Economic changes and the meanings of work and money

Sabrina C. Barros a, b,∗, Livia O. Borges a, José Luis Álvaro-Estramiana b

a Universidad Federal de Minas Gerais, Belo Horizonte, Brazil
b Universidad Complutense de Madrid, Spain

A R T I C L E   I N F O

Article history:
Received 14 December 2016
Accepted 18 January 2017
Available online 27 February 2017

Keywords:
Meanings of money
Meanings of work
Construction workers

A B S T R A C T

The literature has shed light on the influence of macro-social contexts on the meanings of work and money. Bearing in mind the impact of changes in the economic cycles in the construction sector in Brazil, our aim is to compare the meanings of work and money, as understood by building construction workers in 2011 and 2015. The sample was composed of two groups, being 302 participants in 2011, and 125 in 2015. We used structured surveys specific to each issue studied, and carried out descriptive and inferential analyses. The results outline differences in the concept of work and money, providing evidence of the negative effects of the economic crisis on workers’ lives. Limitations and suggestions for further research are pointed out.

© 2017 Colegio Oficial de Psicólogos de Madrid. Published by Elsevier España, S.L.U. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

Los cambios económicos y el significado del trabajo y del dinero

R E S U M E N

Estudios previos han señalado la influencia de los contextos macro-sociales en la producción de los significados del trabajo y del dinero. Considerando el impacto de los cambios económicos en el sector de la construcción en Brasil, nuestro objetivo fue analizar dichos significados desde el punto de vista del trabajador, comparando dos períodos económicos del sector. Contamos con dos muestras diferentes, una realizada en 2011, que consta de 302 participantes, y otra en 2015, que consta de 125 participantes. Aplicamos cuestionarios estructurados específicos para cada fenómeno estudiado y realizamos análisis descriptivos e inferenciales. Los resultados mostraron diferencias en la percepción de los significados del trabajo y del dinero, así como los efectos negativos de la crisis económica en la vida de los trabajadores. Se describen las limitaciones del estudio y sugerencias para futuras investigaciones.

© 2017 Colegio Oficial de Psicólogos de Madrid. Publicado por Elsevier España, S.L.U. Este es un artículo Open Access bajo la licencia CC BY-NC-ND (http://creativecommons.org/licenses/by-nc-nd/4.0/).

The construction sector is traditionally known for following the country’s economic cycles (Gonçalves, 2015). According to the Departamento Intersindical de Estatística e Estudos Socioeconômicos (DIEESE, 2010), during the prior decade, especially after 2004, this sector in Brazil experienced a period of recovery in its activities, partially due to government incentives in infrastructure projects and in reduced taxes on industrial products. In 2010, for example, this sector showed 11.6% growth in Gross Domestic Product (GDP), above the national value of 7.5% (DIEESE, 2010). Such growth had an immediate impact on the increase of formal work posts. To illustrate this, the Employment and Unemployment Survey Data (PED, 2012), for the year 2011, indicated the highest relative growth (5.2%) in the generation of formal jobs in the civil construction sector, for the second consecutive year, compared to the industrial, commerce, and services sectors. At that time, Mello and Amorim (2009) pointed out the lack of specialized workers to meet the growing needs in the sector. In addition, the construction industry is widely known for being one of the principal means of access to formal employment for a considerable portion of the Brazilian population, mainly due to its capacity to employ a workforce with a low degree of formal education and/or specific training (Santos, 2010;...
Sousa, 1983; Takahashi, Silva, Lacorte, Cevenry, & Vilela, 2012). In
the building sub-sector, the focus of this research, this fact is more
evident since manual activities play a central role in the work
process, requiring a larger workforce from the organizations (Cockell,
2008; Oliveira & Iriart, 2008).

The economic growth in this period turned this sector into something promising and attractive, though there was no
significant impact on working conditions, which did not get the
same attention. This situation was characterized by precarious
working conditions, such as long working hours, high risk of
accidents (Silva & Borges, 2015), insalubrious environments, and
intense physical efforts (Cattani, 2001), as well as low salaries
and a high level of staff turnover in the sector (Borges & Peixoto,
2011; Oliveira & Iriart, 2008). To add to insult to injury, workers were
stigmatized as doing peon jobs (‘peão’); not only is this term derogati-
vely connected to being just a ‘pawn’ on the economic chessboard,
but above all to a capacity which requires strenuous physical effort
and very little recognition (Santos, 2010; Sousa, 1983).

More recently, the construction industry has been facing a cool-
ing period in its activities, affecting the number of formal jobs.
In 2015, this sector took the lead in job losses (DIEESE, 2016).
Pochmann (2015) noted in the same year a 54.3% increase in unem-
ployment. This fact has directly affected the lives of workers, either
by making it difficult to find suitable work in other sectors of the
economy, or by increasing financial instability and the fragility of
labor rights found in the informality and subcontracting to which
the workers are subjected (Cockell & Perticarrari, 2010).

Taking into account that the production of meanings of work
(e.g., Barros & Borges, 2016; Borges, 1997; Brief & Nord, 1990) and
of money (e.g., Barros, Borges, & Alvaro, in press; Furnham & Argyle,
2000; Moreira, 2002) reflect the social inclusion of people in the
different economic, historical, and social contexts, it is relevant
to analyze such meanings based on the periods of economic growth
(Barros, 2012; Barros & Borges, 2016) and retraction in the sec-
tor. Thus, we aim to compare the meanings of work and money as
understood by construction workers in 2011 and 2015.

Meanings of Work
The studies on the meaning of work are already consolidated
in Work and Organizational Psychology. Its founding reference in the
literature (Alvaro, Bérique, Crespo, Torregrosa, & Garrido, 1995;
Ardichvili, 2005; Bakuduk, Gonzalez, & Montilla, 2008; Harpaz &
Meshoulam, 2010) is the research carried out by the Meaning of
Work – International Research Team (MOW, 1987), which con-
tributed to the phenomenon’s comprehension from a cognitive
viewpoint (Bendassoli & Gondoan, 2014). In addition, the cited
MOW group showed empirically the importance of work in people’s
lives, introducing the concept of work centrality (Borges, Tamayo,
& Alves-Filho, 2005). Despite its relevance and diffusion in the
research, different social scientists have pointed out divergences
when identifying the phenomena proposed by the MOW Team
(e.g., how to contemplate the drawbacks of work, the differences
between ideal and real work?), a fact that has stimulated the con-
struction of models aimed at improving prior ones and adapting
them to the realities being investigated (Bendassoli, Alves, &
Torres, 2014; Borges, 1997; Fernandes, Gonçalves, & Oliveira, 2012;
Kubo & Gouveia, 2012).

In this study, we have adopted the Borges and Tamayo’s (2001)
model, that comprises four facets: centrality of work (the impor-
tance of work when compared to other areas of life), the value
attributes (what work should be), descriptive attributes (what work
is), and the hierarchy of such attributes (how they are organized in
order of importance). Even though the attributes are distinct, they
influence one another, indicating the dynamism of the meanings
of work (Borges, 1997; Varella & Borges, 2012).

Researchers such as Tette, Carvalho-Freitas, and Oliveira (2014),
who have used this model, found out that workers who are physically
impaired not only value work that contributes to their dignity
(financial independence and well-deserved economic return) but
also perceive it as a positive load (taking on and fulfilling responsi-
bilities), as well as a way to guarantee personal and family survival.
Silva, Kemp, Carvalho-Freitas, and Brighenti (2015) have identified
similarities between the types of value and descriptive attributes
when it comes to voluntary work, especially concerning achieve-
ment, working conditions, and fairness. Varella and Borges (2012),
in a study with bank employees between 1999 and 2005, identified
the importance attached to economic aspects and a wider percep-
tion of their work as a source of social status, financial rewards,
responsibility, and working conditions.

In the construction industry, different studies carried out with
workers indicate similar results for the value and descriptive
attribute types. In Pinheiro (2014), within the value attribute types,
the notable ones were personal and economic growth, and respect
and assistance, nearly matching Barros and Borges’ (2016) results,
which contain respect and acceptance expressions, followed by
source of achievement and economic independence. As for the
descriptive attribute types, in the first study the highlights were
work as a means to responsibility, and occupation, as well as to
personal and economic growth; in the second study, work was
seen as an occupation, followed by a feeling of responsibility,
compared the results with previous samples from workers in 1995
and 2011, and found a weakness in the notion that work should
be dehumanizing, exhausting, and hard-work recognition, a fact
equally observed in the studies by Pinheiro and by Barros and
Borges. The results of the studies showed that Borges and Tamayo’s
(2001) model is sensitive to the characteristics of the contexts and
to the changes that have taken place in a single occupation. At the
same time, they corroborate the literature about the influence of
social contexts on the meanings of work and the importance of
including broader levels of analysis in order to better understand
them. As indicated by Brief and Nord (1990), the changes at a macro
level, such as the economic cycles, can have an impact on the pro-
duction of meanings of work. In the period of growth, people would
tend to focus on opportunities and negative aspects at work. In the
case of economic retraction, people would express less dissatis-
faction with their jobs, regardless of the working conditions. Bearing
in mind the results obtained in previous studies and the aforemen-
tioned changes in the sector, this particular study will focus on
the following hypotheses: (H1) in the period of economic retrac-
tion, the construction workers are likely to present lower scores for
the value attributes such as source of achievement and economic
independence (TV1), expressions of respect and acceptance (TV2),
source of challenge and occupation (TV3), and auto-affirmative
(TV4), when compared to the growth period, suggesting lower ide-
als about work in those aspects; (H2) in the period of economic
retraction, the construction workers are likely to present higher
scores for the descriptive attributes such as physical effort and
dehumanization (TD1), when compared to the growth period, sug-
gestng a greater acceptance of the way work is perceived and
carried out.

Meanings of Money
The literature converges in considering the 1980s decade as an
important period for the development of studies on the mean-
ings of money. The investigative models developed from this
decade onward (Furnham, 1984; Tang, 1992; Yamauchi & Templar, 1982) have been used as a springboard for further research (e.g., Durvasula & Lyonski, 2010; Pimentel, Milfont, Gouveia, Mendes, & Vione, 2012; Roberts & Sepulveda, 1999) and, overall, have been empirically demonstrating the multiple dimensions of this phenomenon.

On revisiting the literature, Moreira and Tamayo (1999) and Moreira (2002) pointed out the limitations in the referenced models, highlighting the insufficient attention given to the theoretical assumptions applied to the development of these models and the lack of empirical support for the measurement instruments used. These authors proposed a model in order to overcome these limitations, identifying nine components situated in two separate poles: positive – progress, culture, and stability – and negative – inequality, detachment, conflict, and suffering. The component named pleasure presented characteristics of both poles.

Further research applied this model to different occupations and/or different groups of people. For public transport workers, for instance, money was associated with altruism (helping others) and social inequality (Tavares, 2003). In another study conducted on students, the meanings most associated with money were happiness, as an aspect influencing one’s choice of profession (Oliveira, 2010), as well as culture, concern, and detachment as aspects that influence the likelihood of getting into debt (Vieira, Ceretta, Melz, & Gastardelo, 2014). In the construction industry (Barros, 2012; Barros & Borges, 2016), transcendence was the component of the meanings of money most emphasized by the construction workers, indicating that money was associated with spirituality, as a means of expressing solidarity and a way of helping other people.

The meanings of money identified by the construction workers (Barros, 2012; Barros & Borges, 2016) match the characteristics of the occupation as well as broader aspects that span the sector, which were discussed earlier. Following the same line of thought and discussion developed in the previous section, we have come up with the following hypothesis: (H3) the construction workers, in a period of economic retraction, are likely to present higher scores in components such as conflict, suffering, and inequality, when compared to the growth period, reflecting the financial difficulties stemming from the instability of the labor market.

**Method**

**Participants**

Altogether, 427 workers in the construction industry took part in this study. The final sample was formed by two groups, one in 2011 (n = 302) and the other in 2015 (n = 125). Both field studies took place in Belo Horizonte. In the first group, the participants were formally contracted by two organizations (Barros, 2012; Barros & Borges, 2016). In the second group, due to the difficulty in the access to the organizations, we established the snowball technique (indication of people in the occupation) as a strategy for data collection, comprising workers formally hired by contractors, outsourced workers, freelancers, and those who worked as contractors. Both groups presented similar characteristics as far as gender and education level were concerned. However, the second group was somewhat older and had longer working experience in the construction industry, and less time at the present job (Table 1).

**Instruments**

To study the meaning of work we followed the facets found in Borges and Tamayo (2001). In both groups, we applied the Means of Work Inventory (MWI), composed of 68 items about work, measuring the types of value attributes (TV) and descriptive attributes (TD) (Table 2). Each participant had to provide two answers to each item, indicating what work should be and what it actually is. The answers were given according to a 5-point Likert scale, ranging from zero to four (maximum value). We employed an application strategy to workers with low literacy, previously tested (Borges & Barros, 2015; Borges & Pinheiro, 2002), presenting two color-printed scales in which Green would refer to value attributes and Blue to descriptive attributes. We identified the types of both attributes by using the Smallest Space Analysis (SSA) technique employed in previous studies (Barros, 2012; Barros & Borges, 2016). Cronbach's alpha coefficients were obtained, varying from .65 to .86 (value attributes) and from .68 to .84 (descriptive attributes). We also applied one question about the relative centrality of work (MOW, 1987), which was translated and adapted to Portuguese by Soares (1992). We presented the participants with figures representing areas of life (work, religion, family, community, and leisure) and asked them to rank these areas from the most to the least important. The results found for this question, coupled with the ones on value and descriptive attributes, served in composing the cluster analyses of the meanings of work.

As for the data collection on the meanings of money, we applied to both groups the Meaning of Money Scale (MMS II) adapted by Moreira, Caldas, and Athayde (2002), having 60 items about money that would measure six components (Table 2). For each item, the participant would answer on a 5-point Likert scale, ranging from 1 (strongly disagree) to 5 (strongly agree). Following the same strategy used in the MWI, we presented the participants with a scale printed in Blue. The identification of the components was done by means of factor analysis of principal components (varimax rotation), with a factor loading criterion of over .40, employed in previous studies (Barros, 2012; Barros & Borges, 2016), and for each factor, Cronbach's alpha coefficients were obtained, varying from .61 to .86. Internal consistency and construct validity had been examined in previous studies proving their adequacy for research purposes.

**Table 1**

Socio-demographic Characteristics.

<table>
<thead>
<tr>
<th>Socio-demographic Data</th>
<th>2011 (n = 302)</th>
<th>2015 (n = 125)</th>
<th>Tests</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex: male</td>
<td>94%</td>
<td>96%</td>
<td>χ² = 2.29</td>
</tr>
<tr>
<td>Incomplete primary school</td>
<td>53.6%</td>
<td>53.6%</td>
<td>χ² = 1.64</td>
</tr>
<tr>
<td>Incomplete and complete high school</td>
<td>33.1%</td>
<td>32%</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>18 to 69 years</td>
<td>19 to 64 years</td>
<td>t = −2.6</td>
</tr>
<tr>
<td>(M = 34.86, SD = 10.65, Mdn = 33 years)</td>
<td>(M = 37.92, SD = 11.97, Mdn = 40 years)</td>
<td>t = −4.94</td>
<td></td>
</tr>
<tr>
<td>Time working in construction</td>
<td>18 days to 48 years</td>
<td>2 months to 46 years</td>
<td>t = −2.91</td>
</tr>
<tr>
<td>(M = 10.86 years, SD = 10.22, Mdn = 7 years)</td>
<td>(M = 16.93 years, SD = 12.06, Mdn = 10.22)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time in present job</td>
<td>18 days to 22 months</td>
<td>1 day to 3 years</td>
<td>t = −2.91</td>
</tr>
<tr>
<td>(M = 1.92 years, SD = 2.62, Mdn = 1.25 years)</td>
<td>(M = 3.45 years, SD = 5.64, Mdn = 1 year)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p < .01,

*− p < .001.
Table 2
Value and Descriptive Attributes of the Meanings of Work and the Meanings of Money Components.

<table>
<thead>
<tr>
<th>Meanings of work</th>
<th>Types of Value Attributes</th>
<th>Meanings of money</th>
<th>Components</th>
</tr>
</thead>
<tbody>
<tr>
<td>TV1 – Source of achievement and economic independence</td>
<td>Pleasurable, for professional, social, and personal development, satisfaction in achieving results (recognition and independence).</td>
<td>Money is seen as a source of happiness, harmony, and satisfaction in general relationships.</td>
<td>Pleasure</td>
</tr>
<tr>
<td>TV2 – Expressions of respect and acceptance</td>
<td>Promote a reliable, respectful, and quality environment where the worker is assisted socially and in working conditions.</td>
<td>Money is perceived as generator of suspicion, envy, disagreement, and betrayal in interpersonal relationships.</td>
<td>Conflict</td>
</tr>
<tr>
<td>TV3 – Source of challenge and occupation</td>
<td>Face challenge with awareness and intellectual effort, being the means of occupation in people’s lives.</td>
<td>Money gives the idea that handling money generates anguish, the feeling of impotence, and guilt.</td>
<td>Suffering</td>
</tr>
<tr>
<td>TV4 – Auto-affirmative</td>
<td>Ensure the workers recognize their own qualities, responsibilities, merits, and social role in the work environment.</td>
<td>Money is perceived as a source of social exclusion and domination.</td>
<td>Inequality</td>
</tr>
<tr>
<td>TV5 – Hard-work recognition</td>
<td>Demand physical effort, fast pace, and repetitive movements, encapsulating the idea of heavy work and physically strenuous.</td>
<td>Money is seen as a means of growth through scientific/technological progress and through arts and popular cultural development.</td>
<td>Altruism</td>
</tr>
<tr>
<td>TV6 – Dehumanizing and exhausting</td>
<td>Exhausting, demanding, rapid, and acute physical effort and ability, overloading and also dehumanizing as it is exploiting, underestimating and discriminating.</td>
<td>Money is connected with spirituality and perceived as a means to help those less fortunate, as well as a way to exercise faith and love.</td>
<td>Transcendence</td>
</tr>
</tbody>
</table>

Source: adapted from Barros and Borges (2016).

(Borges, 1997; Borges & Barros, 2015; Moreira et al., 2002; Moreira & Tamayo, 1999).

Procedure and Analyses

The procedures to collect data in both groups were conducted at the participants’ work location. We administered the questionnaires individually with the aid of a Pocket PC to record the answers. We used the Statistical Package for the Social Sciences (SPSS) data bank for the descriptive analyses (frequencies and means) and inferential statistics (t-test, variance, and cluster analyses).

Results

Meanings of Work

As for the types of value and descriptive attributes, we calculated the means, standard deviations, and frequency of scores in the distribution intervals for each type. As can be seen in Table 3, we compared the results between the groups analyzed (2011 and 2015), and found significant differences (p < .001) in all types, with the exception of the recognition and fair treatment descriptive attribute type (TD5). As for the value attribute types, we identified higher averages in 2011 for source of achievement and economic independence (TV1), expressions of respect and acceptance (TV2), source of challenge and occupation (TV3), and auto-affirmative (TV4), while in 2015 the highest averages were for hard-work recognition (TV5) and dehumanizing and exhausting (TV6). As for the four types of descriptive attributes with significant differences, all the highest averages occurred in 2011.

We investigated whether the differences found would retain their significance, controlling the age and length of service in the construction sector and at the present job, which were the characteristics that differentiated the two sample groups (Table 1). We divided the sample into two segments according to those characteristics, using the median as the cutoff point. For age (Mdn = 35 years) and length of service in the construction sector (Mdn = 9 years) and at the present job (Mdn = 1.08 years), the differences encountered held steady in all types of value attributes (p < .001), in the respective segments formed. The same was observed in the descriptive attribute types, for a significance level of p < .01. However, the recognition, and fair treatment type (TD5), for which there was no significant difference over the data collection period, presented a considerable difference when controlled for age and time at the present job. In the first condition, among the participants under 35 years of age, the mean in 2011 (M = 2.65, SD = 0.63) was higher than in 2015 (M = 2.40, SD = 0.63), while for those over 35, the mean in 2015 (M = 2.68, SD = 0.60) was higher than in 2011 (M = 2.36, SD = 0.68). In the second condition, among the participants with up to 1.08 years at the present job, the mean in 2015 (M = 2.61, SD = 0.61) was higher than in 2011 (M = 2.38, SD = 0.73), while for those with more than 1.08 years, the mean in 2011 (M = 2.60, SD = 0.59) was higher than in 2015 (M = 2.41, SD = 0.63).

Through repeated measures analysis of variance, we verified significant differences between the means in 2015 (F = 634.99, p < .001) and in 2011 (F = 1750.44, p < .001) for the value attribute types. The post hoc test (Bonferroni) indicated in which pairs these differences were evident, allowing us to identify the hierarchies (Figure 1). In 2011, all the value attribute types had distinct priority levels, where expressions of respect and acceptance (TV2) were highlighted, followed by source of achievement and economic
independence (TV1) and auto-affirmative (TV4). In 2015, such types were found to have a single priority level and were ranked in last place, as opposed to 2011, in which the highlighted types were dehumanizing and exhausting (TV6), and hard-work recognition (TV5).

The same analysis technique pointed out a significant difference between the means in 2015 ($F = 42.25$, $p < .001$) and in 2011 ($F = 258.22$, $p < .001$) for the descriptive attribute types. The post hoc test (Bonferroni) indicated in which pairs of these types the means were different, allowing us to identify the hierarchies (Figure 1). In 2011, all descriptive attribute types presented distinct priority levels, recognition, and fair treatment (TD5) occupying the last position. In 2015, on the other hand, this same type occupied the first position together with physical effort and dehumanization (TD1). In the second position, we found the types being occupied (TD2) and achievement, and being helpful/useful (TD4). The latter one was also found at the same priority level as type TD1.

By employing the cluster analysis technique, we identified the same groups in 2011 and 2015: optimist ($n = 105$ in 2011, $n = 37$ in 2015), in which the positive aspects of the value attribute types were highlighted, these being equally recognized in the activities done at work; critical ($n = 63$ in 2011, $n = 64$ in 2015), in which the detachment between what work should be and what work actually is, experiencing dissatisfaction, were highlighted; satisfied ($n = 57$ in 2011, $n = 22$ in 2015), in which a more coherent awareness is shown between the ideal job and what it actually is; and expressly indifferent ($n = 71$ in 2011, $n = 2$ in 2015), in which work is not that important, though it is worth pointing out more positive aspects of the value attribute types and the perception of being recognized for the activity carried out at work.

Table 3
Mean, Standard Deviation, and Percentage by Response Intervals for Types of Value and Descriptive Attributes ($n_{2011} = 296$) ($n_{2015} = 125$).

<table>
<thead>
<tr>
<th>Types of Value Attributes</th>
<th>Year</th>
<th>M</th>
<th>SD</th>
<th>Participant frequency by interval (%)</th>
<th>t-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x ≤ 2</td>
<td>2 &lt; x ≤ 3</td>
</tr>
<tr>
<td>TV1 – Source of achievement and economic independence</td>
<td>2011</td>
<td>3.75</td>
<td>0.24</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>2015</td>
<td>1.25</td>
<td>0.51</td>
<td>24.8</td>
<td>72.8</td>
</tr>
<tr>
<td>TV2 – Expressions of respect and acceptance</td>
<td>2011</td>
<td>3.81</td>
<td>0.25</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>2015</td>
<td>1.22</td>
<td>0.56</td>
<td>40.8</td>
<td>54.4</td>
</tr>
<tr>
<td>TV3 – Source of challenge and occupation</td>
<td>2011</td>
<td>3.58</td>
<td>0.40</td>
<td>–</td>
<td>0.3</td>
</tr>
<tr>
<td></td>
<td>2015</td>
<td>1.44</td>
<td>0.54</td>
<td>16.0</td>
<td>77.6</td>
</tr>
<tr>
<td>TV4 – Auto-affirmative</td>
<td>2011</td>
<td>3.67</td>
<td>0.35</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td></td>
<td>2015</td>
<td>1.31</td>
<td>0.53</td>
<td>29.6</td>
<td>68.0</td>
</tr>
<tr>
<td>TV5 – Hard-work recognition</td>
<td>2011</td>
<td>2.26</td>
<td>0.82</td>
<td>8.4</td>
<td>31.4</td>
</tr>
<tr>
<td></td>
<td>2015</td>
<td>2.80</td>
<td>0.69</td>
<td>–</td>
<td>12.0</td>
</tr>
<tr>
<td>TV6 – Dehumanizing and exhausting</td>
<td>2011</td>
<td>1.23</td>
<td>0.63</td>
<td>45.6</td>
<td>43.9</td>
</tr>
<tr>
<td></td>
<td>2015</td>
<td>3.88</td>
<td>0.59</td>
<td>–</td>
<td>0.8</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Types of Descriptive Attributes</th>
<th>Year</th>
<th>M</th>
<th>SD</th>
<th>Participant frequency by interval (%)</th>
<th>t-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x ≤ 2</td>
<td>2 &lt; x ≤ 3</td>
</tr>
<tr>
<td>TD1 – Physical effort and dehumanization</td>
<td>2011</td>
<td>2.66</td>
<td>0.60</td>
<td>1.0</td>
<td>12.2</td>
</tr>
<tr>
<td></td>
<td>2015</td>
<td>2.28</td>
<td>0.60</td>
<td>–</td>
<td>36.3</td>
</tr>
<tr>
<td>TD2 – Being occupied</td>
<td>2011</td>
<td>3.43</td>
<td>0.43</td>
<td>–</td>
<td>0.7</td>
</tr>
<tr>
<td></td>
<td>2015</td>
<td>2.16</td>
<td>0.66</td>
<td>2.4</td>
<td>41.1</td>
</tr>
<tr>
<td>TD3 – Being responsible, challenged, and growing economically</td>
<td>2011</td>
<td>3.41</td>
<td>0.44</td>
<td>–</td>
<td>0.7</td>
</tr>
<tr>
<td></td>
<td>2015</td>
<td>1.62</td>
<td>0.62</td>
<td>6.6</td>
<td>78.7</td>
</tr>
<tr>
<td>TD4 – Achievement and being helpful/useful</td>
<td>2011</td>
<td>3.03</td>
<td>0.57</td>
<td>–</td>
<td>6.1</td>
</tr>
<tr>
<td></td>
<td>2015</td>
<td>2.12</td>
<td>0.68</td>
<td>1.7</td>
<td>49.6</td>
</tr>
<tr>
<td>TD5 – Recognition and fair treatment</td>
<td>2011</td>
<td>2.49</td>
<td>0.67</td>
<td>1.4</td>
<td>24.0</td>
</tr>
<tr>
<td></td>
<td>2015</td>
<td>2.51</td>
<td>0.63</td>
<td>–</td>
<td>26.0</td>
</tr>
</tbody>
</table>

* $p < .001$.

Figure 1. Priority Order of value and Descriptive Attribute Types in the Meaning of Work.
Table 4
Mean, Standard Deviation, and Percentage by Response Intervals for Meanings of Money (n2011 = 302) (n2015 = 125).

<table>
<thead>
<tr>
<th>Component</th>
<th>Year</th>
<th>M</th>
<th>SD</th>
<th>Participant frequency by interval (%)</th>
<th>t-test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>x ≤ 2</td>
<td>2 &lt; x ≤ 3</td>
</tr>
<tr>
<td>Pleasure</td>
<td>2011</td>
<td>3.64</td>
<td>0.76</td>
<td>2.0</td>
<td>19.9</td>
</tr>
<tr>
<td></td>
<td>2015</td>
<td>3.81</td>
<td>0.77</td>
<td>1.6</td>
<td>13.6</td>
</tr>
<tr>
<td>Conflict</td>
<td>2011</td>
<td>4.14</td>
<td>0.68</td>
<td>0.7</td>
<td>7.6</td>
</tr>
<tr>
<td></td>
<td>2015</td>
<td>4.12</td>
<td>0.77</td>
<td>2.4</td>
<td>4.8</td>
</tr>
<tr>
<td>Suffering</td>
<td>2011</td>
<td>2.70</td>
<td>0.84</td>
<td>25.2</td>
<td>41.4</td>
</tr>
<tr>
<td></td>
<td>2015</td>
<td>2.74</td>
<td>0.89</td>
<td>25.6</td>
<td>39.2</td>
</tr>
<tr>
<td>Inequality</td>
<td>2011</td>
<td>3.82</td>
<td>0.92</td>
<td>5.6</td>
<td>17.2</td>
</tr>
<tr>
<td></td>
<td>2015</td>
<td>3.85</td>
<td>0.97</td>
<td>4.0</td>
<td>17.6</td>
</tr>
<tr>
<td>Altruism</td>
<td>2011</td>
<td>3.86</td>
<td>0.86</td>
<td>5.0</td>
<td>12.3</td>
</tr>
<tr>
<td></td>
<td>2015</td>
<td>3.85</td>
<td>0.88</td>
<td>2.4</td>
<td>16.8</td>
</tr>
<tr>
<td>Transcendence</td>
<td>2011</td>
<td>4.37</td>
<td>0.64</td>
<td>0.7</td>
<td>4.3</td>
</tr>
<tr>
<td></td>
<td>2015</td>
<td>4.61</td>
<td>0.52</td>
<td>-</td>
<td>2.4</td>
</tr>
</tbody>
</table>

^ p < .05.
" p < .001.

Means of Money

Similarly to what was done in the previous section, we calculated the means, standard deviations, and frequency of scores in the distribution intervals (Table 4). We observed, between the two periods analyzed, that there were similarities in the response distributions for most components of the meanings of money. However, we found significant differences between the distributions regarding the components pleasure and transcendence. In both cases, there was a slight increase in the scores, indicating greater value attached to these meanings in 2015.

We wondered if the differences found in pleasure and transcendence would be retained when controlling age and length of service in the construction sector and at the present job. According to these characteristics, we used the median as the sample cutoff point, dividing the sample into two segments. For those with ages up to 35 years the difference found was retained in both components (p < .001), while for those over 35 the difference was retained in the pleasure component (p < .05). As for the service time in the construction sector and at the present job, we did not find any significant differences (p > .05) in the respective segments formed for the pleasure component, as opposed to those for the transcendence component, which remained steady (p < .05).

Through repeated measures analysis of variance, we verified significant differences in the meanings of money component between the means sampled in 2015 (F = 91.91, p < .001) and in 2011 (F = 210.48, p < .001). The post hoc test (Bonferroni) indicated in which pairs of components these differences were evident, allowing us to identify the hierarchies (Figure 2). In 2011, there were five levels of priorities, with inequality and altruism being at the same level. In 2015, we found only three levels in which conflict and altruism, and pleasure, and inequality basically remained at one single level.

By employing the cluster analysis technique, we identified the same groups in 2011 (Barros & Borges, 2016) and 2015: expressly collectivist (n = 102 in 2011, n = 49 in 2015), which accounted for the highest scores in all components, expressing more intensively the contradictions behind money; collectivist (n = 73 in 2011, n = 30 in 2015), whose more evident connotations of money were transcendence and altruism; conflictive (n = 46 in 2011, n = 13 in 2015), whose major emphasis was on the conflict component, yet attributing less pleasure and altruism to money; and pessimist (n = 75 in 2011, n = 33 in 2015), whose most prevalent connotations for money were inequality and conflict, though the transcendence component was perceived.

In a complementary manner, we compared the relationship between the clusters for the meanings of work and of money in the two periods analyzed. In 2011, the chi-square test was significant (χ² = 17.62, p < .05), rejecting independence between these meanings. Thus, the optimist, satisfied, and expressly indifferent clusters for the meanings of work were the ones that perceived money more as collectivist and expressly collectivist, whereas for the critical cluster, the conflictive and pessimist aspects of money were more evident. For the 2015 analysis we excluded the expressly indifferent cluster for presenting only two participants. The chi-square test result was not significant (χ² = 4.76, p > .05), accepting the independence between the meanings of work and of money.

Discussion

The results have shown that in an economic crisis situation, the meanings of work changed more than the meanings of money. As for the meanings of work, the differences found in the value and descriptive attribute types, between the two situations analyzed, offered evidence of the negative effects on the workers’ lives. As a consequence, they tended to present low ideals concerning work (value attributes) as well as a more accepting attitude toward the work performed (descriptive attributes). The downturn period in the sector, especially concerning formal jobs (DIEESE, 2016; Pochmann, 2015), contributed to workers’ prioritizing less the attributes such as expressions of respect and acceptance (TV2) which were identified in the growth period, since the main priority was to maintain their jobs. Bearing this in mind, the negative aspects of work got a higher focus in 2015. These negative aspects were associated with the characteristics of the activities, most requiring strenuous physical efforts, found at the construction

Figure 2. Priority Order of Components of the Meaning of Money.
sites (Cockell, 2008; Oliveira & Iriart, 2008), and characterized by precarious working conditions (Borges & Peixoto, 2011; Cattani, 2001; Santos, 2010; Silva & Borges, 2015; Sousa, 1983). In this case, the workers valued physically exhausting hard work and dangerous activities, as these would allow them to grow as well as maintain their jobs.

In the 2015 economic crisis scenario, the types of descriptive attributes that showed greater emphasis seemed to be based on the opportunity to keep working, as there were no unemployed individuals in the sample. Such opportunity is evident in the scores found for recognition and fair treatment, as a counterpart to taking a job that requires physical effort and dehumanization. At the second level of priority, being able to keep working built a sense of being occupied, achievement, and helpfulness, especially if one considers it as one basic way of financing for the family and providing society with services. The differences observed in these two moments match the cluster analysis for the meanings of work. In 2011, in the midst of the growth in the sector, a good part of the workers showed a more optimistic and expressly indifferent view of work, while in the 2015 economic crisis what we have is a more critical vision indicating dissatisfaction with the lack of opportunities. Despite these factors, a significant number of workers still presented an optimistic view and one of satisfaction, expressing resignation toward the real situation.

The changes observed in 2015 still bear some resemblance to previous research on the valorization of a job that shows more negative connotations (Borges, 1997; Borges & Tamayo, 2001; Borges et al., 2005). Such studies were also carried out during a period of downturn in the sector, a fact which suggests that a good part of the aspirations for an ideal job rely on the real job opportunities for these workers. The guarantee of a favorable job market, as occurs in periods of expansion, seems in many ways to bring about an aspiration for better working conditions (Barros, 2012; Barros & Borges, 2016; Pinheiro, 2014).

The literature has been signaling that social-demographic characteristics play an important role in the production of meanings of work (Dakduk et al., 2008; Harpaz & Mesouhaim, 2010; MOW, 1987; Pinheiro, 2014). In our findings, the significant differences found in the types of value and descriptive attributes remained steady even controlling the social-demographic characteristics. This indicates that the changes in the macro-economic context presented a stronger influence and led to greater dynamism in the process of construction of meanings. It does not mean, however, that individual characteristics will not have an impact on the process, especially when the recognition and fair treatment type only presented a significant difference when the age and length of time at the present job are controlled. Nevertheless, we understand that the change in the workers’ profile from 2011 to 2015 occurred due to an economic fall in the sector. The reduction in formal jobs (DIESE, 2016; Pochmann, 2015) promoted a selection in the job market favoring older workers or workers with longer service time in the sector. However, the individual characteristics are not totally independent of the contexts.

The results for value attributes match the hypothesis H1. The scores for the types source of achievement and economic independence (TV1), expressions of respect and acceptance (TV2), source of challenge and occupation (TV3), and auto-affirmative (TV4) were lower in 2015. In addition, we found higher scores for hard-work recognition (TV5) and dehumanizing and exhausting (TV6). The results altogether match what we had initially considered with hypothesis H1. The results for descriptive attributes, however, partially match hypothesis H2. Although the scores for physical effort and dehumanization (TD1) were significantly lower, as opposed to what was predicted, we observed that when we constructed the descriptive attributes hierarchy, TD1 moved from the fourth level of the hierarchy in 2011, to level one in 2015, along with recognition and fair treatment. We understood that these results match our prediction for a conformist tendency on the workers’ part when perceiving work on a daily basis (Barros & Mendes, 2003; Cockell & Perticarrari, 2010).

As far as the meanings of money are concerned, the differences found in the two periods analyzed were significant only for the transcendence and pleasure components. The first one, which occupied first place in the components hierarchy as of 2011, showed a significantly higher average in 2015. The second one, besides reaching the highest level when compared to 2011, went up in the hierarchy rank. The additional analyses, controlling the characteristics of the workers’ profiles, indicated that age (over 35 years old) influenced the perception of transcendence, while pleasure was influenced by the length of service times. Though only partially, these findings match the literature about the influence of people’s characteristics in the production of meanings of money (Barros, 2012; Furnham, 2014; Furnham & Argyle, 2000; Távora, 2003). On the other hand, as discussed previously, the results suggest that such characteristics are not independent of context, especially given the differences found between the analyzed groups regarding the participants’ profiles.

Besides the valorization of the components concerning the meanings of money, pleasure showed the same priority level given to altruism and inequality. We should take into account that such components have distinct natures, in the sense that altruism and inequality are closely connected with social aspects (progress and social exclusion, respectively) and pleasure is related to individual aspects (Moreira, 2002; Moreira & Tamayo, 1999). Moreover, inequality introduced a contradiction in the hierarchy level. We understood that altruism, which represents money invested in progress in its diverse areas, should provide workers with more appropriate living conditions, which means having access to the financial resources for such a living. As discussed previously, in the workers’ case, these conditions are closely associated with fending for both themselves and their families (Cockell, 2008; Silva & Borges, 2015). The lack of these conditions, which is exacerbated by the economic crisis, affects basic needs directly, since the workers find themselves within the bounds of social exclusion (Cockell & Perticarrari, 2010; Santos, 2010).

Curiously, the meanings of money clusters remained more stable, retaining proportional amounts of participants in their respective analyzed groups. In addition, the dialectic comprehension of money was maintained, although the component dynamics changed in 2015. The fact that the results showed a tendency toward stability of the phenomenon does not mean, however, that periods of economic growth and retraction do not affect the construction process of these meanings. In the case of these workers, the clusters’ stability could reflect a more resigned attitude in relation to the conditions to which they are subjected, such as low salaries in the sector (Silva & Borges, 2015; Sousa, 1983; Takahashi et al., 2012) and the difficulty in finding other occupations with better opportunities (Cattani, 2001; Oliveira & Iriart, 2008).

The differences found between the two periods analyzed, in the relationships between the two groups of clusters concerning the meanings of work and money, indicate that despite the fact that the meanings of work and money are interwoven (Brief & Nord, 1990), the way they are dealt with by the workers is distinct. This probably reflects the reality of social practices in a capitalist system, in which the main axis is money (Guttman, 2008), not work. The acceptance of the independence of these two meanings in 2015 might have occurred due to the economic crisis situation, and then the real contradiction of interests between money and work is better verified.

We rejected our hypothesis H3 based on the results discussed. The response distributions were similar for the meanings of money between the two periods analyzed. Besides this, the components...
organization confirmed what Barros and Borges (2016) had already observed about a more dialectic comprehension of money, since the positive and negative aspects remained intertwined in the priority levels. Despite the difficulties that such workers have been facing with the crisis, the perception of pleasure and transcendence was higher than in the growth period in the sector. As previously mentioned, all the participants in the research were employed. Considering the present context, being able to keep a job and provide financially for both individual and family basic needs might somehow be considered a privilege and, in this sense, the perception of money as something pleasurable is significant. By the same token, being employed means favoring solidarity with coworkers who are in more precarious situations or live with greater social vulnerability, as pointed out by Cockell (2008) and Cockell and Perticarari (2010), a fact that reinforces the transcendent aspects attributed to money.

Final Considerations

On achieving the research objective, we were able to demonstrate empirically the influence of wider social contexts, such as economic cycles, in the process of construction of the meanings of money and work. The results match the literature when it comes to the importance of including such contexts in the discussion about the meanings of money and work (e.g., Barros et al., in press; Borges et al., 2005; Brief & Nord, 1990; Moreira, 2002). Some limitations found in this study include the lack of analyses that consider the profile of the participating organizations. Even being within a single macro-social context, the way each organization faces and/or benefits from this condition is distinct and affects the workers’ lives through management practices.

In addition, the second sample included participants in various work contexts. However, their frequency in each of these contexts (e.g., freelancer, contractor, subcontractor) was not sufficient for other exploratory analyses to be carried out. Probably, workers who enjoy greater autonomy in their work and/or greater negotiating power, such as self-employed workers and contractors, will attribute different meanings than those who are formally hired by a construction company and, consequently, are under a more clearly delineated hierarchical structure.

Another important aspect concerns the working conditions in the context of civil construction, which, as already pointed out, are structurally precarious (e.g., Borges & Peixoto, 2011; Cattani, 2001; Santos, 2010; Silva & Borges, 2015; Sousa, 1983). Although not within the scope of this research, exploring and/or analyzing the effects of these conditions on how workers perceive the meanings of work and money can contribute to a better understanding of the observed changes between the two periods analyzed, especially with regard to the meanings of work, which, as already stated, did undergo more substantial changes. In addition, considering the low wages of these workers, an analysis that considered aspects of the family environment (e.g., number of dependents, family members employed and/or unemployed, whether they have other sources of income besides wages, whether they own their own residence, among others), would allow a greater refinement in the understanding of what the meanings of money represent for these workers.

Practical and Theoretical Implications

We feel that comparative analyses such as the ones used in this study have contributed to expanding the comprehension of the dynamics behind the meanings of work and money. It is evident that comparing distinct moments of economic development is of paramount importance in order to highlight the way such meanings are perceived by workers. We recommend that further research should consider distinct periods in other occupations. This strategy will also lend itself to expanding the assessment of the relationship between the meanings of money and work, verifying whether the results found in this study are a tendency only in this occupation, or if such relationships do indeed hold for others as well.

In view of the limitations listed, we suggest that future research explore the perception of the meanings of work and money for workers in civil construction and/or other occupational segments, who are subject to different contractual working relationships than those from the organizations studied here. Such studies can help clarify the effects of these types of work relationships on the meanings of work and money. We also suggest that aspects of working conditions, as well as those concerning the family environment of these workers, should be incorporated into the analyses of both phenomena. Considering these specifics can contribute to the advancement of knowledge, explaining, for example, the differences found in different occupational groups.

Financial Support

This research was supported by the Brazilian Government: Coordenção de Aperfeiçoamento de Pessoal de Nível Superior/CAPES (doctoral scholarship) and Conselho Nacional de Desenvolvimento Científico e Tecnológico/CNPq (GRANT number: 311764/2014-2).

Conflict of Interest

The authors of this article declare no conflict of interest.

References


