

Theoretical-empirical Article

Ties that Knot: How App-workers Co-construct Their Identities at Precarious Work Contexts

Laços que Criam Nós: Como Trabalhadores de Aplicativos Coconstroem suas Identidades em Contextos Precários de Trabalho



Eliana Pires Conde¹
Bruno Felix¹
Nadia Cardoso Moreira^{*1}

ABSTRACT

Objective: the aim of this paper was to understand how self-employed workers, more specifically app workers, co-construct their identities at work. **Theoretical framework:** social identity theory. **Method:** we used the grounded theory method, through 40 interviews conducted with Brazilian independent app workers. **Results:** our model presents the following propositions: (1) there is an association between identity management and structured environment, not necessarily formal environment; (2) when there is a collectivity, a feeling of belonging through the more stable relationships between groups and individuals, there is an easier construction of the self; (3) the insertion of the worker in the groups provide a reduction of anxiety for the identity construction and increase motivation and security; (4) it is of the initiative of the app workers themselves the creation of the groups that converge to a personalized belonging – group identity and a precarious belonging – individual identity. **Conclusions:** the collective constructed by independent application workers comes from an integration whose initiative comes from the workers themselves, at first with a productive purpose, but consequently being a source of facilitators for the construction of an identity.

Keywords: gig economy; independent worker; identity management.

RESUMO

Objetivo: o objetivo deste trabalho foi compreender como trabalhadores independentes, mais especificamente trabalhadores de aplicativos, coconstroem suas identidades no trabalho. **Marco teórico:** teoria da identidade social. **Método:** o estudo foi realizado pelo método da teoria fundamentada nos dados (*grounded theory*), por meio da realização de 40 entrevistas com trabalhadores independentes brasileiros que atuam por meio de plataformas de aplicativos. **Resultados:** nosso modelo apresenta as seguintes proposições: (1) existe uma associação entre gestão identitária e ambiente estruturados para interações interpessoais, não necessariamente ambiente formal; (2) quando existe uma coletividade, um sentimento de pertencimento através das relações mais estáveis entre os grupos e os indivíduos, há uma maior facilidade na construção do *self*; (3) a inserção do trabalhador nos grupos proporciona redução de ansiedade pela construção da identidade e aumenta motivação e segurança; (4) é de iniciativa dos próprios trabalhadores de aplicativos a criação dos grupos que convergem para um pertencimento personalizado – identidade grupal e precarizado – identidade individual. **Conclusões:** o coletivo construído pelos trabalhadores independentes de aplicativos vem de uma integração cuja iniciativa parte dos próprios trabalhadores, a princípio com uma finalidade produtiva, mas consequentemente sendo uma fonte de facilitadores para a construção da identidade.

Palavras-chave: economia *gig*; trabalhador independente; gestão identitária.

* Corresponding Author.

1. Fucape Business School, Vitória, ES, Brazil.

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INTRODUCTION

For several decades now, researchers have dedicated themselves to understanding how individuals construct their identities at work. Identity management, which refers to the processes by which individuals construct, abandon, revise, and adhere to identities at work (Nobrega & Felix, 2021; Watson, 2008), has been widely studied. These studies traditionally focus on the cultural, normative, and networking processes involved in defining ‘who I am’ in the workplace, which leads individuals to fit into their work context while preserving their identity (Gomes & Felix, 2019; Ibarra & Barbulescu, 2010; Rodrigues & Felix, 2021).

To date, research on identity management at work has generally shown that longer-lasting identity definitions depend on the existence of structured and intense ties with an organization (Brown, 2022; Li et al., 2021; Liao et al., 2019). For example, Frandsen (2017) presented evidence that the identity of individuals at work tends to be influenced by changes in organizational culture. Huber and Brown (2017) identified that humor is often used as a vehicle to communicate which identities are or are not acceptable in an organizational context.

These studies make it possible to identify a research gap. While they all discuss the role of norms and social structures of organizations by way of the process in which individuals construct their identities at work, they leave something to be desired with regard to the need for understanding how identity management takes place in the less structured contexts of social interactions. Self-employed workers no longer seem to rely on the ties once seen as necessary to build their professional identities (Felix et al., 2023; Kyratsis et al., 2017). In the context of such ambiguity, it is possible to maintain that these individuals find guidance for their self-definitions at work through some other source (Petriglieri et al., 2019). Thus, it is necessary to understand where these individuals find guides to construct their identities at work.

In order to fill this gap, this study seeks to understand how independent workers, more specifically app workers, manage their identities at work. Although previous studies (Bellesia et al., 2019; Caza et al., 2022) suggest that independent workers who work outside stable organizational structures tend not to build stable identities at work, this thesis is contested in this study. We argue here that, even without an organizational structure that imposes a collective routine on the worker, and without a clear definition of interrelated work roles (Caza et al., 2022; Wood et al., 2019), independent workers develop an identity at work through co-constructed routines in interpersonal interactions, autonomous formation of

subgroups, collective purposes, and rivalry between such subgroups (Petriglieri et al., 2019; Wittman, 2019). These processes enable the creation of identities at work, even in precarious relational conditions (Antunes, 2020c; 2020d; Kahancová et al., 2020).

This work makes theoretical and practical contributions. In theoretical terms, it contributes to the literature on identity management at work by exploring the particularities of the identity formation process of independent workers who feel like organizational orphans, showing the paths they take to circumvent the absence of action guides and group interaction. Some studies related to self-employed workers report a feeling of loneliness in the labor market, as well as uncertainties and the absence of rights, duties, and representativeness (Caza et al., 2022; Fleming et al., 2017; Wentrup et al., 2019), but do not explain their identity formation in such contexts. Thus, the main theoretical contribution presented by this study refers to ‘how’ the phenomenon, already explored in the literature, occurs.

In practical terms, the study has implications for both workers and managers of service provision platforms characteristic of the gig economy. For the workers, we have shown evidence that organizing in informal groups, even outside the structure of the platform manager, minimizes their anxieties and emotional tensions, and favors the creation of connections to achieve their work identities in a satisfactory way. In this way, our results lead us to encourage these workers to organize themselves in this way. For platform managers, the results reveal the importance of facilitating this social organization of workers, so that fairer and more sustainable relationships can be built. This suggestion is not only socially motivated, given the positive impacts it tends to have on workers’ health, but also market motivated, given the emergence of different platforms and the growing competition between them for workers.

LITERATURE REVIEW

Identity in the context of self-employed app workers

The literature on identities is wide-ranging, as are the definitions of the term. In this paper, in line with social identity theory (Ashforth & Mael, 1989), we define identity as the meanings associated with the self, which can refer to personal attributes (e.g., punctual, intelligent, and honest), relational (leader, partner, or parent), or collective (employee of the specific company, Brazilian, or practitioner of a given religion) (Leavitt & Sluss, 2015). These meanings generate opportunities and restrictions

for the self (definition of the 'I'), since their manifestation tends to occur in a relatively stable and coherent way with the definitions that subjects outline for themselves. Thus, if an individual develops an identity as an honest leader of a given political party, this tends to generate opportunities for action and behavioral limits so that this identity is sustained over time. The result of this is that identities tend to generate stability, in the intrapersonal aspect, and sociability, in the interpersonal aspect (Felix, 2020).

Despite being relatively stable, the self is often permeated by dilemmas between the desire to be or interact in opposite ways (e.g., honest vs. dishonest; selfish vs. altruistic) (Brewer, 1991). Faced with such dilemmas, an identity tends to manifest relatively stable meanings for the self, which promote a reduction in uncertainty, self-esteem, and belonging for individuals (Gomes & Felix, 2019). In this way, an identity can be understood as "a balance resulting from a process of reflection that leads to attraction and repulsion in relation to one or more meanings" relating to an identity (Ashforth & Schinoff, 2016, p. 120).

Such a movement between attraction and repulsion to certain valued identities tends to lead to harmful feelings of anxiety and self-rejection (Gill, 2015), which in turn tend to threaten the stability and coherence of the self (Petriglieri et al., 2019). To protect themselves from these unwanted feelings, individuals create defense processes at different levels of the self. At the individual level, self-esteem means that even if a person experiences an attraction to being dishonest at a given moment, they remain emotionally comfortable due to an appreciation of themselves stemming from a history of honest choices (Petriglieri, 2011). At the relational and collective levels, it is the feeling of belonging to the relationship and the group, respectively, that provide individuals with avoidance of anxiety when they feel inclined to violate meanings associated with an interaction or a collectivity (Gomes & Felix, 2019).

In a world where occupational ties have become more fluid, organizations no longer play the same role in terms of being sources of self-identity definitions for individuals (Bauman, 2013). If, in the past, organizations and occupations were some of the main sources for creating an identity, today such relationships are less stable and, for this reason, academics have sought to understand how individuals deal with, build, and maintain identities in this new context (Alvesson & Willmott, 2002; Petriglieri et al., 2019). Given this scenario, the literature on identity management has been growing (Araujo et al., 2015; Felix & Bento, 2018; Zheng et al., 2020), which refers to the process by which individuals seek to adapt to external and internal expectations and become more authentic while

legitimizing their internal structure of distinctiveness (Eller et al., 2016; Kreiner et al., 2015). Some studies have explored, more specifically, how people have negotiated their definitions of 'who I am' in organizations with which they have permanent (Kreiner et al., 2015) and temporary ties (Petriglieri et al., 2018; Petriglieri et al., 2019).

In general, the literature on identity management has shown that the process of identifying with organizations tends to ease anxieties about building an identity (Petriglieri et al., 2018). While some show evidence that organizations limit the expression of individual-level identities (Greil & Rudy, 1984), others emphasize that they enable the creation and expression of desired identities (Fiol et al., 2009; Thornborrow & Brown, 2009) and psychological security (Kahn, 1990). However, we identified a need to better understand how individuals deal with the creation and maintenance of their identities in organizations that are less structured and more unstable in the process of ensuring that individuals have a space for the existence of a collective self (Felix & Cavazotte, 2019; Ibarra & Obodaru, 2016; Petriglieri et al., 2019), which seems to be the case for self-employed workers.

Freelance work

In the contemporary labor market, technological and geopolitical changes, as well as increased economic integration between countries, have led to a movement to reformulate labor relations (Berlato & Correa, 2017; Cattani et al., 2014; Franco & Faria, 2013; Vallas & Schor, 2020). This movement has also led to a transformation in the way people construct their career paths (Felix & Cavazotte, 2019; Fraga et al., 2020), as well as in the types of jobs available to individuals (Stanford, 2017). This movement intensified between 2005 and 2015 (Katz & Krueger, 2019) and led to a scenario in which around a fifth of American workers began to work without a long-term link to a specific organization, a rate that tends to be even higher in other countries (Petriglieri et al., 2019). Thus, we have identified a growing need to study the phenomenon of independent workers, since this type of work carries with it a high promise of freedom and autonomy combined with higher levels of risk and job insecurity (Antunes, 2020c; 2020d; Kahancová et al., 2020; Kellogg et al., 2020).

Recent studies have sought to understand the structures of self-employment, as well as its consequences, but there is a need to better understand the experiences of individuals in this emerging context (Antunes, 2020a; Petriglieri et al., 2019; Spurk & Straub, 2020). Years after Arthur and Rousseau (2001) pointed out a transformation in the nature of work that began to challenge the duration and nature of the bonds between organizations and workers, some continue to point out the need to better

understand the nuances of the working relationships that have been created since then (Antunes, 2020b; Ashforth et al., 2020; Wittman, 2019). With the decline of more rigid and predictable working relationships, and the emergence of the gig economy (Duggan et al., 2020; Filgueiras & Antunes, 2020; Veen et al., 2020), a better understanding of the experiences of contemporary workers is needed. Studies on identity and identification, for example, which have been built for decades on the foundation of traditional and long-term working relationships, must therefore undergo a moment of updating to the reality present in the lives of these more recent forms of work.

In this paper, we explore a specific facet of self-employment: the way workers deal with their identities in the workplace. We want to better understand how, by performing their professional activities without the existence of a link to an organizational structure that establishes a collective routine for the worker, and without the establishment of hierarchically connected work roles (DeRue & Ashford, 2010; Jarrahi et al., 2021), these independent workers develop their identities at work. More specifically, we focus on the case of an emerging type of independent worker: app workers.

App workers

For years, digital media platforms have sought to manage and influence their users' consumption (Moodley et al., 2019). These platforms have used algorithms, computer formulas that generate automated decisions based on statistical models, and rules without direct human interference (Agung & Darma, 2019). These are instructions with autonomous learning that guide a computer to follow steps designed to meet objectives (Anwar & Graham, 2021; Mann & O'Neil, 2016). Because they are presented as objective and mathematical in nature, algorithms tend to be seen as reliable and impersonal and are little challenged (Duggan et al., 2020).

More recently, algorithms have also been applied to manage not only the way individuals consume services on the internet, but their own work (Bucher et al., 2021; Schildt, 2017). On platforms such as Uber, algorithms are used to connect consumers and workers (Jabagi et al., 2019; Rosenblat & Stark, 2016), as well as to evaluate the work performed and determine individuals' bonus remuneration (Duggan et al., 2020). Such use tends to lead workers to high levels of engagement with their work, albeit without a formally established traditional connection to the organization.

However, given the fragmented nature of the relationships established between the worker and the organization promoting the platform, the relational

reciprocity of more traditional bonds tends not to be found in this form of work (Sherman & Morley, 2020). Work assignment practices, performance evaluation, and feedback also exist in the context of the app worker (Duggan et al., 2020). However, the impersonality of the relationship the worker has with the organization and with his or her coworkers creates a scenario in which the essential foundations that lead to the balance of social contracts are not clear (Wood et al., 2019). Thus, possible abuses are not so easily perceived, since automated and impersonal calculations, rather than people, are seen as the decision-makers in working relationships. In this context of abundant impersonality, relationships with coworkers and the sense of culture, identity, and identification become vague (Panteli et al., 2019), which justifies this research.

METHOD

Materials and method

We took a qualitative perspective in this study, more specifically using the method of grounded theory (Charmaz, 2009). This method was chosen because the phenomenon of identity in groups of self-employed workers — who connect with each other in a less structured way (Duggan et al., 2020) — has not been explored in detail in previous studies. Thus, although social identity theory (Ashforth & Mael, 1989) and recent findings on independent workers and app workers have been used in this study as sensitizing concepts (Bowen, 2006), we have adopted a stance of visiting the field without this process being guided by any prior theory (Glaser et al., 1968). Thus, we seek to develop a substantive theory about the proposed phenomenon that is based on the data obtained in the field.

Initial and expanded samples

Initially, we selected and interviewed a sample of self-employed workers based on an interview protocol built on the objectives of the study and the sensitizing concepts presented in the literature review. This process initially led to 10 interviews with independent workers who work on application platforms. A priori, we carried out these initial interviews without any specific criteria for this number; we only started this wave of interviews based on the researchers' network of relationships. From the first wave of interviewees, we used the snowball method, according to which we asked for nominations of other possible interviewees, stressing that the only restriction was that they worked utilizing apps.

After this stage, we analyzed the initial data using first-order memos and codes, generally represented by

using gerund verbs that convey meanings close to the action contained in the data (Charmaz, 2009), with a more descriptive nature (Felix & Cavazotte, 2019). We then carried out a second level of analysis, in which we sought to group the first-order codes with similar meanings and name them with more abstract and theoretical terms (second-order codes). These, in turn, were also grouped into even more abstract and analytical codes, called aggregate dimensions, which revealed the central categories presented in the study.

According to the method used, in this initial stage of data collection and analysis, we expected new theoretical questions to emerge, which led us to adjust the interview protocol and look for new participants with different characteristics that would allow us to explore these questions (for example: younger workers, older workers, men, women, those with other jobs, and those who only work on apps) that would allow us to explore the questions that had emerged so far. From this point on, we made a more structured visit to the literature in order to identify lines of study that would allow us to dialog with the substantive theory generated in this work and reach a discussion that would insert the theory derived into the contemporary academic debate on the subject.

The process of waves of data collection and analysis guided by questions that would lead to the construction of a theory, called theoretical sampling (Fontanella et al., 2011), took place six times, until further trips to the field no longer led to the emergence of new categories or added dimensions (theoretical sufficiency) (Charmaz, 2009). This iterative process led to 40 interviews with self-employed people working on app based platforms.

Participant selection

In order to achieve the aim of the research, we limited ourselves to contacting professionals who worked in apps (app work) for both urban transport and meal delivery. In the first wave of data collection, we interviewed a total of 10 workers, six of whom were urban transportation app workers and another four were meal delivery workers. All of them were men, with their only occupation being independent workers on the app, and were aged between 25 and 36. In our second wave of data collection, in which we interviewed another nine workers, we also tried to include women. In the third wave, we also interviewed professionals over 36 and under 25 who had another occupation. From the fourth to the sixth and final wave of data collection, we interviewed subjects with these different characteristics, in order to seek multiple perspectives that would allow for greater variability in the data (Gomes & Felix, 2019).

The research participants were predominantly men (33) who worked in at least two professional activities (4). The age range varied: four were under 25, 22 were between 25 and 34, 11 were between 35 and 44, two were between 45 and 54, and one was 55 or older. At the time of the interview, all the interviewees worked in at least one app-based organization. The majority worked for a public transport company (21), while some worked in food delivery (19).

Interview protocol

The final protocol that guided the interviews began with questions about age, gender, education, and marital status, as well as general questions about the career trajectory of the research participants. We then asked about their motivation to work independently in apps, and about their identity at work. In addition, we asked about organizational actions that promoted a collective sense of belonging, or some form of group vision among workers on the platform. Other questions were dedicated to understanding the existence of any autonomous forms of creation, maintenance, and discontinuity of informal groups among the platform's workers. In accordance with the precepts of grounded theory, the interviews were conducted in a flexible manner, since new questions might be needed during the course of the interviews, so that the protocol was not a literal script, but a semi-structured guide for conducting the interviews (Charmaz, 2009). As we used the grounded theory method, the interview script was not based on a previous theoretical model, but rather on questions raised initially by the central sensitizing concepts presented in the literature review and, later, by questions of a theoretical nature that emerged during the analysis process itself.

We therefore constructed a total of 10 questions, as shown below:

- a. Tell me about your professional experience, your career path. What led you to work with the [name of app] application?
- b. What do you like and dislike about your job?
- c. What motivates you to work? What makes you want to work?
- d. How do you identify yourself professionally today?
- e. Do you have a work routine, do you wear specific clothes to work, do you have pre-established hours? If so, what made you create this routine?
- f. When working in an organization, some people exchange information with their coworkers and

interact with them. Does this happen in your job? If so, how?

- g. When do you feel alone at work on the [name of app] platform? And at what times do you feel like you're participating in a collective, a group? Explain in detail those moments when you feel part of a collective/group.
- h. When you come across a conflicting or uncomfortable situation at work, how do you usually resolve it? By your personal actions alone? Do you collaborate with the organization or a coworker? Can you cite an example?
- i. Do you feel like a member of the group of workers at [name of app]? If so, what makes you feel part of that group? If not, what makes you not feel part of this group?

Once the first stage was over, we analyzed the data collected, which supported the development of the first category, and realized that there was a need to reformulate the focus of the interview, going more in-depth into the behavioral criteria related to the formation of identity and the interrelationship of independent workers as a group. This process of visiting the field was considered finished when we noticed that the data were sufficient, i.e., when the interviewees' answers had been assimilated or when the material collected was considered sufficient to respond to the objectives set by the work.

Data analysis

Initially, we built broad documents that would give us a generalized view of the position of the professional related to the lack of an organizational structure that facilitates interactions between workers, what we call organizational orphans, in order to identify any link with the construction of identity.

Subsequently, we were able to construct the first-order codes, with the first results in hand, applying grounded theory (Charmaz, 2009), and using the principle of constant comparison. Some meanings that recurred in the data served as the basis for building these first-order codes, such as the organizational environment, identity management, concern for productivity, and the feeling of belonging to a group.

These second-order dimensions were grouped together and connected to the first-order dimensions, as summarized in Figure 1, which shows the structure of the categories found. These codes were then compared with each other and, whenever we found support in the data, we tried to establish theoretical propositions that connected them. Thus, the propositions generated were not based on the researchers'

intuitions, but on theoretical confrontations between the categories generated from the data (Charmaz, 2009).

RESULTS

In this section, we present the results found in this research. The analytical structure presented, according to the theoretical model, is the result of interactions with the data, and this generated categories, and by correlating them, we support some propositions:

- a. Proposition 1 (P1): the lack of a structured organizational environment for interactions between workers leads to a precarization of identity management and a personalization of identity management;
- b. Proposition 2 (P2): the precariousness and the personalization of identity management lead to a greater emphasis on productivity;
- c. Proposition 3 (P3): the emphasis on productivity leads to a personalized structuring organizational environment, which occurs through the union of people, purposes, and routines;
- d. Proposition 4 (P4): a personalized structuring organizational environment makes it possible to create a personalized sense of belonging;
- e. Proposition 5 (P5): a personalized structuring organizational environment makes it possible to create a depersonalized sense of belonging.

Figure 2 illustrates the model built and proposed in this research..

Understanding the consequences of a lack of structured environment

The data collected supported us in identifying that the app workers we interviewed, when they entered their job, were faced with an organizational environment that was poorly structured in terms of personal interactions. This, on the one hand, provoked a feeling of freedom, while, on the other, instigated a sense of isolation and invisibility. Below are examples of the reports that underpin this initial category of our model. "I don't think we can really feel the company on a day-to-day basis, and that's because there's no one we can talk to there. It's all through the app, so the company kind of exists, but it doesn't (E1)." "As soon as I signed up to the app, I already felt a weight being lifted, that of the day-to-day demands from my boss, because waking up every day and not being demanded to be on time, the fear of being late, there's no better feeling, but on the other hand, when you leave a formal job, you miss that formal structure, the demands (E2)."

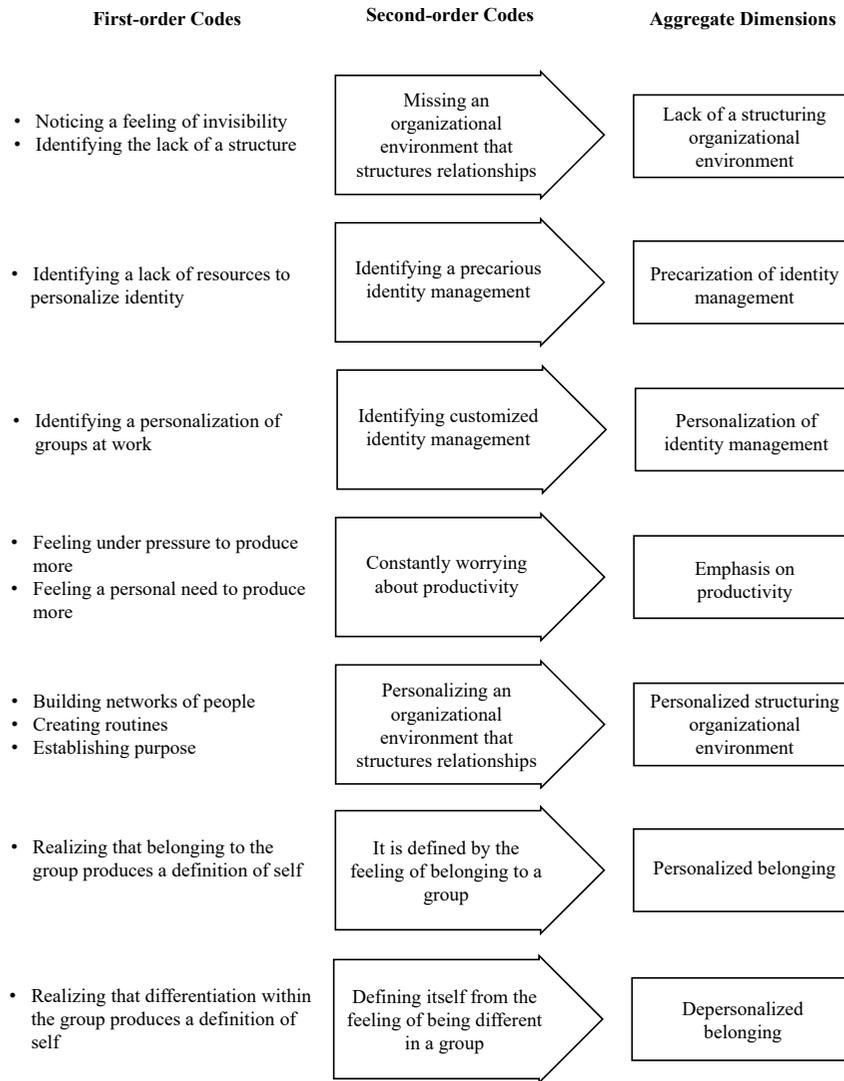


Figure 1. Structure of the codes derived in the analysis.
Source: Elaborated by the authors with research data.

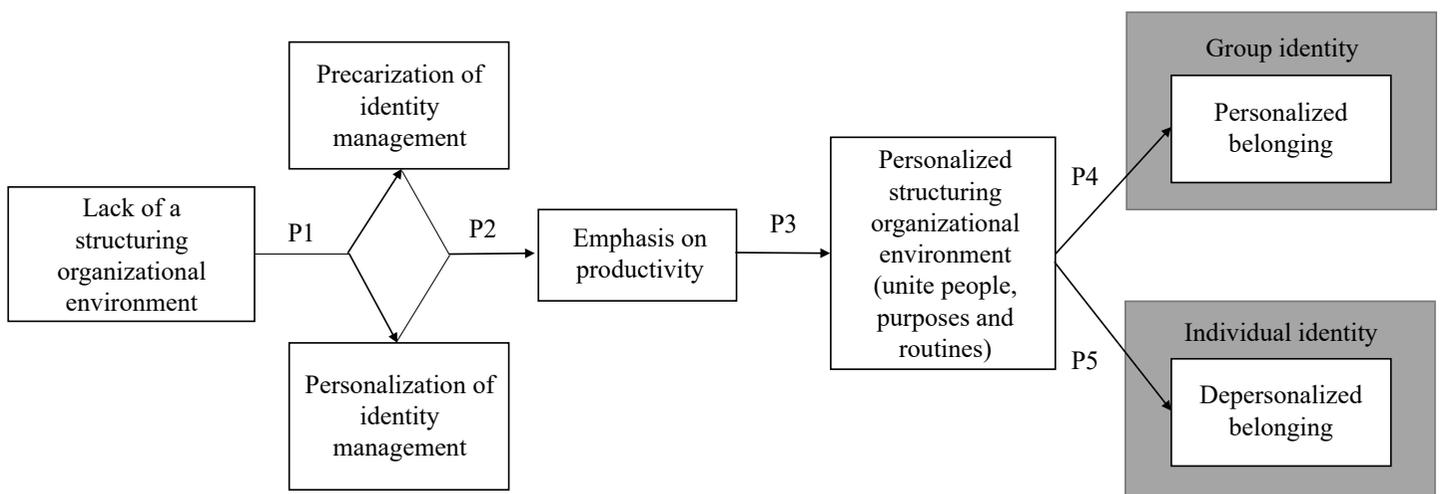


Figure 2. Model on the co-construction of identities at work by self-employed workers.
Source: Elaborated by the authors with research data.

We notice that in the first story there is a perceived absence, not only in relation to the organizational structure in terms of the physical, the place to go to and have as a base, but also in relation to the absence of people, of interpersonal relationships. In the second story, we see the benefits of the freedom of app work, experienced in the first moments of joining, fading over time and returning to the need for control and formality.

In some cases, the notion of the lack of a structuring organizational environment only arose when the worker had to seek help from the app's management. In the first report below, the interviewee mentions the expression "it hit me" at the moment when he realizes his invisibility to the company, and the need to personalize the management of 'who I am' at work. Another fact we identified was that the lack of resources for creating a more tangible collective identity layer is generated precisely by the absence of a formal organizational environment. Faced with this absence, workers end up improvising and creating ways to customize their own cars as a group in order to create an identity. In this way, they create small islands of collective identity among other drivers in the category. "I had a problem with a passenger that made me realize that I had to solve my problems on my own, I didn't have any support from the organization, I still turned to the app, but I got a message that they weren't responsible for work occurrences, that I had to solve my problems, then I found myself alone, it hit me that I was my own boss (E3)." "This lack, this thing that's kind of invisible, that's kind of all down to the algorithm, means that we end up feeling kind of lost in terms of who we are and how we do things. The other day I bought a little sign with LEDs and gave it to about eight friends who also work so I could create the feeling that we were a group. It worked, but it looks ugly, because it's something you buy cheaply on the internet, poorly made, it would be nicer if it was something official. It looks a bit piratey, you know? (E7)"

Thus, one way to circumvent the absence of a collective organizational structure for physical interactions between workers, and to provide the process of identity construction, is to form informal groups and, while identifying the precariousness of identity management, create strategies for personalizing the group, and, consequently, personalize identity management. The following story illustrates this idea: "We have a work strategy, we always rotate to work at dangerous times and in dangerous places too, it's a way for us to always help each other, because that way everyone earns a bit more and also protects themselves. Some groups are even imitating us (E12)."

One of the main questions of our research concerns the process of identity co-construction of the app worker.

Initially, we were faced with the need to determine the start of this process, and previous reports have shown that it begins with the awareness of the lack of a formal structure for physical interactions between workers in this type of work. App workers are faced with constructed groups that personalize themselves by practicing strategies that differentiate them from each other, showing a personalization of identity management, while, at the same time, perceiving the absence of mechanisms for identity personalization, precariousness, coming from the app. This evidence led us to the first proposition of this study.

Proposition 1: the lack of a structured organizational environment for interactions between workers leads to a precariousness of identity management and a personalization of identity management.

Understanding the emphasis on productivity

The precariousness and personalization of identity management presented above had implications for the workers' emphasis on a high level of productivity. The environment of instability and insecurity led workers to focus on productivity, but it was necessary, according to the interviewees, to create a way of minimizing bad weather by joining forces, even if informally. In most cases, the interviewees said they felt more motivated and safer at work when they were part of informal groups, but, on the other hand, they also said they felt more pressure to increase productivity as a result of being part of groups, even if the positive feeling of collectivity and the result of production generated positive results individually. We coded these cases as 'constantly worrying about productivity.' Below, we present a report that shows the aspects of focusing on productivity, both individually and collectively, and their nuances. "As we are always thinking about how to produce, we form collectives, support groups, which make us feel that there is a glue that makes us one, even if there is no organization behind it. The organization is us. It's a bond that's created, but it's the result of the need to organize collectively in order to gain a boost, feel more motivated, produce more (E26)." "The company doesn't give us a place to talk, to exchange ideas. It's like this, we don't have a place for coffee, we don't get to know each other through the company itself, anything it does, nothing. So we find a way, because we like to make friends, we need to talk about what works, about ways of making more money in this job. There are a few tricks. But there's no room to talk (E9)."

The speeches suggest that the precariousness and personalization of identity management are the factors that have led to fairly improvised and informal forms of organization. However, as this association has as its emphasis

the need to increase the capacity to extract financial results from work activity, we note that it increases the emphasis on productivity. We therefore propose that:

Proposition 2: the precariousness and the personalization of identity management lead to a greater emphasis on productivity.

Faced with the emphasis on producing, the interviewees reported that they informally create groups to deal with their need for a personalized structuring organizational environment. This environment allows them to interact in an atmosphere that is more conducive to making up for the shortcomings of the lack of a formal organizational environment. The reports showed three main types of objectives of these elements that create this structuring environment that helps them face the need to produce better: the union of people (makes it possible for individuals to connect), purposes (makes it possible for individuals with common objectives to organize themselves), and routines (makes it possible for individuals with common regular activities to connect). The following examples illustrate this idea: “We had to organize ourselves, and groups are formed by people who are together at a certain time and end up becoming a group so that everyone can produce more. The ‘Guardians,’ the group I’m part of, was like that (E35) (they bring people together).” “There are groups made up of women, and the aim is to protect women from passengers who are inconvenient, to help with strategies for women to choose races, so sometimes it’s according to the objective (E31) (they unite purposes).” “I’m part of a group of people who play soccer on Sundays, so I think it can also be that, a routine activity that relaxes us so we can produce more afterwards (E38) (they unite routines).”

We therefore propose that:

Proposition 3: the emphasis on productivity leads to a personalized structuring organizational environment, which occurs by uniting people, purposes, and routines.

Identities: The ties that bind

According to the analysis carried out, despite working in an organization with a low level of organizational structuring for developing interpersonal relationships with coworkers, the creation of a personalized structuring organizational environment made it possible to create the app workers’ identity on two levels: group and individual. At the group level, we noticed that the personalizations that are made give those who adopt them a sense that belonging to a collective has meaning for those who participate in it. This sense of belonging communicates

expectations of behavior and roles and becomes an integral part of the participants’ self. The following accounts exemplify this idea. “We create these skull things, the knife in the skull, but in the end it’s all about making us produce more. On the one hand, we feel more connected to that group that’s using the same customization, it’s kind of our tribe, which wants to be well seen, it has to show that it’s producing. On the other hand, in order to create these groups, we invest our own money, symbols to put on our cars, things like that. It puts more and more pressure on us to be productive. There’s the group that accepts any race, our skull group is known for its strategy of taking those with a higher dynamic price. That means alternative times, more dangerous places. That’s why we’re the skull! (E29)” “Every job I went to had a table for the employees, a place to have lunch, even if it wasn’t every day. At the last bus company there were uniforms and monthly meetings. Here everything is very individual, everyone does their own thing. But then we organize ourselves, put stickers on cars, make Zap groups. I feel more like I belong to the ‘The Bald Ones’ group than to the company itself (E1).”

Thus, even in the absence of an environment structured by the company in terms of interactions between workers, we found evidence that the app workers interviewed associate themselves with collectivities that they feel part of, thus developing their identity at the group level of analysis. We therefore propose that:

Proposition 4: a personalized structuring organizational environment makes it possible to create a personalized sense of belonging.

However, it is not only at the group level and in terms of personalized belonging that we identified elements of identity formation. Some interviewees also revealed identity formation at the individual level of analysis, by showing a sense of depersonalized belonging, i.e., which occurred independently of the formation of groups, focused on the individuals themselves. This belonging does not refer to any collectivity and gives the individual a feeling of being unique and distinct. The following statements illustrate this form of identified identity. “Ah, this environment gives me the basis for feeling unique, because I’m seen. I’m in a group, but within that group, I’m the quiet one. So if you ask me who I am, I’m the quiet one, that’s how I see myself. Without this group, if it was like it was in the beginning, which was just me and the app, nobody would see me, it would be difficult for me to develop a way of answering this ‘who am I’ (E40).” “I’m part of the group ‘The Bald Ones.’ And in this group, I’m the one who organizes the barbecues, who livens up the group, who makes the stickers, who makes everyone laugh. So this group we’ve created, our *panela*, makes me feel like the joker, the one who brings everyone together. Everyone

says: Fatty is the guy who makes it happen! ... So yes, there I started to see myself as the one who cheers up, if we didn't have the group, I wouldn't be able to see myself like that (E23)."

By 'being unique,' the individual becomes 'seen,' an essential element for identity formation (Ibarra, 1999). This work has the merit of showing that this occurs within informal organizations set up in an organizational environment with little structure for interpersonal interactions. We therefore suggest that:

Proposition 5: a personalized structuring organizational environment enables the creation of a depersonalized sense of belonging.

DISCUSSION

Some studies argue that, when reference is made to independent workers, aspects of the absence of rights, duties, and representativeness immediately come to mind (Fleming et al., 2017; Wentrup et al., 2019). This is because the scarcity of these legal aspects is a consequence of the absence of a structured organizational environment for interactions between workers (which causes a feeling of loneliness), which we have already called organizational orphans. This lack of reference, mainly due to the absence of a structured environment for interactions between workers and stable connections, leads to increased anxiety and feelings of isolation and insecurity, hindering the construction of identity (Wentrup et al., 2019). These aspects were also found in this research, which therefore corroborates the literature that already expressed reports of relational situations between the individual and the organizational environment in the construction of identity (Kahn, 1990; Thornborrow & Brown, 2009).

In the midst of theoretical disagreements about the role of groups in identity formation, we are inclined to explore the importance of collectivity in the construction of identity. Identity formation has come about through the existence of groups with more stable relationships and the individual (in this case, the self-employed worker). These groups are built to create a sense of belonging that favors the construction of the 'individual self' and the 'collective self.' Entering into the process of co-construction of the identity of independent workers, starting from an absence of a structured organizational environment for workers to interact, and going beyond the need to create connections for awareness of the individual 'I' and the individual 'I' in the group, we add a more holistic view on the management of the identity of application workers, unifying studies that address personal, social, structural, and cultural aspects (DeRue & Ashford, 2010; Huber & Brown, 2017). We

identify with research that adopts the need for connections and bonds (Araujo et al., 2015; Bauman, 2013; Felix & Bento, 2018; Gomes & Felix, 2019; Zheng et al., 2020), for identity construction, but not only with an environment designed within a formality, because even in the midst of a precarious environment, there are emerging strategies for identity co-construction.

Self-employment and its nuances tend to break down the social ties that exist in jobs that are considered formal, with the main consequence being job insecurity and uncertainty (Petriglieri et al., 2019). We added to this finding the idea that there is a need for a sense of belonging to a group, to circumvent organizational euphemisms and soften or eradicate these harmful consequences, and identified that bonds increase motivation and security by reducing uncertainty and facilitating identity positioning. This is due to the social ties that are built, even if they are informal, and reduce anxiety in the formation of identity. Thus, the informal interaction built up between app participants aims to fill gaps, not only in routines and patterns, but also in parameters that serve as support for identifying similarities and dissimilarities in the definition of the self.

However, it is the emphasis on production that creates environments in which efforts and purposes converge, which at the same time give rise to a sense of personalized belonging, when the group itself constructs a group identity, and to a sense of precarious belonging, when the individuals construct their own characteristics distinct from those of others, thus creating an identity and a clear delimitation of the 'I.' These conversion environments are groups created by the initiative of the independent workers themselves, who, at first, prioritize production, generating an environment of security and motivation at work, increasing engagement, but come to be seen as ties that create knots (Felix & Bento, 2018; Zheng et al., 2020).

In general, when we explored the process of building the identity of app workers, we followed theoretical paths that made us reinforce results we had already found, such as the need for a structured environment for identity building and the importance of connections that minimize tensions, feelings of uncertainty, and loneliness, based on authors already referenced in this work. On the other hand, it was also possible to go down paths that detailed how this process of identity construction takes place, revealing the process of collective belonging constructed by the independent workers themselves in order to circumvent the lack of structure for interpersonal interactions, to promote security and motivation, to differentiate themselves and be different, and to embrace an identity.

CONCLUDING REMARKS

Theoretical implications

The theoretical implications of this work refer to an aggregation on the theme of identity construction for independent workers, especially app workers. Our study focuses on an analysis and discussion of the process of identity construction and management, making it possible to go beyond the limits of conventional views and explore the biases of a new type of work and its specificities. Furthermore, by analyzing the construction of the structured environment by the workers themselves, we identified how they subsidize the construction of identity and lead to the construction of a personalized or depersonalized belonging that favors the management of organizational and personal identity. In addition, we noticed that the collective built by independent workers, more specifically app workers, comes from an integration whose initiative comes from the workers themselves, at first with a productive purpose, but consequently being a source of facilitators for the construction of identity.

Limitations and future research

This study has limitations that can be remedied by future research. At first, we consider it a limitation that we conducted our research only with independent workers of transportation and delivery apps, most of whom were men, and who worked in Brazil. We suggest that future studies explore other types of apps, as there may be different specificities, as well as exploring the gender aspect with a greater emphasis on research involving women, due to the different view of the role of women in society (Biasoli-Alves, 2000).

One aspect identified as a limitation is the fact that the research was carried out at a specific point in time, and does

not offer a longitudinal view, the application of which could go into greater depth, understanding from the moment the need to form the groups arises until they are formed. Future studies could use the theoretical propositions generated by this research, built in particular by the qualitative characteristic adopted, testing them through quantitative studies and checking whether the proposed relationships are supported.

Another contribution to future research is the possibility of detailing the behaviors and maintenance of the groups identified, describing the group structure, existing rules, hierarchy, and command. For example, one participant reported that it was not easy to join the group, especially the first ones created, and that there was a possibility of exclusion, making it clear that there are criteria for joining and remaining in this group. Future research could explore the dynamics of these groups.

Practical implications

This study offers practical implications for independent workers and app work platforms. For independent app workers, the study shows the existence of groups that help produce and facilitate the construction of identity, as well as showing the need for a collective interactional structure, insertion into groups to facilitate the development of work, and the positioning and definition of identity, and this can favor the search for insertion into groups or the incentive to create them.

In the process of opting for independent work on apps, the fear of isolation and anxiety about building a 'self' can reduce the preference for this type of work. For this reason, we suggest that delivery and transportation apps adopt appropriate conditions for creating group structures, providing full support in terms of suitable tools and training for group participants.

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Authorship

Eliana Pires Conde

Fucape Business School

Av. Fernando Ferrari, n. 1358, Boa Vista, CEP 29075-505, Vitória, ES, Brazil

E-mail: eliana.conde@ifpi.edu.br

 <https://orcid.org/0000-0002-5482-1563>

Bruno Felix

Fucape Business School

Av. Fernando Ferrari, n. 1358, Boa Vista, CEP 29075-505, Vitória, ES, Brazil

E-mail: bfelix@fucape.br

 <https://orcid.org/0000-0001-6183-009X>

Nadia Cardoso Moreira*

Fucape Business School

Av. Fernando Ferrari, n. 1358, Boa Vista, CEP 29075-505, Vitória, ES, Brazil

E-mail: nadiacardoso@fucape.br

 <https://orcid.org/0000-0002-9085-6595>

* Corresponding Author

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2nd author: conceptualization (equal), data curation (equal), formal analysis (equal), funding acquisition (equal), investigation (equal), methodology (equal), project administration (equal), resources (equal), software (equal), supervision (equal), validation (equal), visualization (equal), writing – original draft (equal), writing – review & editing (equal).

3rd author: conceptualization (equal), data curation (equal), formal analysis (equal), funding acquisition (equal), investigation (equal), methodology (equal), project administration (equal), resources (equal), software (equal), supervision (equal), validation (equal), visualization (equal), writing – original draft (equal), writing – review & editing (equal).

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Data Availability

The authors claim that all data used in the research have been made publicly available through the Harvard Dataverse platform and can be accessed at:



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