ORIGINAL ARTICLE



Work satisfaction and job permanence in artistic careers: the case of musicians in Belo Horizonte, Brazil

Jonas da Silva Henrique^{1,2} · Ana Flávia Machado² · Mariangela Furlan Antigo²

Received: 27 July 2021 / Accepted: 4 December 2022 / Published online: 28 December 2022 © The Author(s), under exclusive licence to Springer Science+Business Media, LLC, part of Springer Nature 2022

Abstract

Working conditions of musicians are marked by several specific characteristics that differ the occupation from most others in the labor market. For instance, nonpecuniary aspects of the profession may have a greater influence on the individuals who pursue musical activities than in most other occupations. Moreover, musicians are more susceptible to uncertainties in the short run and regarding the duration of their careers. Besides, informality and underemployment rates tend to be higher in the music industry when compared to the rest of the labor market. This paper aims to better understand musician's labor market participation using primary data. We conducted an online survey between February and December 2020, gathering data about working conditions, in particular job satisfaction and turnover, with all the musicians from Belo Horizonte who were registered and not were registered in musician's association. Belo Horizonte is known as a unique city and a highly heterogeneous environment for the development of the music industry. Thus, using work satisfaction indicators and Kaplan-Meier survival model, controlled by personal and work-position variables, this study highlights that most musicians were neither satisfied nor dissatisfied with their work. However, satisfaction was positively correlated with the following characteristics: being protected by social security, having a music career as main occupation, and holding a degree in music. These traits were also important for musicians to remain in the occupation throughout 2020, an atypical period due to the COVID-19 pandemic.

Keywords Musicians · Job satisfaction · Survival analysis · Brazil · COVID-19

 Ana Flávia Machado afmachad@cedeplar.ufmg.br
 Jonas da Silva Henrique jshenrique@cedeplar.ufmg.br; jhenriquebass@gmail.com
 Mariangela Furlan Antigo

maantigo@cedeplar.ufmg.br

¹ Federal University of Minas Gerais, Belo Horizonte, MG, Brazil

² Department of Economics, Federal University of Minas Gerais, Belo Horizonte, MG, Brazil

1 Introduction

A musician's career differs from most occupations in several aspects. They have an idiosyncratic lifestyle, which tends to be freer and with greater autonomy than for individuals in other types of occupations, with activities encompassing creational processes and non-regular working routines, based mainly on reputation and individual skills. Besides, their professional activities are commonly founded on short-term contracts, precarious working conditions and instability. These aspects may promote different levels of job satisfaction and high turnover rates among professionals.

Although the larger uncertainties of the professional trajectory of musicians, there are several vicissitudes of their activities, as non-pecuniary features of the profession, that may potentially promote extra work satisfaction. Thus, artistic careers are among the most rewarding ones in terms of satisfaction. In addition, according to Menger (1999), musicians commonly find several ways of developing their skills, which gives them autonomy to follow their own projects, recycle and reinvent themselves.¹ Hence, it is relevant to measure actual satisfaction of real-life artists, in particular musicians. Moreover, based on these aspects and the significant chance of failure, artists tend to develop a strong sense of community, which is usually recognized by society and especially by their peers, what may also enhance job satisfaction.

Brazilian music and musicians are recognized internationally for their originality in production and execution. The diversity of musical manifestations throughout the national territory has various influences, from the cultural expressions of black and indigenous music to traditional musical styles from other countries, in part due to the diversity of immigrants that Brazil received. All those influences built the Brazilian musical identity, and this eclecticism creates a unique context for the development of the music industry.

In particular, this same scenario is observed in Belo Horizonte, the capital of the State of Minas Gerais, located in the Southeast Region of Brazil. Belo Horizontes' musicians are known for their musical quality and diversity. Among the most outstanding, the *Clube da Esquina*, a group of musicians that deeply influenced Brazilian music, and the thrash metal band *Sepultura*, which is a heavy-metal reference in the World. Besides, there were several national pop rock and metal bands in the 80 s, 90 s and 2000s, instrumental music, fusion and jazz in the late 2000s, and the Symphonic Orchestra (created in 1977) and the Minas Gerais Philharmonic Orchestra

¹ Boredom with work is a common hazard in conventional careers because it saps away the workers' satisfaction due to repetitive tasks. This problem has long been identified by Adam Smith, who claimed that constant repetition of a task makes a person "become as stupid and ignorant as it is possible for a human creature to become", killing the worker's enthusiasm and artistic taste (SMITH, [1776] 2009). The idea is that artistic careers, due to focusing on abilities that require constant innovations in content, even if similar techniques are used, are less likely to be bored with work. In economic terms, "Boredom could be viewed as a state of disequilibrium which would never occur if an individual had sufficient resources which might be expanded to include skilled *cultural* consumption capital" (CAMERON, 2011, p. 85, emphasis added). This can be extended not only to consumers but also producers as well.

(created in 2005). Thus, this city is a unique and highly heterogeneous environment for the development of the music industry.

This richness of musical activities was, however, impacted by the worldwide COVID-19 pandemic. Consequently, musicians, performing artists, bars, concert halls and the entire cultural production chain were directly affected, as they were unable to perform activities in person without health risks. With the halting of events, all musicians were affected and had their main activities interrupted, from in-person classes to concerts and events.

Considering, therefore, the specificities of musician's economic activities, this paper aims to analyze their satisfaction and permanence in the profession in Belo Horizonte with two main objectives. The first seeks to identify the musicians' level of satisfaction with their profession trajectory, working conditions and incomes. The second objective is to assess whether the career is vulnerable in terms of turnover and to identify which factors are associated with the permanence or not in the profession.

Regarding those objectives, we conducted a primary survey between February and December of 2020, with a sample composed by musicians, both registered and not registered in the Ordem dos Músicos do Brasil (henceforth, OMB)² Participants were interviewed three times during the year 2020. The first wave took place during the months of February, March and April, with questions involving information about job satisfaction, personal, economic and professional trajectory characteristics. The second wave, which took place between June and August. The third and final wave was conducted between the months of October and December.

The primary data are organizing in terms of work satisfaction indicators that enable us to quantify what a musician desires from work and from a professional trajectory, and we use the Kaplan–Meier model to estimate the probability of the musician's remaining in their position throughout the year of 2020.

This paper has five sections, including this introduction. In the second section, we briefly review the literature on artists' economic activities. In the third section, we describe the data and the used methods. In the fourth section, we analyze the empirical results. Finally, we present the papers' conclusions.

2 Peculiarities of the artistic career—a brief review

Literature has identified some aspects that make the artists' labor market distinct from most others. A potential explanation is that artistic activities can generate higher job satisfaction than conventional work. This hypothesis may be associated with the non-monetary compensations of the adversities and tribulations found in the monetary features of this labor market (Throsby, 1994).

² Ordem dos Músicos do Brasil is a federal autarky that regulates professional musicians in Brazil. It legally represents musicians as a group of interest in the Republic. Minas Gerais regional council's website: https://www.ombmg.org.br/.

Thus, work satisfaction in the artists' labor markets is mostly related to an idiosyncratic way of life, which tends to be freer and with greater autonomy than for individuals in other types of occupations, with activities encompassing creational processes and non-regular working routines, based mainly on reputation and individual skills. In addition to the opportunity to enjoy fame and to integrate various skills, feelings and personal perceptions into their products that might enhance work satisfaction. It is worth mentioning that the work satisfaction achieved by the artist goes beyond public recognition. It also includes the prestige and importance obtained among his/her peers. In that sense, the notion of success, self-fulfillment and happiness with the artist's own work are directly related to a myriad of rewards (Menger, 1999).

Steiner and Schneider (2013), using data from 1990 to 2009 from Germany, show that, in average, artists declare themselves quite satisfied with their work. The differences that distinguish the level of job satisfaction are tied to the unique traits of their work. Differences in remuneration, number of hours worked, and artistic personality partially explained the differences observed in work satisfaction. On the other hand, the high rate of self-employed workers among artists was negatively correlated with work satisfaction.

However, other authors show that the artistic career, including musicians, is not as satisfying as this passionate model suggests. Wheatley and Bickerton (2017) have analyzed the artistic practice by musicians and the well-being from playing instruments. Their findings show that, although musicians' performances are therapeutic in a broader sense, the relationship with satisfaction and well-being is not straightforward and the results are inconclusive. When the authors applied an econometric strategy on the Understanding Society data in Great Britain, they show that the satisfaction of musical performance is positive when it comes to leisure hours, but the same is not verified when the relationship with working hours is established. In their words:

"... positive leisure experience is derived from participation in arts, culture and sport, evident in greater satisfaction with life and leisure, and general happiness; 2. the characteristics of arts, cultural and sporting activities are important in understanding their relationship with SWB³ including the effects of frequency of engagement; 3. limited evidence, with the exception of engagement in mild sport, of spillover from arts, cultural and sporting activities into job satisfaction...". (Wheatley, Bickerton, 2017, p. 39)

The same authors, in a paper from 2019, using the same database, showed that only regular attendance at cultural activities ensured well-being.

Bille and Jensen (2018), adopting survival models to study the Danish art market, pointed out that formal education can provide important skills, but that there is little influence on career income. When analyzing the impact of formal artistic education on income, the authors observed that experience is actually one of the most important traits for survival in a music career. They understand that artists have different traits

³ Subjective well-being.

when compared to other careers that involve a similar number of years to completely become a professional.

In a similar vein, Eikhof and Warhurst (2013) contested the meritocracy discourse in Florida's (2001) work on the creative class and found no significant evidence that schooling and experience would open doors for artists. Eikhof and Warhurst (2013) pointed out that networks already consolidated by family members, friends and critics are much more important for the success of the artists' career than their training. O'Brien et al. (2016) also questions openness and meritocracy in the creative and cultural industries in Britain. Social class is a reference for remuneration much more than education. Therefore, opportunities are not the same for individuals with the same educational level.

Lindström (2016) developed a qualitative study to observe the relationship between low income, job insecurity and multiple jobs for artists holding a Master of Fine Arts degree from the Royal Institute of Arts in Stockholm. The respondent's experience on artistic and main work illustrates the issue of continuation and disruption in artistic careers. Artists commonly have multiple jobs as a strategy for upholding their artistic work.

Hennekam and Bennett (2017), when conducting a qualitative study with artists from the Netherlands, Perth and Vancouver, point out similarities in the work of those agents, despite being in different countries. Professional activities tend to be more precarious than stable, characterized by lower wages, with fewer benefits and modest coverage, having higher mobility between occupations, under-employment and unemployment throughout the career. Usually, they have another source of income and manage to become stable by reputation and by joining some important network. Campbell (2018) show, using the National Household Survey, that there is an overrepresentation of self-employed among artists in Great Britain and they are not employed throughout the year, experiencing moments of lack of work and this situation is even worse for young people. In addition, Alacovska and Gill (2019), when investigating the creative and cultural sectors outside the western central axis, concluded that most activities of the employed in this sector was informal and precarious, anchored in community exchanges and not in institutional practices and norms, especially in places, such as Latin America, Africa and Asia.

Given that there is no certainty of stable income and even stable demand, artists normally experience career instability. This situation is deemed to be even worse through periods of reduced economic activity, and specially in periods with health issues, such as the COVID-19 pandemic. Through an economic and sanitary crisis, artists may experience lower job satisfaction and lower career survival, as they are more prompted to face instabilities of demand and uncertainties. Motivated by those questions related to the artists' work permanence and satisfaction, we analyze the professional musicians in Belo Horizonte.

3 Methodology

In order to build our database, we collected data from February to December 2020, in the city of Belo Horizonte, state of Minas Gerais, Brazil. The applied questionnaire involves questions specific to the musician's work universe, but not about the process, procedures or the way that musicians develop their work. The survey contains information about satisfaction, personal characteristics and professional trajectory.⁴

The data collection occurred through online interviews, with a self-applicable form sent by e-mail, at first only with the musicians registered at the Belo Horizonte's OMB. In a second moment, to achieve a larger representation, we included other musicians who were not affiliated to OMB. The decisive criteria for the participation in this research was to occupy at least one work position as a musician.

To calculate the sample size, we used the simple random sampling formula with replacement for finite populations, represented by the following equation:

$$n = \frac{NZ^2 p(1-p)}{(N-1)e^2 + Z^2 p(1-p)},$$
(1)

in which, n = sample size; N = musicians population size; e = margin of error (in decimal percentage); z = Z score; and p = expected level of statistical significance.

The letter *N* represents 15,000 musicians, which is the approximate number of musicians working in the city of Belo Horizonte, as reported by the OMB. We chose maximum variance, with a 95% confidence interval and a 5% margin of error. That guarantees a level of confidence and estimation error sufficiently acceptable for a minimal sample of 375 interviews for a statistically rigorous analysis.

Participants were interviewed three times during the year 2020. The first wave took place during the months of February, March and April, with questions involving information about job satisfaction, personal, economic and professional trajectory characteristics, totaling a sample of 380 interviews. The second wave, which took place between June and August, brought together 190 musicians who agreed to continue in the research. In the third and final wave, between the months of October and December, 86 musicians participated.

In the case of the second and third waves, the questions were adjusted to capture the impact caused by COVID-19 and its implications for the musician's permanence in the occupation.

In the city of Belo Horizonte, restrictions on movement, agglomeration and social distancing policies began on March 20, 2020, prohibiting all activities with the potential of agglomeration. The period of abnormal situation and public calamity, resulting from the public health emergency caused by COVID-19, remained throughout the year. Only on October 27, 2020, theaters and concert halls reopened with reduced audiences⁵ Those restrictions had a direct impact on

⁴ The questionnaire can be provided on demand.

⁵ The Table 8 with the schedule of restrictions is in the Appendix.

Table 1 Variables related to sat	isfaction. Source: Prepared by the autho	ors (2020)	
Endogenous variable	Perception variables		Exogenous variables
Global satisfaction index	Prestige (work environment)	Q1—Social prestige Q2—Prestige from close colleagues Q3—Support of colleagues in the profession (emo- tional and instrumental)	- Contribution to social security Musician as main or secondary occupation Educational level (in music and other areas) Origin
	Satisfaction with the professional trajectory	Q4—Satisfaction with working in music Q5—Satisfaction with remuneration Q6—Professional opportunities Q7—Satisfaction with work outside of music (hypothetical or not)	Race Gender
	Emotional satisfaction	Q8—Career fatigue (last four months) Q9—Chances of job exit (next four months)	

(20
e authors
th
ą
Prepared
Source:
satisfaction.
to
related
Variables
Ξ

the musician's work in Belo Horizonte in 2020, since there was no vaccine coverage forecast for the population in the analyzed period.

To assess the level of work satisfaction with music careers, we summarize our variables in Table 1. The Global Satisfaction Index (GSI), an endogenous variable, is composed by data related to how musicians perceive their own careers, considering intrinsic variables, data about prestige, professional and emotional trajectories. We also included exogenous variables, such as personal traits, motivations to work with music and others.

The satisfaction questionnaire was based on Tamayo (2000) and Spector (2012). The authors define work satisfaction in two ways: one-dimensional and multidimensional. In the one-dimensional analysis, one studies how musicians perceive their own work as a whole, and how global satisfaction is created. In the multidimensional analysis, one can analyze certain specific points that help in the overall quantification in different groups, using perception variables and exogenous data.

Thus, the work satisfaction indicators enable us to quantify what a musician desires from work and from a professional trajectory for each of the nine variables. Those questions give the interviewees the opportunity to quantify their perception of the addressed topics from 1 to 10 –in which 1 stands for extreme dissatisfaction, and 10 stands for extreme satisfaction. The questions are available in the appendix.

To calculate the Work Satisfaction Indicator score with music, for each obtained result, the corresponding values of the nine questions addressed are summed up and, thus, their average is calculated.

As the instrument of this research is of the self-applicable type, this might lead the interviewee to evaluate different points of one's own relationship with the work. Considering that, we chose to use and adapt the following categorization:

- 1. Dissatisfied: when the musician is extremely or very dissatisfied;
- 2. Neither satisfied nor dissatisfied: when the musician is satisfied and/or dissatisfied with several points;
- 3. Satisfied: when the musician is very or extremely satisfied.

Our investigation about musician's job permanence in Belo Horizonte also used the results derived from the primary data collected throughout the year 2020 (aforementioned).

In addition to the stylized facts, 2020 also added an exogenous shock, that is, the New Coronavirus (COVID-19) pandemic. Thus, data collection in the second and third waves of our research incorporated related data to the impacts of the pandemic on musicians.

To evaluate the active musicians' job permanence in Belo Horizonte, as well as to evaluate their exit rate, we used the method of survival analysis, following Colosimo and Giolo (2006). We chose the Kaplan–Meier estimator (Kaplan; Meier, 1958; Colosimo; Giolo, 2006, p. 34–42). This nonparametric estimator, also known as the limit product estimator, applies the survival function for observations given by survival times $(t_1, t_2, ..., t_n)$ independently and identically distributed:

Personal traits (%)	1st stage	2nd stage	3rd stage
Men	81.10	77.60	79.55
White	48.03	77.08	78.41
Age (average)	37.64 y	37.21 y	37.43 y
Belo Horizonte (non-migrants)	57.74	49.77	20.55
Graduate degree	77.69	86.98	96.59
Graduate degree in Music	32.28	64.46	76.79
Social Security	41.84	43.23	44.32
Musician as the main occupation	59.47	63.02	64.77
Music as the main source of income	60.79	63.02	65.91
Sample	388	190	88

Table 2 General traits of musicians. Source: Research data, prepared by the author (2021)

$$\widehat{S}(t) = \prod_{i/ti>t} \left(1 - \frac{d_i}{n_i}\right),\tag{2}$$

where d_i is the number of failures that occur in time t_i , and n_i is the number of observations at risk (which did not fail and did not suffer censoring) until time t_i (exclusive). d_i/n_i is responsible to represent the hazard function.

The main characteristic found in data for Survival Analysis is the incidence of incomplete information about the time of failure or occurrence of the observed event. That feature is called censoring. According to Lawless (1982) and Colosimo and Giolo (2006), there are three types of censoring⁶: (i) right-censoring, because the end of the interview period is prior to the outcome; (ii) left-censoring, because there is no information about the period before the research; (iii) to the random right-censoring, due to the individual's departure from the study due to causes unrelated to the experiment, without the event of interest having occurred.

For all types of censoring listed in the literature, the information on the occurrence of the analyzed event (failure) is greater than the time that the individual was monitored by the research. In this paper, the occurrence of being inactive as a musician can occur before or may occur after the period observed in 2020.

Therefore, we use the Kaplan–Meier estimator to estimate the probability of the musician remaining in the occupation throughout the year 2020. The most advanced form of application of this method is by observing the effect of covariates (groups with distinct characteristics) that may be associated to survival over the observed period.⁷

⁶ It is known that there are also type 1 and type 2 right-censoring, interval-censoring and truncation.

⁷ All statistical and graphical constructions in this study were made using Microsoft Excel© and Stata©.

Table 3 General characteristicsof musicians in Belo Horizonte	Ano	2019	2020	2021
– 2019 a 2021 (PNAD- contínua). <i>Source</i> : PNAD-	Men (%)	100.00	73.29 34.46	100.00 51.64
contínua, IBGE, prepared by the	Age-average	36.50	54.40	51.04
authors (2021)	Self declared color or ethny–White	0.00	100.00	100.00
	Self declared color or ethny-Black or Brown	100.00	0.00	0.00
	Sample	2	4	2
	Expanded sample	1241	2130	853

4 Results

This section presents the traits of the interviewed musicians, the analysis for work satisfaction and survival analysis, these last two with the control variables.

4.1 Sample composition

Table 2 shows the general traits of the sample. Given that we are analyzing a phenomena that is inherent to the universe of musician's work, our sample includes individuals with different traits. The only essential trait, however, is that the participants must have had at least one job as a musician (primary or secondary).

From the results shown in the table, in the first wave of interviews, the musicians were predominantly men, approximately half of them were of self-declared white ethnicity and around 37 years old on average. Most musicians were not migrants. In addition, it is observed that most musicians (77.69%) have a higher education degree and 32.28% of the interviewees have a degree in music. Moreover, given that only a reasonable small proportion of musicians contributed to social security through their job, one can concur that most musicians are not protected by social security. That result is in agreement with the findings by Hennekam and Bennett (2017), Campbell (2018) and Alacovska and Gill (2019) for the set of workers in the creative and cultural industries in other countries. Most musicians had music as their main occupation and source of income.

In order to characterize the sample of this study, we used data from the National Household Sample Survey (PNAD-continuous) carried by the Brazilian Institute of Geography and Statistics (IBGE). As the main objective of the sample is to analyze the Brazilian labor market, the sample is not representative for musicians. Despite that, it covers the same period of time of this research, being a complementing tool for the analysis.

Therefore, it can be seen, through Table 3, that the expanded sample highlights an universe of 1241 musicians in 2019, 2,130 in 2020 and 853 in 2021. The number of musicians represented in the PNAD-C (Continuous PNAD) is lower than the considered in the universe of this survey (approximately 15,000), which is based on information provided by the OMB/Minas Gerais.

The high incidence of men working as musicians in the city is notorious, reaching 100% of respondents in the years 2019 and 2021. The average age found in the PNAD-C data is very close to the results found in this study, ranging between 35 and 39 years old (except for 2021). Regarding the self-declared color, 100% of the sample declared to be white in 2020 and 2021.

Returning to Table 2, there is a decrease in the participation of individuals throughout the three waves of interviews, probably as a result of random censoring⁸ Although random censoring is beyond the control of the research according to Colosimo and Giolo (2006), we decided to use the maximum collected information available in both waves.

Among the percentage differences found in the three waves of interviews, the decrease in the proportion of non-migrants, the increase in musicians with some higher education and musicians with higher education in music are prominent. Also, it is important to highlight the high proportion of self-declared white musicians, and individuals protected by Social Security.

4.2 Results concerning work satisfaction

Information on work satisfaction was collected in the first wave of the interviews, from February to April, 2020, the period prior to the pandemic-related lockdowns. Therefore, results from that specific period are not influenced by social isolation yet.

Table 4 allows us to verify, through the Global Satisfaction Index, that 60% of the musicians interviewed perceive themselves as "neither satisfied nor dissatisfied" in their work. A third of the respondents declared to be very satisfied or even extremely satisfied. This can be positively related to their self-perception on traits involving prestige and professional trajectory and emotional features, the exogenous variables Table 4.

In order to explain the associations of the exogenous variables on the level of satisfaction, Fig. 1 highlights the different levels of satisfaction in personal traits. This analysis presents the levels of global satisfaction (blue squares) compared to the variable's perception of self-perceived income satisfaction (yellow circles) and work satisfaction (gray triangles).

The findings highlight that, regardless of the exogenous traits, the musician's global level of satisfaction in his/her work sample remains in the neither satisfied,

⁸ To investigate the type of random censoring identified in this research, a probit-type regression was performed, in which the dependent variable is the individual's participation through the research. In case of having participated in the three waves, the binary variable assumes a value equal to 1. For the other situations, participating in two waves, the value is equal to 0. In the first probit estimation, all identifiable covariates were able to distinguish certain groups of individuals. A second model was also estimated with the covariates considered in survival analysis. The regression with all identifiable covariates presented bias for emotional distress, higher education in music, age and if they do or do not have children. The regression with the variables used in this study identified bias for musicians with higher education and income reduction during the pandemic period. Those estimations can be found in the appendix. Although the random censoring identified in this study suggests that there is a problem of sample selectivity between the waves, resulting in an overestimated average duration of time, it is not possible to estimate the magnitude of that bias.

Scale		Global Satisfaction Index (%)	Prestige (%)	Professional trajectory (%)	Emotional (%)
Extremely or very dissatisfied (below 3.33)	Extremely dissatisfied (up to 1.66)	0.00	0.00	0.00	4.07
	Very dissatisfied (from 1.66 to 3.33)	3.15	12.7	0.00	3.62
Neither very satisfied nor very dissatisfied (from	Dissatisfied (3.33 to 5.00)	19.42	12.7	8.00	11.31
3.33 to 6.68)	Satisfied (5.00 to 6.67)	42.52	14.29	8.00	34.84
Very or extremely satisfied (over 6.68)	Very satisfied (6.67 to 8.33)	32.28	23.81	40.00	17.19
	Extremely satisfied (over 8.33)	2.62	36.51	44.00	28.96
	Minimum	1.88	1.00	1.50	1.00
	Mean	5.99	6.19	5.42	6.82
	Maximum	9.11	10.00	10.00	10.00

 Table 4
 Percentage degree of self-perception on job satisfaction. Source: Research data, prepared by the author (2021)

 Scale
 Global Satisfaction

Time interval (days)	Active occupation (%)	Inactive (Var. %)	Survival func- tion	Standard devia- tion	Confide interval	ence (95%)
1–29	100.0	3.4	1.0000	_	_	
30-31	96.6	3.4	0.9651	0.0198	0.8957	0.9886
60–61	93.3	2.2	0.9419	0.0252	0.8660	0.9754
85-86	91.0	1.1	0.9302	0.0275	0.8513	0.9680
90–91	89.9	1.1	0.9186	0.0295	0.8368	0.9603
105-106	88.8	1.1	0.907	0.0313	0.8226	0.9524
120-121	87.6	15.7	0.7442	0.047	0.6380	0.8234
137–138	71.9	1.1	0.7326	0.0477	0.6256	0.8135
144–145	70.8	1.1	0.7209	0.0484	0.6132	0.8034
150-151	69.7	7.9	0.6395	0.0518	0.5286	0.7309
160–161	61.8	1.1	0.6279	0.0521	0.5168	0.7203
170-171	60.7	1.1	0.6163	0.0524	0.5050	0.7097
180–181	59.6	6.7	0.5465	0.0537	0.4356	0.6445
195–196	52.8	1.1	0.5349	0.0538	0.4243	0.6334
198–199	51.7	1.1	0.5233	0.0539	0.4130	0.6223
203-204	50.6	1.1	0.5116	0.0539	0.4017	0.6111
210-211	49.4	3.4	0.4767	0.0539	0.3683	0.5773
235–236	46.1	1.1	0.4651	0.0538	0.3573	0.5659
240-241	44.9	2.2	0.4419	0.0536	0.3354	0.5430
265-266	42.7	1.1	0.4302	0.0534	0.3245	0.5315
270-271	41.6	4.5	0.3837	0.0524	0.2817	0.4847
300-301	37.1	1.1	0.3721	0.0521	0.2712	0.4729
330-331	36.0	3.4	0.3372	0.051	0.2399	0.4371
353–354	32.6	1.1	0.3256	0.0505	0.2296	0.4250
360-361	31.5	_	0.3256	0.0505	0.2296	0.4250

 Table 5
 Probability of musicians staying or leaving the occupation in 2020. Source: Results of the research, prepared by the authors (2021)

nor dissatisfied range, with values between 5.85 and 6.24. We can conclude that their global satisfaction level is reasonable stable among the traits and is average/ intermediate. Although it deals with satisfaction in leisure activities and not properly work, Wheatley and Bickerton (2017) conclude that, despite the musician's performance being therapeutic in a broader sense, the relationship with satisfaction, and therefore with well-being, is not straightforward.

Regarding income satisfaction, it is worth noting that the results are smaller than global satisfaction for all traits. That is, musicians tend to be more satisfied in general than their satisfaction with income, showing that non-monetary features of the profession are important to determine overall satisfaction. Differences among the trait are clearer than for overall satisfaction. Those who have answered to be neither satisfied nor dissatisfied (results ranging between 5.00 and 6.67) were mainly of musicians with a degree in music, musicians protected by social security, and



Fig. 1 Level of satisfaction–perception and exogenous variables. *Source*: Research data, prepared by the author (2020). By the value of the *t*-statistic, the hypothesis of equality of means is rejected. Test results can be found in the Appendix



Fig. 2 Satisfaction and level of formal education-endogenous and exogenous variables. *Source*: Research data, prepared by the author (2020). By the value of the t-statistic or by the p value, the hypothesis of equality of means is rejected. Test results can be found in the Appendix

those who had music as their main occupation. The other groups have shown lower levels of income satisfaction, classified as intermediate dissatisfaction with their income (results ranging between 3.33 and 5.00). The lowest values were observed for self-taught musicians, with social security in areas different than music and having music as secondary occupation. That is, music is only secondary in their lives when the labor market is concerned.

When analyzing work satisfaction, the results for all traits are above global satisfaction. All the groups presented a lot of satisfaction working with music. Moreover, one can observe that the highest level of self-perceived work satisfaction belongs to musicians protected by social security coming afterward the women and having music as main occupation. The least satisfied in this dimension are also among the least satisfied with income.

It is also possible to observe a connection between the level of satisfaction and the level of formal education. Figure 2 highlights the positive relationship between the self-perceived level of satisfaction (Global Satisfaction Index, work satisfaction and income satisfaction specific to musical work) and the musician's formal education level.

The results indicate a positive trend between educational levels and self-perceived satisfaction in all the observed variables. It should be noted that the lowest levels of income satisfaction occur with those who have declared not to have any formal education. Thus, the higher the educational level, the greater the self-perceived income satisfaction.

As only a third of respondents say they are very or extremely satisfied with their occupation, this suggests that the quality of the job, portrayed by the absence of social protection and low income, interferes in their perception of satisfaction. Thus, the hypothesis that becoming a musician is more guided by non-pecuniary than pecuniary returns becomes partially fragile, since only musicians with higher educational levels in music, social security contributors, and who have been working with music as their main occupation have greater overall satisfaction, both from working with music and the income derived from this professional activity. This is an expected result in any occupation, regardless of being an artist or not.

4.3 Job permanence

The Kaplan–Meier estimator was used to analyze the general job duration of Belo Horizonte musicians throughout 2020. The univariate analysis allows for a graphical observation of the results of the duration of the position in the occupation. In the previous analysis, the results came from the first wave. Here we used the data for the musicians who were present in the three waves.

Figure 3 shows the estimated survival function for musicians working in Belo Horizonte. The vertical axis represents the value of the function, that is, the probability of an individual remaining occupied as a musician for each period of time. The horizontal axis represents the temporal scale, measured in days. If t=0, S(t)=1, which indicates that at the initial time, beginning of the research, the individual



Fig. 3 Job permanence of a musician in 2020. *Source*: Results of the research, prepared by the authors (2021)

was occupied. The questionnaire was available to musicians from February 1st-to December 14th.

The results in Fig. 3 show that the survival function has a stair shape. Still, at t=120, a significant drop was observed. That information highlights the impact of the COVID-19 pandemic in the work of Belo Horizonte musicians, decreasing the probability of being employed around the third month. Table 5 shows the probability of the musician remaining in an active workplace after an elapsed period of time.

2020 was an atypical year and the results found in this study highlights that the first impact on the musician's occupation occurs approximately after the first 120 days. As shown in Fig. 3, these results match with the worsening of the COVID-19 pandemic and the prohibition of public events. It is possible to note that, as 2020 progressed, only 31.5% of the musicians remained working as musicians.

It is possible to observe the sample through interest groups with nonparametric analysis. Therefore, one can observe if musicians remained in this occupation throughout 2020, for individuals with different traits, such as gender, self-declared color (White and Non-White), age, social security protection, main occupation, main source of income and income reduction during the COVID-19 pandemic (Fig. 4).

As shown in Fig. 4, being a male and a white musician, being under 35 years old, being a musician protected by social security, having a degree in music, having music as the main occupation and source of income, were the traits associated with higher probabilities of being active throughout the year 2020. Moreover, those who had a lower income reduction and those who considered themselves



Fig. 4 Survival function for different groups—Kaplan–Meier. *Source*: Results of the research, prepared by the authors (2021)

Table 6Survival curve equalitytest statistics. Source: Resultsof the research, prepared by theauthors (2021)

Covariate	Log-rank	Wilcoxon
Gender	1.09 (0.2973)	1.81 (0.1782)
Color	1.49 (0.2217)	2.08 (0.1490)
Age	3.88 (0.0489)**	2.37 (0.1241)
Social security	14.08 (0.0002)*	11.34 (0.0008)*
Graduate degree in music	11.94 (0.0005)*	9.64 (0.0019)*
Music as main income	14.11 (0.0002)*	12.43 (0.0004)*
Music as main occupation	21.49 (0.0000)*	19.59 (0.0000)*
Income reduction	11.76 (0.0006)*	9.99 (0.0016)*
Global satisfaction Index	10.85 (0.0010)*	13.59 (0.0002)*

The value shown is χ^2 and, in parentheses, you have the *p* value. *Significant at 1%; **significant at 5%.

to be satisfied with the work, form the group with the highest probabilities of remaining in the occupation. Thus, it was observed that individuals older than 35 years old, not contributing to social security, for whom the music is not the main occupation and source of income and not having higher education in music are more likely to present discontinuities in their music career. In other words, those musicians accumulated greater relative probabilities of leaving the job during the observed period.

Covariate	Category considered	Estimated duration (days)	Standard deviation	Confident interval (9	ce 95%)
Gender	Women	206.67	28.78	150.26	263.07
	Men	241.49	12.73	216.54	266.44
Color	Non-White	204.74	27.29	151.24	258.23
	White	242.53	12.87	217.30	267.76
Age	Under 35 y	258.20	17.79	223.34	293.07
	Over 35 y	212.65	14.96	183.34	241.96
Social security*	No	199.86	14.32	171.79	227.91
	Yes	278.08	17.23	244.32	311.84
Graduate degree in music*	No	177.31	26.74	124.90	229.71
	Yes	275.39	16.86	242.35	308.43
Music as the main occupation*	No	170.16	16.40	138.01	202.31
	Yes	269.42	13.78	242.41	296.43
Music as main Income*	No	179.83	17.18	146.16	213.51
	Yes	262.67	14.14	234.95	290.39
Income reduction*	No	322.06	24.53	273.98	370.14
	Yes	214.77	12.17	190.92	238.64
Global Satisfaction Index*	Dissatisfied	160.00	21.88	117.106	202.89
	Satisfied	254.26	12.51	229.74	278.79

 Table 7
 Estimated duration of the complete period of staying in occupation, according to the musicians' traits in 2020. Source: Results of the research, prepared by the authors (2021)

The longest analysis time observed is censored, the average is underestimated.

*did not present overlaps in the confidence intervals

As a complement to the survival analysis, the homogeneity tests of the survival curves for the observed groups were performed using the Log-Rank and Wilcoxon tests. Those are described in Table 6.

The results corroborated with the null hypothesis for gender and color. For the variable of age, the null hypothesis was rejected only by the Wilcoxon test. For the other variables, the tests reject the hypothesis that there is no difference between the survival curves. That is, there were significant differences in the survival curves for higher education in music, social security, working with music as the main source of income and as the main occupation, income reduction during the COVID-19 pandemic and the Global Satisfaction Index covariates.

Table 7 presents the survival estimates, emphasizing the average duration of employment for each group of individuals.

The results shown in Table 7 corroborate with the differences found in Fig. 4. Among the traits in the analysis, musicians with greater job duration are those who have not suffered from any reduction in income, who are protected by social security, have higher education in music, and those classified as satisfied in the Global Satisfaction Index. Also, it is possible to observe that women (206.67 days) and Non-Whites (204.74 days) spend less time (in days) in the

occupation, compared to men and white individuals, however, there are overlaps in the confidence intervals.

5 Final considerations

This study began with the construction of a database in the city of Belo Horizonte, Brazil, during 2020. A total of 380 musicians, both registered and not registered in the OMB, were interviewed. The essential criteria used to define a "musician" was that one should occupy at least one working position as a musician. The data collected made it possible to describe specific phenomena found in the field of artistic work, reporting themes on career satisfaction and permanence in the job.

The results on work satisfaction highlight that, on average, the musician in Belo Horizonte is neither satisfied nor dissatisfied with one's work. The level of satisfaction is positively related in groups of musicians with higher education, either in music or another area of knowledge. Thus, these findings suggest that satisfaction is related to sheltered, stable employment with higher incomes. Hence a possible relationship between job satisfaction and non-pecuniary returns, as proposed by Throsby (1994), is partial.

For the specific case of the sample under analysis, the evidence suggests that the artist's reality is less romantic than imagined. Opportunities are created by family backgrounds, interaction within the music environment and the access to higher education—something that, in Brazil, is still very unevenly distributed. In that sense, results are in line with Eikhof and Warhurst (2013) and O'Brien et al. (2016), although family history-related variables and the formation of networks were not considered.

This situation was deemed worse with COVID-19. Regarding job permanence, there was a 55.9% reduction on the probability of remaining in the job after the first 120 days of analysis, indicating the negative effects of the pandemic on employment at the music industry. The nonparametric analysis allowed us to observe the survival function in occupation of different groups. Some groups, such as those who had higher education, had social security, music was the main source of income and occupation had greater probability of remaining active.

Thus, as in aforementioned studies in this paper, the musician's job market in Belo Horizonte is favorable for the group of educated people with social protection at work. While the impact of the pandemic on the work of artists in general cannot be overlooked, a sizable majority was indifferent or dissatisfied with their occupation and vulnerable in maintaining their jobs, which makes the assertion that artists derive more satisfaction from their craft than most other occupation questionable.

Appendix

See Tables 8, 9, 10, 11, 12 and 13.

Table 8 Restriction schedule on m	usicians, in the fight against	COVID-19 in Belo Horizonte-2020
Date	Degree	Summary
March 17th, 2020	N° 17.297	It declares an abnormal situation, characterized as a Public Health Emergency Situation, to preserve the health of the population
March 18th, 2020	N° 17.304	As of 03/20/2020, the indefinite suspension of Location and Operation Permits (ALFs) and authoriza- tions for carrying out activities with the potential for agglomeration of people
April 8th, 2020	N° 17.328	The decree suspends the use of squares and other public places for the practice of collective or individual sport and leisure activities that could bring agglomeration of people
April 20th, 2020	N° 17.334	It declares as of May 4, 2020, with effect until December 31 of the same year, a state of public calamity in the Municipality of Belo Horizonte, due to the pandemic caused by the coronavirus agent—COVID-19
May 4th, 2020	N° 17.351	It extends the ban on carrying out activities such as parties, celebrations, exhibitions, and events, in drive-in or in any location, public or private
September 26th, 2020	N° 17.437	Aldir Blanc Law—The text provides the distribution, through subsidy, for the maintenance of spaces, micro and small companies and cultural agents harmed by social distancing
October 27th, 2020	N° 17.458	Partial reopening of activities in theaters and concert halls, for performances with a reduced and exclu- sively seated audience
December 18th, 2020	N° 17.502	It extends the term of the state of public calamity due to the effects arising from the COVID-19 pan- demic, since there is no forecast of vaccination coverage
Fonte: City Council of Belo Horiz	onte. < https://www.cmbh.m	g.gov.br/covid-19/decretos-municipais > (accessed on January 17, 2022)

(2021)
the authors
Prepared by
Source: I
satisfaction.
about
Questions
able 9

Prestige

1. Does working with music bring social prestige?

2 Does working with music bring prestige with your closest peers?

3. Do you receive help and support from your co-workers/musicians? (Emotional and instrumental support)

Professional trajectory

4. What is your level of satisfaction when working with music?

5. What is your satisfaction with your salary or income compared to the potential you think you have?

6. How do you feel about personal opportunities in the professional career as a musician?

7. What is (or would be) your level of satisfaction when working in other areas (outside music)?

Emotional satisfaction

8. Have you felt emotionally worn out working with music in the last 4 months?

9. Do you intend to stop working with music in the next 4 months?

0	
2	
9	
ŝ	
5	
Ĕ	
Ξ	
a	
0	
Å	
ι, μ	
Š.	
2	
7	
E	
g	
5	
Ľ,	
д	
3	
5	
30	
Š	
-	
n	
.e	
5	
ĕ	
÷.	
÷	
E)	
s	
E	
.2	
Ħ	
E .	
g	
Ξ	
ā	
E	
Ē.	
þ	
E	
8	
-ĕ	
ã	
Η	
E	
.e	
ct	
ĕ,	
sf	
÷	
, G	
\mathbf{v}	
7	
p	
0	
75	
е	
tł	
÷	
Ð	
÷	
S	
té	
e.	
හු	
12	
é	
7	
4	
0	
ĭ	
· _	
a)	

Table 10 Average test for the	Global Satisfaction I	Index and remuneration satisf	faction. Source: Prepai	red by the authors (2022)		
Variable	Observation	Mean	Standard error	Standard deviations	[95% confidence	Interval]
Global Satisfaction Index	380	5.9912	0.0684	1.3342	5.856652	6.125804
Remuneration Satisfaction	380	4.4684	0.1232	2.4019	4.226144	4.71098
diff	380	1.5228	0.1012	1.972803	1.323818	1.721796
mean(diff) = mean(Global sati:	sfaction Index-remu	meration satisfaction)				t = 15.0471
Ho: mean(diff)=0						degrees of free-
						dom = 379
Ha: mean(diff) < 0		Ha: mean(diff) $!=0$			Ha: mean(diff)>0	
$\Pr(T < t) = 1.0000$		$\Pr(T > t) = 0.0000$			$\Pr(T > t) = 0.0000$	

Table 11 Average test for the	Global Satisfaction Index an	d job satisfaction.	Source: Prepared by	the authors (2022)		
Variable	Observation	Mean	Standard error	Standard deviations	[95% confidence	Interval]
Global satisfaction Index	380	5.9912	0.0684	1.3342	5.856652	6.125804
Work satisfaction	380	8.0473	0.1033	2.0139	7.844-234	8.250-503
diff	380	-2.0561	0.0815	1.5899	-2.216-444	-1.895 - 837
mean(diff) = mean(Global sat	isfaction Index-Work satisfac	tion)				t = -25.2201
Ho: mean(diff) $= 0$	Ha: mean(diff) $!=0$			Degrees of freedom $= 379$		
Ha: mean(diff) <0				Ha: mean(diff) > 0		
$\Pr(T < t) = 1.0000$	$\Pr(T > t) = 0.0000$			$\Pr(T > t) = 0.0000$		

Table 12 Probit regression model-all covariates. Source: Prepared by the second s	he authors (2022)					
Participated in the entire research = 1; did not participate = 0	Coefficient	Standard error	2	P>z	[95% Confidence	Interval]
Gender	4.7820	416.8595	0.01	0.991	-812.2477	821.8117
Whites	-4.6405	416.8595	-0.01	0.991	-821.6700	812.3891
Age	-0.0597	0.0270	- 2.21	0.027	-0.1126	-0.0068
Career time	0.0060	0.0227	0.26	0.793	-0.0385	0.0505
Children	0.6927	0.3627	1.91	0.056	-0.0182	1.4036
Origin in BH	0.4243	0.2933	1.45	0.148	-0.1506	0.9992
First or second job as a musician	-0.34853	0.405636	- 0.86	0.390	-1.14356	0.446504
Higher education in music	1.0160	0.3966	2.56	0.010	0.2386	1.7933
Other formations (no formation-omitted)						
Technical or professional education	0.4515	0.3829	1.18	0.238	-0.2990	1.2019
Higher education	0.3324	0.3513	0.95	0.344	-0.3561	1.0209
University education	-0.0246	0.4044	-0.06	0.952	-0.8171	0.7680
Music as main income source	0.3298	0.4352	0.76	0.449	-0.5232	1.1828
Social security	-0.1448	0.3525	-0.41	0.681	-0.8357	0.5461
Income reduction during the period of social distancing	-0.0543	0.3780	-0.14	0.886	-0.7951	0.6865
Moved from Belo Horizonte	0.2565	0.5107	0.50	0.616	-0.7445	1.2574
Received government emergency aid (COVID-19)	-0.4317	0.3030	-1.42	0.154	-1.0255	0.1621
Moved to another occupation (during the period of social distancing)	0.619898	0.334127	1.86	0.064	-0.03498	1.274775
Global satisfaction Index	-0.01409	0.1057	-0.13	0.894	-0.22125	0.19308
Emotional career burnout (during social distancing period)	1.480361	0.35389	4.18	0.000	0.78675	2.173973
Constant	-0.14451	1.208698	-0.12	0.905	-2.51352	2.224493
Log likelihood=	-60.499522		Prob > chi2 =		0.0007	
LR chi2(19) =	44.82		Pseudo $R2 =$		0.2703	

Participated in the entire research $= 1$; did not participate $= 0$	Coefficient	Standard error	Z	P>z	[95% Confidence	[Interval]
Gender	5.4408	290.0318	0.02	0.985	- 563.0110	573.8926
Color	-5.4953	290.0317	-0.02	0.985	-573.9470	562.9564
Age	-0.0008	0.0109	-0.07	0.942	-0.0221	0.0205
Origin in BH	0.0586	0.1985	0.30	0.768	-0.3304	0.4476
Higher education in music	0.7044	0.2431	2.90	0.004	0.2279	1.1808
Other formation (no formation-omitted)						
Technical or professional education	0.2865	0.2668	1.07	0.283	-0.2365	0.8094
University education	0.3528	0.2454	1.44	0.151	-0.1282	0.8338
Social security	-0.0109	0.2453	-0.04	0.964	-0.4916	0.4697
Music as main occupation	0.3256	0.2902	1.12	0.262	-0.2433	0.8944
Music as main income	-0.0812	0.3015	-0.27	0.788	-0.6721	0.5096
Income reduction during the period of social distancing	-0.7450	0.2816	-2.65	0.008	-1.2969	-0.1932
Constant	-0.7706	0.5717	-1.35	0.178	-1.8912	0.3500
Log likelihood =	- 111.85252		Prob > chi2 =		0.0016	
I.R. chi2(19) =	29.93		Pseudo $R2 =$		0.118	

717

Declarations

Conflict of interest No potential conflict of interest is reported by the authors.

References

- Alacovska, A., & Gill, R. (2019). De-westernizing creative labour studies: The informality of creative work from an ex-centric perspective. *International Journal of Cultural Studies*, 22(2), 195–212.
- Bille, T., & Jensen, S. (2018). Artistic education matters: Survival in the arts occupations. Journal of Cultural Economics, 42(1), 23–43.
- Cameron, S. (2011) The economics of sleep and boredom. In: (Ed.) *Handbook on the Economics of Leisure*. Cheltenham: Edward Elgar, (p. 79–99).
- Campbell, M. (2018). 'Shit is hard, yo': young people making a living in the creative industries. *Interna*tional Journal of Cultural Policy, 26(4), 524–543.
- Colosimo, E. A.; Giolo, S.R. (2006) Análise de sobrevivência aplicada. São Paulo: Edgard Blücher (380 p).
- Eikhof, D. R., & Warhurst, C. (2013). The promised land? Why social inequalities are systemic in the creative industries. *Employee Relations*. https://doi.org/10.1108/ER-08-2012-0061
- Hennekam, S., & Bennett, D. (2017). Creative industries work across multiple contexts: Common themes and challenges. *Personnel Review*, 46–1, 68–85.
- Kaplan, E. L., & Meier, P. (1958). Nonparametric estimation from incomplete observations. Journal of the American Statistical Association, 53(282), 457–481.
- Lawless, J. F. 1982 Statisticals models and methods for lifetime data. (580 p), New York: John Wiley.
- Lindström, S. (2016). Artists and multiple job holding: Breadwinning work as mediating between bohemian and entrepreneurial identities and behavior. *Nordic Journal of Working Life Studies*, 6(3), 43–58.
- Menger, P.M. (2006) Artistic labor markets: Contingent work, excess supply and occupational risk management. In: V. Ginsburgh, D. THROSBY, (Eds.). *Handbook of the Economics of Art and Culture* (v. 1, p. 765–811).
- Menger, P. M. (1999). Artistic labor markets and careers. Annual Review of Sociology, 25, 541-574.
- Menger, P. M. (2001). Artists as workers: Theoretical and methodological challenges. *Poetics*, 28(4), 241–254.
- O'Brien, D., Laurison, D., Miles, A., & Friedman, S. (2016). Are the creative industries meritocratic? An analysis of the 2014 British labour force survey. *Cultural Trends*, 25(2), 116–131.
- Smith, A. An inquiry into the nature and causes of the wealth of nations. [1776] 2009. <<u>https://www.gutenberg.org/files/3300/3300-h/3300-h.htm</u>>, access: 2 Jun. 2021.
- Spector, P. E. 2012 Psicologia nas organizações. São Paulo: Saraiva (481p).
- Steiner, L., & Schneider, L. (2013). The happy artist: An empirical application of the work-preference model. *Journal of Cultural Economics*, 37(2), 225–246.
- Tamayo, A. 2000 Axiological priorities and job satisfaction. RAUSP Management Journal, v. 35, n. 2, p. 37–47. Towse, R. Human capital and artists' labour markets. In: V.Ginsburgh, D. Throsby, (Eds.), Handbook of the Economics of Art and Culture, (v. 1, p. 865–894) 2006.
- Throsby, D. (1994) A Work-Preference Model of Artist Behaviour. In: Peacock, A., Rizzo, I. (Eds.), Cultural Economics And Cultural Policies. Springer, Dordrecht. https://doi.org/10.1007/ 978-94-011-1140-9_6
- Wheatley, D., & Bickerton, C. (2017). Subjective well-being and engagement in arts, culture and sport. Journal of Cultural Economics, 41(1), 23–45.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

Springer Nature or its licensor (e.g. a society or other partner) holds exclusive rights to this article under a publishing agreement with the author(s) or other rightsholder(s); author self-archiving of the accepted manuscript version of this article is solely governed by the terms of such publishing agreement and applicable law.