called Brazilian dekasseguis [1]. The term dekassegui is used in the Japanese language to designate an individual who leaves their homeland to work temporarily in another country or region.

These immigrants are workers who have a high level of education compared to the average level of education for the Brazilian population. However, they perform less specialized and low-skilled functions in Japan with a small and limited expectation of ascending in the Japanese occupational structure [2]. They work mainly in the automotive, food and service industries, in companies in geographic regions such as Aichi, Shizuoka, Kanagawa, Saitama and Gunma. The trip's objectives are mostly related to improving the quality of life, saving money to open businesses in Brazil and paying for their own and/or their children's studies [1, 2, 3].

Quality of life can be defined as the individual's perception of their position in life, in the context of the culture and the precepts of values in which they live, and their goals, expectations, standards and concerns. It is understood that people's perceptions originate in the cultural context in which they are inserted, and it considers components of quality

^{*} Corresponding author: Guilherme Akira Otani.

of life, physical and psychological status, level of independence, social relationships, personal beliefs, environment and individual culture, therefore, from a subjective assessment, influenced by the cultural, social and environmental context [4, 5]. Quality of life at work has been increasingly addressed by a more sociological view, with broad attributes related to work activities, recognition, relationships with colleagues and supervisors, factors linked to organizational foundations, type of work and social links, among others [6].

In Japan, economic and social issues are deeply related to long working hours [7]. Thus, many population health problems are linked to working hours, such as "karoshi" (death from overwork), cardiovascular diseases, Burnout syndrome and mental disorders, especially suicide [8], which affect both the Japanese and the Brazilian dekasseguis.

These pathologies and their comorbidities are the central focus of classic studies of occupational health. As one of the forms of positive interventions for such issues, studies of human strength and its optimistic functioning have been gaining ground, with a change in the focus of this perspective, concentrating research on optimistic issues of the relationship between human beings and their functional occupation, the so-called engagement at work. While suffering workers feel exhausted and dehumanized, their engaged peers feel vigorous and enthusiastic about their work. Engagement is a positive, fulfilling, work-related state of mind characterized by vigor, dedication, and absorption. More than a momentary and specific state. It refers to a more persistent and affective-cognitive state that is not focused on a specific object, event, individual or behavior [9, 10].

According to the researchers, people who are more engaged at work tend to focus their activities on meaningful and pleasurable activities, consequently presenting better indicators of occupational health and better results in productivity [11].

There are few studies on Brazilian dekasseguis and their period of activity in Japan. However, it is important to understand how the working conditions, health and social relations of Brazilian dekasseguis are outside the industrial environment to highlight the necessary points for future intervention proposals. Thus, to improve such issues, this study aims to measure and correlate the quality of life with the engagement in the work of Brazilian dekasseguis during their stay in Japan.

2. Methods

2.1. Study design

This study had a quantitative and descriptive design.

2.2. Location

The study was carried out remotely from Bauru, São Paulo, Brazil. The recruitment of participants was carried out in conjunction with Japanese cultural associations spread across the State of São Paulo, Brazil, as they have contact with a large number of Brazilian dekasseguis residing in Japan and those who have already established worked there and returned to Brazil.

2.3. Period

The study was carried out from October to November 2020.

2.4. Population

157 Brazilian dekasseguis of Japanese descent were contacted, who worked in various industrial sectors such as food, metallurgy, and automobile. All contacts had already returned to Brazil.

2.5. Selection criteria

The inclusion criteria were being a Brazilian dekassegui, over 18 years old, who was or had been working in Japan for a minimum period of 2 months. Individuals who did not meet these criteria were excluded from the study.

2.6. Data collect

Participants were invited by e-mail and recruited using the "snowball sampling" technique, which consists of the interviewed dekassegui indicating three other individuals who met the established inclusion criteria.

In the body of the text of the e-mail addressed to the dekasseguis, the objectives of the work were explained, data confidentiality was guaranteed and the filling out of the instruments was guided. After reading the invitation, participants were invited through a link to fill out the electronic form provided by Google Docs®, the Informed Consent Term. Completing this document was a mandatory condition to be forwarded to the other study data collection instruments. It is noted that development of this research met the recommendations set forth in the Consolidated Criteria for Reporting Qualitative Research (COREQ).

2.7. Data collection instruments

A questionnaire to characterize the participants, aiming to obtain sociodemographic and economic data related to Japan's current period and period of stay.

Quality of life was assessed using the abbreviated World Health Organization Quality of Life (WHOQOL-bref) already translated and validated for Brazil [12]. It is a Likert-type instrument containing 26 questions divided into four domains: physical, psychological, social relationships and environment. This questionnaire comprises four response scales graded into five levels: intensity, ability, frequency, and evaluation. The intensity scale ranges from nothing to extremely; the capacity scale from nothing to completely; the rating scale ranges from very dissatisfied to very satisfied and very poor to very good. The frequency scale ranges from never to always [12].

Work engagement was assessed using the 17-item Utrecht Work Engagement Scale (UWES-17), which has already been translated and validated for Brazil [10]. The Likert-type instrument with 17 points consisting of two scales of responses graduated into six levels ranging from "never" to "always" and "not at all" to "every day", divided into three dimensions: vigor, dedication and concentration [10, 13]. Vigor refers to the energy and strength involved in work even in adverse situations; dedication characterizes the worker's connection with his/her work activity, in which he/she attributes meaning and purpose to work and finally, concentration is the state of immersion and absorption in the task in which the person is fully and pleasantly linked to the activity he/she is performing [13, 14].

2.8. Data processing and analysis

The data obtained were coded and double-entered into Excel® spreadsheets and analyzed using the Statistical Package for Social Science (SPSS), version 24 (Windows)®. In the data from the WHOQOL-bref scale [12], the assessment scores for each of the four domains and the two general questions were calculated. In the UWES-17 scale [10], the main scale score of the three scale subscales was computed by adding the scores of a particular scale and dividing the sum by the number of items in the subscale involved. A similar procedure was followed for the total score. The instruments were correlated with each other using the Pearson correlation (ρ).

The analysis of the Kolmogorov-Smirnov test showed a normal distribution (>0.05) of the sample. Thus, the T-test was used to compare the domains of the WHOQOL-bref [12] and UWES-17 [10] scales. The results were presented in tables and a discursive report and discussed based on the literature dealing with the subject.

3. Results

Sixty-three (100.0%) Brazilian dekasseguis participated in the study. Among them, 33 (53.0%) were female and 30 (47.0%), aged between 19 and 66 years (37.94 \pm 14.84), with a median of 35 years. Most participants, 35 (55.5%), were under 40 years of age. Concerning education, the vast majority, 62 (98.3%), had completed high school and/or higher education, and only one (1.7%) did not finish elementary school. Among the participants, 29 (46.0%) had completed higher education.

Most subjects, 39 (61.9%), reported going to Japan accompanied by a family member or friend. The average stay of Brazilian dekasseguis in Japan was 7 ± 7.93 years and a median of 3 years. Among the sample participants, 39 (61.9%) stayed for up to 5 years, two (3.7%) stayed for less than one year. The Brazilian dekassegui that stayed the longest was for 31 years. Table 1 presents the characterization of the studied population concerning income, work sector, working hours and knowledge of the Japanese language.

Table 1 Characterization of the subjects regarding monthly family income, work sector, working hours and knowledge of the Japanese language during the period of stay. Bauru, SP, Brazil

Socioeconomic characterization	Total	Total (%)
Monthly family income (USD)		
1000-2000	10	15.9%
2000-3000	30	47.6%
3000-4000	7	11.1%
4000-5000	13	20.6%
5000-6000	2	3.2%
6000-7000	0	0.0%
More than 7000	1	1.6%
Total	63	100%
Work Sector		
Food	30	47.6%
Eletronic	14	22.2%
Auto parts	11	17.5%
Services provision	4	6.3%
Others	4	6.3%
Total	63	100%
Daily Working Hours		
8 hours	28	44.4%
9 hours	9	14.3%
10 hours	6	9.5%
11 hours	2	3.2%
12 hours or more	18	28.6%
Total	63	100%
Daily Overtime		
Don't do overtime	2	3.2%
1 hour	8	12.7%
2 hours	34	54.0%
3 hours or more	19	30.2%
Total	63	100%
Japanese Language Knowledge		
Does not speak/understand	4	6.3%
Talks little	23	36.5%
Speaks without proficiency	24	38.1%
Speaks with proficiency level	12	19.0%
Total	63	100%

Dollar (USD) Rate in 23/11/2020 R\$5,62.

The reliability of the WHOQOL-bref (α = 0.91) and UWES-17 (α = 0.96) scales presented a good coefficient in the studied sample. The domain with the lowest average score on the UWES-17 was "Absorption" and the one with the highest average was "Vigor". In all domains of the UWES-17, the lowest scores attributed in the responses had a minimum score of zero (lowest possible value attributed) and maximum scores of 6 (highest possible value attributed). In the WHOQOL-bref, the lowest and highest assigned values were zero and 100 for the "Social Relations" domain, representing the minimum and maximum possible values. However, there was no significant difference (< 0.05) between the domains of each of the instruments in the sample.

Table 2 presents the subjects' responses according to the domains of the respective scales. Table 3 shows the ρ value between the domains of the quality of life and work engagement scales. Tables 4 and 5 show the ρ values between the domains of the scales, respectively, UWES-17 and WHOQOOL-bref.

Table 2 Distribution of subjects according to the domains of the WHOQOL-bref and UWES-17 scales. Bauru, SP, Brazil

Scale	Domains	Average	Minimum	Maximum	Standard Deviation
UWES-17	Vigor	3.50	0.00	6.00	1.59
	Dedication	3.10	0.00	6.00	1.66
	Absortion	3.10	0.00	6.00	1.46
	Total	3.20	0.12	6.00	1.51
WHOQOL-bref	Physical	67.00	38.00	94.00	14.00
	Psychological	65.30	6.00	94.00	14.92
	Social Relation	64.00	0.00	100.00	20.14
	Envorinment	66.20	13.00	88.00	14.74

Table 3 Pearson's correlation coefficient (ρ) values between the domains of both scales (WHOQOL-bref x UWES-17). Bauru, SP, Brazil

UWES-17	WHOQOL-bref			
	Physical	Psychological	Social Relation	Envorinment
Vigor	0.521	0.523	0.163	0.597
Dedication	0.407	0.389	0.192	0.601
Absortion	0.444	0.474	0.205	0.602
Total	0.477	0.483	0.193	0.623

Table 4 Pearson's correlation coefficient (ρ) values between the domains of the Work Engagement Scale (UWES-17). Bauru, SP, Brazil, 2021

UWES-17				
	Vigor	Dedication	Absortion	Total
Vigor	1.000	0.861	0.903	0.960
Dedication	0.861	1.000	0.913	0.956
Absortion	0.903	0.913	1.000	0.974
Total	0.960	0.956	0.974	1.000

Table 5 Pearson's correlation coefficient (ρ) values between the domains of the WHOQOL-bref). Bauru, SP, Brazil, 2021.

WHOQOL-bref					
	Physical	Psychological	Social Relation	Envorinment	
Physical	1.000	0.676	0.369	0.476	
Psychological	0.676	1.000	0.573	0.579	
Social Relation	0.369	0.573	1.000	0.516	
Envorinment	0.476	0.579	0.516	1.000	

4. Discussion

Few studies in the literature address the quality of life and/or engagement in the work of the Brazilian dekasseguis in Japan. Thus, this study inquired the relationship between these concepts among workers who are currently in Brazil.

In this study, the sample results show that most Brazilian dekasseguis are young adults with a high level of education, average knowledge of the Japanese language, length of stay in Japan of an average of seven years, working in the field of industrial food production. The sample studied indicated long working hours, with a monthly family income in Japan ranging between US\$1000.00 and US\$3000.00 (Table 1). Discrepant from previous studies [1], the findings found in the characterization of the participants in this study indicated a similar percentage of men and women, confirming that most women reported having gone to Japan in the company of a friend or family member.

The desire and/or need to immigrate, increasingly prominent in different age groups, may be due to the recent economic crises that hit Brazil, among which the economic crisis of the 1980s ("Lost years") stands out [15] and the 2008 financial crisis [16]. Thus, it is important to highlight that, as in other studies [1], in this sample, most of the subjects concentrate their chronological age in the range of 40 years, the most productive and economically active phase in different societies. However, the percentage of Brazilian dekasseguis aged 50 years or more found in this sample stands out, which is more numerous than the populations evaluated by other researchers [1].

Concerning education, the level of education of the Brazilian dekasseguis surveyed differs from the general Brazilian population [17] and is superior to other studies that evaluated other samples of these workers [1]. However, although many have completed higher education studies, they hardly exercise their labor practices in their areas of academic training, which can be explained by the lack of knowledge of the Japanese language [1]. The monthly income reported for the period of stay in Japan (US\$2000.00 – US\$3000.00) is similar to the average income of the Japanese population (US\$2352.00) [11]. However, it is much higher when compared with the average monthly income of most Brazilians (US\$ 546.11) [17], which infers the improvement in the financial conditions of the sample during the period of stay in Japan.

Workers in Japan have a much higher workload when compared to other countries. Hierarchically, the youngest are not usually absent from their jobs while the older adults or superiors do not finish their activities [7]. Working overtime is culturally common and generates an increase in income, which commonly pleases and is incorporated into the period of stay in the country by Brazilian dekasseguis. In the data collected in this study, it can be observed that most Brazilian dekasseguis worked more than 49 hours per week, which is greater than the workload of the vast majority of Japanese workers. In Brazil, the percentages of individuals who work more than 49 hours a week are around 14.6% among men and 8.1% among women [18]. In Japan, this percentage is greater than 30.0% among men and 10.0% among women. As a percentage of individuals who work more than 49 hours, Japan is second only to Hong Kong (29.0% and 31.0%, respectively) and South Korea (36.0% and 24.5%, respectively) [7].

Throughout the development of humanity, shorter workdays have been the object of struggle and discussions to improve the quality of life and health of workers [19]. However, in this sample, the long working hours and excessive overtime related to the country's culture are mainly related to the increase in income sought by Brazilian dekasseguis. In recent years, aware of the problems caused by overwork, the Japanese government has adopted measures to try to contain this situation. New legislation that defines a maximum limit for overtime is being implemented in the country [20].

An excessive workload can negatively impact the quality of life. The quality of life of respondents in this sample was assessed by the WHOQOL-bref. The sample results indicate that the scale domains had very varied values between minimum and maximum scores, indicating different experiences in Japan's period (Table 2).

In the study sample, in the assessment of the WHOQOL-bref domains, it can be observed (Table 2) that the lowest value attributed to this instrument was in social relations, which indicates that individuals do not feel engaged in society and the social work environment. Low scores in the psychological domain may indicate missing family, friends, and brazilian culture. The highest scores in the environment domain may indicate the greater ease of adapting to a developed country with low crime and violence rates. When they find themselves in a completely different reality from what was expected when they were still in Brazil, Brazilian dekasseguis suffer from difficulty adapting to the new country and its culture, despite being educated in Brazil with Japanese standards. In addition, the image of Brazil that predominates in Japan is negative, such as poverty, delayed development, high crime, which discourages Brazilian dekasseguis from assuming their nationality in Japanese society [20].

Such results are justified by factors related to issues of work, culture and language, which have already been demonstrated and discussed in this research, and were also found in other studies, which indicate that Brazilian dekasseguis do not take sufficient advantage of the cultural and leisure opportunities available in the country. About three-quarters have never been to a Japanese museum, and more than two-thirds have never been to a theater or cinema [1].

Concerning well-being at work, the scores of Brazilian dekasseguis measured using the UWES-17 were normatively classified as "average" (Table 2). Results overlap with the low scores found among native Japanese workers when compared to other contries [22].

Concerning the UWES-17 domains, all items presented the instrument's lowest and highest possible grade, which demonstrates that the experiences at work were heterogeneous among Brazilian dekasseguis during their stay in Japan. They also show that there is a strong or robust correlation (ρ) between all the factors (vigor, energy and concentration) of the UWES-17 (Table 4). Work is a multifaceted, complex, polysemic activity, carried out collectively or individually, consciously that transforms man's life and generates meaning in human nature and distinguishes it from any other animal [23]. Brazilian dekasseguis are individuals who face change from their countries of origin, who immerse themselves in a different culture, in search of better living conditions, even for a short period. Thus, the vigor, energy and dedication shown may be related to the fact that they basically comprise young adults, of working age, with resilience and resistance to adversities, adaptation and coping factors [24].

Although conceptually, the domains of the UWES-17 and WHOQOL-bref scales have presented results that can be discussed in depth. Data from the respondents in this sample demonstrate that the scales showed a moderate correlation between the physical and environmental domains of the WHOQOL-bref, with the domains of vigor, dedication, absorption and total score of the UWES-17. This factor was also identified between the psychic domain of the WHOQOL-bref with the domains of vigor, absorption and total score of the UWES-17. In the other components, the scales also indicated a weak or very weak correlation, mainly in the social domain of the WHOQOL-bref (Table 3), which may indicate that social relationships, social support and/or sexual activity are indifferent concerning performance and engagement in the work environment of Brazilian dekasseguis.

About two decades ago Brazilian dekasseguis had an opposite profile, in which almost all the socialization of dekasseguis was carried out through relationships at work, both through daily contact with Brazilian workers and the difficulty of creating bonds and maintaining contact with colleagues and/or Japanese neighbors [1]. Social relations at work have lost importance over time in the lives of Brazilian dekasseguis, which can be elucidated by the development of the Internet and the consequent strengthening of social relations at a distance, facilitating contact both with relatives who are in Brazil, as well as with other Brazilians residing in Japan. Such facts lead individuals not to be restricted to social interaction only with the people around them.

The approach to quality of life and well-being in the work of Brazilian dekasseguis is a subject little discussed in national and international literature. However, factors such as the heterogeneous aspect and the small number of the studied sample can be pointed out as limiting factors. Thus, this study can bring contributions, which highlights relevance.

5. Conclusion

In this study, the results demonstrate that the Brazilian dekasseguis are formed by young adults, men and women, who completed higher education studies, who perform a high workload, thus ensuring high income by Brazilian standards.

During the period of stay in Japan, the quality of life presented varied results, indicating different experiences. Among them, the correlation between the quality of life and well-being at work did not indicate robust correlations between the domains of the instruments used. Regarding work engagement, the scores were standardized as "average". However, the results indicated the influence of Japanese culture on the components of coping, well-being at work, and issues related to physical, psychological, social and environmental aspects related to quality of life.

Thus, to expand knowledge on the subject and identify forms of intervention, prospective studies of travel preparation interventions that make Brazilian dekasseguis aware of the Japanese language, society and labor issues in that country can have positive results in terms of quality of life and engagement of the work of these individuals in the period.

Compliance with ethical standards

Statement of conflicts of interests

The authors have no conflicts of interest to declare.

Statement of ethical approval

An Ethics Committee approved the present study and emitted a Certification of Presentation of Ethical Appreciation, held by the authors and available for the editors' appraisal. The authors authorized the use of the WHOQOL-bref and UWES-17 scales for their use in this study.

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

References

- [1] Beltrão KI, Sugahara S. Permanently transient: Brazilian dekasseguis in Japan. Rev Bras Estud Popul. 2006 Jun; 23(1).
- [2] Debiaggi SD. Nikkeis between Brazil and Japan: identity challenges, conflicts and strategies. USP Magazine. 2008 Sep 1; (79):165–72.
- [3] Sasaki E. Immigration to Japan. Advanced Studies. 2006 Aug; 20(57):99–117.
- [4] Loures MC, Porto CC. Quality of life assessment: guide for health professionals. Cien Saude Colet. 2009 Dec; 14(6):2317–8.
- [5] Ventegodt S, Andersen NJ, Merrick J. Holistic Medicine III: The Holistic Process Theory of Healing. The Scientific World JOURNAL. 2003; 3:1138–46.
- [6] Klein LL, Pereira BAD, Lemos RB. Quality of working life: parameters and evaluation in the public service. RAM Mackenzie Administration Magazine. 2019: 20(3).
- [7] Okamoto S. Hours of work and health in Japan. Ann Epidemiol. 2019; 33:64–71.
- [8] Kanai A. "Karoshi (Work to Death)" in Japan. Journal of Business Ethics. 2009 Jan 18; 84(S2):209-16.
- [9] Bakker AB, Demerouti E, de Boer E, Schaufeli WB. Job demands and job resources as predictors of absence duration and frequency. J Vocat Behav. 2003 Apr; 62(2):341–56.
- [10] Magnan E dos S, Vazquez ACS, Pacico JC, Hutz CS. Normatization of the Brazilian Utrecht Work Engagement Scale. Psychological Assessment Magazine. 2016 Jul 10; 15(2):133–40.
- [11] Bakker AB, Demerouti E, Schaufeli WB. The crossover of burnout and work engagement among working couples. Human Relations. 2005 May 22; 58(5):661–89.
- [12] Fleck MP, Louzada S, Xavier M, Chachamovich E, Vieira G, Santos L, et al. Application of the Portuguese version of the abbreviated instrument of quality life WHOQOL-bref. Rev Saude Publica. 2000 Apr; 34(2):178–83.
- [13] Schaufeli WB, Salanova M, González-romá V, Bakker AB. The Measurement of Engagement and Burnout: A Two Sample Confirmatory Factor Analytic Approach. J Happiness Stud. 2002 Mar; 3(1):71–92.

- [14] Bakker AB, Schaufeli WB, Leiter MP, Taris TW. Work engagement: An emerging concept in occupational health psychology. Work Stress. 2008 Jul; 22(3):187–200.
- [15] Cardoso Jr. JC. Crisis and deregulation of labor in Brazil. Social Time. 2001 Nov; 13(2).
- [16] Murphy A. An Analysis of the Financial Crisis of 2008: Causes and Solutions. SSRN Electronic Journal. 2008.
- [17] IBGE. Brazilian Institute of Geography and Statistics. Continuous National Household Sample Survey: Education. Rio de Janeiro; 2019 [cited 2023 Jun 30]. Available from: https://biblioteca.ibge.gov.br/visualizacao/livros/liv101736_informativo.pdf
- [18] IBGE. Brazilian Institute of Geography and Statistics. Family Budget Survey: First Results. Rio de Janeiro; 2018 [cited 2023 Jun 30]. Available from: https://biblioteca.ibge.gov.br/visualizacao/livros/liv101670.pdf
- [19] Carneiro TL, Ferreira MC. Does working time reduction improve quality of work life? The experience of a Brazilian public organization. Rev Psicol, Organ Trab. 2007 Jun [cited 2023 Jun 30]; 7(1):131–57. Available from: http://pepsic.bvsalud.org/scielo.php?script=sci_arttext&pid=S1984-66572007000100007&lng=pt&nrm=iso
- [20] Yamauchi T, Yoshikawa T, Takamoto M, Sasaki T, Matsumoto S, KayashimA K, et al. Overwork-related disorders in Japan: recent trends and development of a national policy to promote preventive measures. IndHealth. 2017; 55(3):293–302.
- [21] Ishikawa EA. The ethnic identity of young Brazilians in Japan. Japanese Studies. 2016 Mar 7; (36):29–42.
- [22] Shimazu A, Schaufeli WB, Miyanaka D, Iwata N. Why Japanese workers show low work engagement: An Item Response Theory analysis of the Utrecht Work Engagement Scale. Biopsychosoc Med. 2010; 4(1):17.
- [23] Neves DR, Nascimento RP, Felix Jr MS, Silva FA da, Andrade ROB de. Meaning and significance of the work: an analysis of articles published in journals associated with the Scientific Periodicals Electronic Library. EBAPEBR notebooks. 2018 Jun; 16(2):318–30.
- [24] Angst R. Psychology and Resilience: A literature review. Psychology Argument. 2017 Nov 10; 27(58):253.