

RESEARCH ARTICLE

Humanness in times of uncertainty: On the link between perceived job insecurity, self-objectification and well-being

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Abstract

The current work scenario is pervaded by widespread perceptions of job insecurity, which is one of the main stress factors for workers and their well-being. This article aims to investigate the link between these perceptions and a most inner dimension, that is, people's tendency to self-objectify (i.e., self-viewing as objects rather than fully human beings). Furthermore, we aim to verify the role of this self-objectifying process in explaining the well-established relation between perceived job insecurity and well-being. Across four studies and a single-article meta-analysis (total $N = 684$), we show that perceived job insecurity is consistently linked with self-objectification. Furthermore, this objectifying self-perception is associated with decreased well-being and plays a mediational role in the link between perceived job insecurity and this latter variable.

KEYWORDS

dehumanization, job insecurity, self-objectification, well-being, workers

1 | INTRODUCTION

Uncertainty is the only certainty there is.

(Paulos, 2003)

In this quote, Paulos (2003) aptly portrays the state of insecurity that is featured in this century. Starting from the 2008 financial crisis and arriving at the ongoing pandemic, in this century, human society has been increasingly characterised by uncertainty, and work is one of the most affected domains. The European Union has identified job insecurity as a 'main psychological hazard' (European Union, 2013; Schaufeli, 2016), and a growing amount of research is currently dedicated to investigating its occurrence and the possible consequences. From a psychological perspective, perceived job insecurity (i.e., 'a subjective phenomenon that concerns uncertainty about an involuntary loss of the current job in the future'; Griep et al., 2016, p. 148) is one of the main stress factors for today's workers and their well-

being (for a review, see De Witte et al., 2016). In the present article, we aim to examine the link between perceived job insecurity and a most inner dimension, that is, people's tendency to self-objectify (i.e., self-perceived as being object-like rather than human-like; see, e.g., Baldissarri et al., 2014). Furthermore, we analyse the role of this self-dehumanizing perception in the well-established process that links perceived job insecurity to people's undermined well-being (De Witte et al., 2016).

2 | WORKING SELF-OBJECTIFICATION

Objectification is a form of dehumanization that refers to the perception (and treatment) of people as objects (Nussbaum, 1995). This phenomenon involves the view of people as useful instruments that lack human features (e.g., Vaes et al., 2014), and it is particularly relevant in the work domain. However, although working objectification is

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a longstanding phenomenon that became particularly debated with the advent of capitalist societies (e.g., Arendt, 1958; Blauner, 1964; Fromm, 1974; Marx, 1844), organisational and social psychological scholars have only recently shown interest in the denial of workers' humanness (Andrighetto et al., 2017; Baldissarri, Valtorta, et al., 2017; Caesens et al., 2017; Christoff, 2014).

In the last decade, research has mainly focused on self-objectification, which is the most insidious facet of this phenomenon (Baldissarri et al., 2022). Specifically, social psychological research has operationalised working self-objectification as a self-perception as being instrument-like—rather than human-like—and as a decreased self-attribution of humanness (Baldissarri et al., 2017). Recent research has analysed the conditions that trigger workers' self-objectification (e.g., Auzoult, 2020; Auzoult & Personnaz, 2016; Baldissarri et al., 2014; Baldissarri et al., 2017) by identifying two main possible antecedents: the perception of being objectified by superiors and the performance of objectifying activities, that is repetitive, fragmented and other-directed work tasks. For example, in a cross-sectional study, Baldissarri et al. (2014) showed that the perceived objectification (i.e., the perception of being viewed and treated as instruments by their superiors) led workers to internalise this objectifying gaze and to objectify themselves. Moreover, the mere recall of an objectifying work experience, due to the relationship with the employer or to the performed activity, led employees to perceive themselves as being less human (Loughnan et al., 2017). Recently, Baldissarri and Andrighetto (2021) showed experimentally that being treated in an instrumental way led people to self-perceive as instrument-like (vs. human-like) and, in turn, this self-perception undermined their task engagement and performance. In addition, Baldissarri et al. (2017) and Baldissarri, Gabbiadini, et al. (2020) provided seminal experimental evidence that doing work activities characterised by objectifying features (e.g., repetitiveness, fragmentation and other direction) triggered self-objectification and its related consequences. In particular, through a series of laboratory studies, they found that performing a manual or computer objectifying task led participants to objectify themselves, in terms of both decreased self-attribution of human mental states and increased self-perception of being instrument-like. This increased self-objectification is associated with increased conformity and decreased belief in having free will (for a review, see Baldissarri et al., 2022), which refers to the perception of being able to make choices and be reasonably free of constraints (Baumeister & Monroe, 2014; Monroe & Malle, 2010).

Inspired by this previous evidence, we wanted to take another step forward in the study of self-objectification by proposing another possible antecedent of this process—*perceived job insecurity*—and a further detrimental consequence—reduced well-being.

3 | PERCEIVED JOB INSECURITY AND WELL-BEING

During the second half of the 1970s, many multinational corporations suffered from a series of setbacks that provoked dramatic changes in their employment conditions. Technological novelties, the recession

and the concurrent declining influence of unions promoted the rise of a more flexible labour market together with the introduction of new forms of employment (Kalleberg, 2011; Vosko, 2011). Such new forms were commonly characterised by increased job precariousness and a deterioration of working conditions (Quinlan et al., 2001; Scott, 2004). The great recession of 2008 further worsened the situation. For example, this recession increased unemployment and decreased the quality of the jobs that survived. This led to the growth of precarious and temporary job relationships, which was even experienced in the previously protected public sector (Benach et al., 2014). In turn, these changes resulted in exacerbated perceptions of job insecurity among workers (Daly et al., 2013; Kalleberg, 2000, 2011).

Notably, perceived job insecurity is a multifaceted experience that cannot be explained only by 'factual' working conditions, such as the type of contract. Indeed, societal, organisational and individual (e.g., the level of education) factors might also play a prominent role in shaping this perception. In particular, its antecedents can be summed up in twofold sources (Lozza et al., 2020): the changes in contracts of employment (e.g., from permanent to temporary) and contextual elements, such as economic (in)stability (e.g., economic downturns and recoveries). Accordingly, job insecurity increases in countries facing an economic crisis, while it decreases in countries enjoying prosperity (e.g., Lübke & Erlinghagen, 2014). Moreover, job insecurity is significantly correlated with the environment featuring each work organisation. Working in an unstable company during an economic downturn, a lack of career opportunities and the experience of organisational changes (e.g., downsizing processes) all exacerbate workers' perceived job insecurity (Greenhalgh & Rosenblatt, 1984; Keim et al., 2014; Klandermans & Van Vuuren, 1999; Sutton, 1987; Sverke & Hellgren, 2002). This scenario explains why perceived job insecurity may affect not only temporary workers but also permanent workers: although spared from unemployment, they start to feel insecure about their employment situation because of these dramatic changes.

Most importantly, perceived job insecurity often plays a more prominent role in undermining workers' well-being than most of the factual factors, such as the type of contract or the occupational category (Russo & Terraneo, 2020). Research has shown that perceived job insecurity has significant negative consequences on health and psychological well-being (for a review, see De Witte et al., 2016), although the impact on permanent and temporary workers might differ. For example, it has been found that perceived job insecurity has relevant effects on permanent workers' psychological complaints (Griep et al., 2016). Furthermore, the threat of job insecurity is related to decreased levels of job satisfaction and increased job exhaustion among those with a permanent contract, while they remain relatively stable in temporary workers (De Cuyper & De Witte, 2007, 2008). However, more recent research has shown that the 2008 crisis made insecurity a structural feature of the labour market. Consequently, job insecurity is now associated with the decreased job and life satisfaction of both temporary and permanent employees in a similar way (De Cuyper et al., 2019). A recent cross-national analysis confirmed these assumptions by showing that subjective perception of job insecurity is negatively related to well-being (measured using the 5-item World Health Organization

Well-Being Index, WHO-5, Topp et al., 2015) for both permanent and temporary workers (Russo & Terraneo, 2020).

The detrimental consequences of perceived job insecurity have been explained in different ways (see De Witte et al., 2016; Schreurs et al., 2010). Some scholars refer to the violation of the work psychological contract (Rousseau, 1995), in which the employer's guarantee of security in exchange for the employee's loyalty is crucial (Schreurs et al., 2010). Thus, permanent workers particularly experience job insecurity as a break of the psychological contract with their employer (De Cuyper & De Witte, 2008). This break leads to consequent effects on their well-being (Wanous et al., 1992), such as a state of psychological distress, anxiety or depression (Roskies et al., 1993). Furthermore, job insecurity obstructs the fulfilment of basic human needs related to work, such as earning income, having social contacts outside the family, and developing the individual and social self (Jahoda, 1982; Paul & Batinic, 2010). The frustration in satisfying these needs is associated with poor physical health and psychological well-being (e.g., McKee-Ryan et al., 2005; Paul & Batinic, 2010; Roelfs et al., 2011).

Most importantly, some evidence (e.g., Bordia et al., 2004) suggests that undermined well-being due to job insecurity is also explained by a prolonged state of uncertainty (Dekker & Schaufeli 1995; Kasl et al., 1975) and loss of control over one's own life (Vander Elst et al., 2011; Vander Elst et al., 2014). Indeed, the perception of job insecurity involves feelings of uncontrollability of the situation and unpredictability associated with the fear of an uncertain future (De Witte, 1999), which are intrinsically related to a sense of powerlessness and lack of agency (Russo & Terraneo, 2020; Vander Elst et al., 2014). These psychological states are highly relevant to our main assumptions, as they provide important insights into a possible link between job insecurity and a peculiar self-dehumanizing process that is typical of work contexts, that is, self-objectification.

4 | THE PRESENT RESEARCH

Basing our research on the reviewed literature, we first hypothesised that perceived job insecurity is an antecedent of self-objectification (*Hypothesis 1*). This main prediction is first supported by the nature of the job insecurity state itself. As mentioned above, job insecurity is characterised by prolonged feelings of uncertainty (Dekker & Schaufeli, 1995; Kasl et al., 1975) and a loss of control over one's work and life (Vander Elst et al., 2011, 2014). This state of uncontrollability and uncertainty about events commonly characterises the nature of passive entities controlled by external forces, such as objects, rather than the state of agents who manage their actions and foresee what is going to happen (Dennett, 1987; Michotte, 1963; Molina et al., 2004; Wegner, 2002). Consistently, lack of power has been shown to trigger self-dehumanisation (Yang et al., 2015). Moreover, the perception of job insecurity involves the feeling that the job future and employment are dependent on others' choices. This belief presumably enhances the metaperception of being instrumentalised and treated by the system as an interchangeable tool, an experience that is associated with self-objectification (e.g., Baldissarri et al., 2014; Sainz & Baldissarri, 2021).

Taken together, this led us to expect the perception of job insecurity to be linked with self-objectification, in terms of self-perception both as an instrument controlled by others and as an individual less able to experience human mental states, such as thinking or planning.

Furthermore, we assumed that increased self-objectification would, in turn, affect workers' psychological well-being (*Hypothesis 2*) and, thus, would play a role in mediating the relationship between perceived job insecurity and reduced well-being (*Hypothesis 3*). Indeed, several studies investigating self-objectification in the sexual realm (for reviews, see Calogero et al., 2011; Moradi & Huang, 2008) or other contexts (e.g., Fontesse et al., 2021) revealed that this self-perception has a negative impact on well-being. Therefore, it is plausible that self-objectification would also be related to decreased well-being in the work domain and may thus help to explain the reduction of well-being related to perceived job insecurity (e.g., De Witte et al., 2016).

We tested our assumptions through four studies that employed different research designs: cross-sectional surveys conducted with real workers (Study 1 and 2) and laboratory (Study 3) and online (Study 4) experimental studies. In Study 1, workers' perception of job insecurity was measured, and its link with self-objectification and well-being was tested controlling, as covariates, two other well-known objectifying factors: perceptions of performing an objectifying activity and being objectified by superiors. Through the involvement of both temporal and permanent workers, Study 2 was designed to consider the type of contract (temporal vs. permanent) as a factual indicator of job insecurity possibly correlated with the self-objectifying process via increased perception of job insecurity. In the last two experimental studies, participants' perception of job insecurity was elicited through a work simulation developed ad hoc (Study 3) and an imagined scenario (Study 4). In all the studies and consistent with previous works (e.g., Baldissarri et al., 2017), self-objectifying perceptions were measured in terms of both a self-view as instrument-like (vs. human-like) and self-denial of human mental states.

5 | STUDY 1

The goal of Study 1 was to provide initial correlational evidence on the hypothesised link between perception of job insecurity, self-objectification and well-being in workers employed in a company. This link was tested controlling for the two main antecedents of working self-objectification investigated thus far—perception of performing objectifying activities and being objectified by one's own superior.

5.1 | Method

5.1.1 | Participants

In total, 195 workers (85 female) voluntarily participated in the study. They were all employed in an Italian branch of an international manufacturing company that produces car components. Participants were recruited based on a request from the human resources manager.

Their ages were rated by ranges: 13.3% of the participants belonged to the 20- to 30-year-old range; 30.8% belonged to the 31- to 40-year-old range; 37.9% belonged to the 41- to 50-year-old range; 16.4% belonged to the 51- to 60-year-old range; 1% were over 61 years old; and 0.5% were less than 20 years old. The majority of the sample was Italian (86%), three workers omitted their nationality, and the remaining sample was Nigerian, Mexican, Colombian, or Albanian. The participants had been employed in the industry for a minimum of 2 months to a maximum of 36 years. The workers belonged to different departments of the industry: assembly (63.6%), preparations (11.8%), heat treatments (14.4%), logistics and stock (2.6%), prototypes and practice rooms (4.1%), and others (e.g., maintenance or packaging, 3.5%). All the workers had a permanent contract and a fixed salary. A sensitivity analysis¹ conducted with G*Power (ver. 3.1.9.7; Faul et al., 2009) showed that our sample was large enough to detect an effect size of $f^2 = 0.06$, assuming an α of 0.05 and a power of 0.80.

5.1.2 | Procedure and materials

An investigator individually administered a paper and pencil survey to each participant, which was presented as a research project on the 'mood of the modern worker'. Before fulfilling the scales² that are described below, the participants were asked to provide some demographic information, including age, sex, department and years of employment. At the conclusion of the study, the participants were thanked and fully debriefed.

Perceived job insecurity

Job insecurity was measured using four items ($\alpha = 0.80$) adapted from the scale of De Witte (2000; see Schreurs et al., 2010). The items were 'I am sure that I will be able to keep my job' (*reverse item*); 'There is a risk that I will lose my present job in the near future'; 'I feel uncertain about the future of my job'; and 'I think that I will lose my job in the near future'. The participants rated each item on a 7-point scale (1 = *strongly disagree*, 7 = *strongly agree*).

Covariates

Perception of objectifying job features. The workers' perception of their activities as being characterised by objectifying features was measured with six items ($\alpha = 0.79$) adapted from the *Job Diagnostic Survey* (JDS; Hackman & Oldham, 1976). In particular, the items concerned the three objectifying features that have been studied in previous research: repetitiveness (e.g., 'The job is quite simple and repetitive'), fragmentation (e.g., 'The job is arranged so that I have the chance to do an entire piece of work from beginning to end', *reverse item*) and other-direction

(e.g., 'The job gives me considerable opportunity for independence and freedom in how I do the work', *reverse item*). The participants were asked to rate the extent to which their job had these characteristics on a 7-point scale (1 = *not at all*; 7 = *extremely*). Higher scores on this scale indicated a higher perception of the activities as being characterised by objectifying job features.

Perception of Being Objectified by Superiors (PBOS). The adapted version of the *Objectification Scale* (Gruenfeld et al., 2008) that was adopted by Baldissarri et al. (2014) was used to measure the workers' perception of being objectified by their superiors. The participants were asked to evaluate their relationship with their superior with nine items on a scale that ranged from 1 (*totally disagree*) to 7 (*completely agree*). Example items are 'My supervisor appreciates me even when I am not useful to her/him' (*reverse item*) and 'My supervisor looks for me only when she/he needs something'. However, unlike previous research (Baldissarri et al., 2014; Baldissarri et al., 2019), the principal component analysis (see [Supplementary Materials](#)) indicated that two items did not load properly, and inspection of the single items revealed that two further items of the scale (i.e., 'I am very useful to my supervisor' and 'My supervisor considers the relationship with me to be important because it helps him to accomplish his goals') significantly reduced the reliability of the scale. Consequently, for this study, we used only five ($\alpha = 0.78$) of the nine items of the original scale. Higher scores on this scale indicate higher levels of perceived objectification.

Self-objectification. Self-objectification was measured through two measures that have been used in previous research. First, the *Self-Mental State Attribution* task (SMSA; Baldissarri et al., 2014) was used to evaluate the self-attribution of human mental states by asking the participants to rate the extent to which they felt themselves able to experience 20 human mental states ($\alpha = 0.93$). Mental states referred to perceptions (e.g., hearing), thoughts (e.g., reasoning), wishes (e.g., wishing), intentions (e.g., planning) and emotions (e.g., fear, pleasure). The items were rated on a 7-point scale (1 = *not at all*; 7 = *very much*). Second, to measure *self-perception as instrument-like* (vs. *human-like*), the participants were asked to rate the extent to which they perceived themselves to be similar (1 = *not at all*; 7 = *extremely*) to four instrument-related items (instrument, tool, thing, machine, $\alpha = 0.91$) and four human-related items (human being, person, individual, subject, $\alpha = 0.70$; Baldissarri et al., 2017). The ratings were combined into a single index (subtracting average ratings on human-like items from average ratings on instrument-like items) so that higher scores indicated greater self-perception as being instrument-like (vs. human-like).

Well-being. To measure the participants' well-being, we used the *Who-5 Well-Being Index* (Bech, 2004), a commonly used self-report scale to assess subjective well-being in organisational settings (Russo & Terraneo, 2020; for a review, see Topp et al., 2015). The participants were asked to rate on a 7-point scale (1 = *never*, 7 = *every day*) the extent to which five statements ($\alpha = 0.88$; e.g., 'I have felt cheerful and in good spirits', 'I have felt active and vigorous') applied to them considering the last 2 weeks.

¹ For all the studies, we performed sensitivity power analyses. For sake of transparency and replicability, all pieces of information necessary to rerun the sensitivity analyses are reported in the [Supplementary Materials](#) (p. 1). The datasets for these studies and the [Supplementary Materials](#) are available through the Open Science Framework (https://osf.io/huc8b/?view_only=6c76d93124244d48a5307f0797d55a5d).

² To test the psychometrics properties of the considered scales, for all the studies we performed a Principal Component Analysis (PCA) on each measure. See the [Supplementary Materials](#) for these analyses.

5.2 | Results

As expected, perceived job insecurity showed significant correlations with the two scores of self-objectification, self-perception as instrument-like (vs. human-like) and the self-attribution of human mental states, which in turn negatively and positively correlated with well-being,³ respectively. Consistent with previous work, the perceptions of objectifying job features and of being objectified by superiors were indeed negatively correlated with self-attribution of mental states and well-being, and they were positively correlated with self-perception as instrument-like. These variables were then entered as covariates in the analyses.

Then, we ran two mediational models in which self-attribution of human mental states and self-perception of being instrument-like (vs. human-like) were tested, alternatively, as mediators (Model 4; Hayes, 2017; see Figure S1 in the [Supplementary Materials](#))⁴ of the relationship between perceived job insecurity and well-being, with objectifying job features and perceived objectification as covariates.

Data analyses (see Table 2 for the results of the two models) indicated that perceived job insecurity was associated with increased self-perception as instrument-like (vs. human-like) and undermined self-attributions of human mental states. In turn, the increased self-perception as instrument-like was negatively related to respondents' well-being, while self-attribution of human mental states was positively related to this outcome variable. Furthermore, when they were entered together in the mediator models, the direct link between perceived job insecurity and well-being was non-significant. Crucially, supporting our expectations, the indirect effects of perceived job insecurity on decreased well-being via both self-perception as instrument-like and self-attribution of mental states were significant. Importantly, these results were obtained even controlling for the perceptions of objectifying job features and of being objectified by superiors.

5.3 | Discussion

Overall, the results of Study 1 confirmed our hypothesis by considering a sample of workers employed in a factory. Perceived job insecurity was found to be significantly related to self-objectification (*Hypothesis 1*), both in terms of decreased self-attribution of human mental states and increased self-perception as being instrument-like (vs. human-like), even when considering the other relevant predictors of this self-dehumanizing process as covariates. Furthermore, the findings of Study 1 revealed that both dimensions of self-objectification were associated with well-being (*Hypothesis 2*) and significantly concurred in explaining the link between perceived job insecurity and undermined well-being (*Hypothesis 3*). Taken together, the findings of the present

study are consistent with the tenet that perceived job insecurity is a relevant critical variable among workers that is strictly related to their self-perception and well-being.

6 | STUDY 2

Study 1 provided initial evidence on the hypothesised link between job insecurity, self-objectification and well-being considering permanent workers. In Study 2, we involved both permanent and temporary workers and considered the type of contract as a predictor of perceived job insecurity. Consistent with Study 1, we assumed that perceived job insecurity would be associated with increased self-objectification and, in turn, with undermined workers' well-being.

6.1 | Method

6.1.1 | Participants

In total, 293 workers (180 females) voluntarily participated in the study. The participants' ages ranged from 19 to 65 years ($M = 33.77$, $SD = 10.62$). A total of 165 participants declared having a permanent job contract, while the remaining 128 declared having a temporary job contract.⁵ The majority of the sample was Italian, three workers omitted their nationality, one was Albanian and one was Slovak. The participants had been working for a minimum of a few weeks to a maximum of 40 years. The workers represented different occupational sectors: office workers (manager, accounting, secretary; 46.4%), technical workers (11.3%), educators and teachers (9.9%), sales and restaurant staff (8.2%), health workers (6.5%), government employees (3.1%), academic researchers (3.1%), IT workers (3.1%), transport and safety operators in a smaller percentage (2.1%), and finally, not responding (6.3%). A sensitivity analysis conducted with G*Power (ver. 3.1.9.2; Faul et al., 2009) showed that our sample was large enough to detect a small effect size, $f^2 = 0.03$, assuming an α of 0.05 and power of 0.80.

6.1.2 | Procedure and materials

Data were collected through an online questionnaire presented as a research project on the 'mood of the modern worker'. By adopting a snowball sampling technique, the participants were recruited through social media and instant messaging systems by sending a link to the web survey and asking the recipients to forward the link to their contacts. Before responding to the scales⁶ that are described below, the participants were asked to provide some demographic information, including

³ We controlled for potential multicollinearity issues for each study. However, the Variance Inflation Factors (VIF) did not signal any critical value; that is, all VIFs < 1.99 for Study 1; all VIFs < 1.19 for Study 2; all VIFs < 1.59 for Study 3; all VIFs < 3.40 for Study 4.

⁴ As recommended by Becker (2005) and Becker et al. (2016), analyses for Study 1 and 2 were performed with and without the sociodemographic variables (sex, age, nationality, years of employment, department). The results were overall unchanged. Therefore, we reported in the main text the results without sociodemographic variables, to decrease the complexity of the model (for a similar procedure, see Caesens et al., 2017).

⁵ More information about sociodemographic variables of the temporary and permanent workers involved in Study 2 is provided in the Supplementary Materials.

⁶ The data used in this study are part of a larger data collection that includes variables such as education, work role, trust in institutions, trust in the future, trust in one's job, turnover intention and job satisfaction. However, in relation to the hypotheses of the present study, these latter variables were not considered because they are part of a study with different objectives.

TABLE 1 Correlations, means and standard deviations for each variable and covariate considered in our studies

Study 1					Covariates		
	Variables	1	2	3	4	Objectifying job features	PBOS
1. Perceived job insecurity	-					0.27***	0.37***
2. Self-attribution of human mental states	-0.33***	-				-0.53***	-0.40***
3. Self-perception as instrument versus human-like	0.39***	-0.52***	-			0.44***	0.51***
4. Well-being	-0.32***	0.50***	-0.52***	-		-0.41***	-0.41***
M	3.21	3.89	-1.28	4.29		4.17	4.50
SD	1.27	1.28	2.65	1.27		1.21	1.40
Study 2	1	2	3	4			
1. Perceived job insecurity	-						
2. Self-attribution of human mental states	-0.17**	-					
3. Self-perception as instrument versus human-like	0.19***	-0.58***	-				
4. Well-being	-0.20***	0.49***	-0.30***	-			
M	3.05	4.85	-2.31	3.82			
SD	1.56	1.18	2.52	1.29			
Study 3	1	2	3	4	Objectifying job features		
1. Perceived job insecurity	-					0.41***	
2. Self-attribution of human mental states	-0.23*	-				-0.32***	
3. Self-perception as instrument versus human-like	0.48***	-0.54***	-			0.48***	
4. Well-being	-0.29**	0.33***	-0.45***	-		-0.16	
M	3.92	4.36	-1.84	4.24		4.63	
SD	1.56	1.19	2.80	1.09		1.09	
Study 4	1	2	3	4			
1. Perceived job insecurity	-						
2. Self-attribution of human mental states	-0.66***	-					
3. Self-perception as instrument versus human-like	0.52***	-0.59***	-				
4. Well-being	-0.85***	0.72***	-0.50***	-			
M	3.81	4.80	-2.27	3.79			
SD	2.04	1.29	2.76	1.67			

Note. * $p \leq .05$; ** $p \leq .01$; *** $p \leq .001$.

Abbreviation: PBOS, Perception of being objectified by superiors.

the type of contract, years of employment, age, sex and job. At the conclusion of the study, the participants were presented with a final page on which they were thanked and debriefed.

Perceived job insecurity

Job insecurity was measured using the four items ($\alpha = 0.87$) of Study 1, adapted from the scale of De Witte (2000; see Schreurs et al., 2010).

Self-objectification

Self-objectification was measured through the same two measures used in Study 1: the *Self-Mental State Attribution* task (SMSA; $\alpha = 0.93$)

and *self-perception as being instrument-like* ($\alpha = 0.85$) versus *human-like* ($\alpha = 0.79$).

Well-being

The items of the *Who-5 Well-Being Index* (Bech, 2004) employed in Study 1 were used to assess workers' subjective well-being ($\alpha = 0.88$).

6.2 | Results

First, we submitted the perception of job insecurity, the two indices of self-objectification and well-being to a type of contract (temporary vs.

TABLE 2 Mediation models (Model 4; Hayes, 2017): Study 1

Predictors	Outcomes (R^2)	Direct effects
Perceived job insecurity	Self-attribution of human mental states (0.34)	$b = -0.15, SE = 0.06, t(191) = -1.31, p = .022, sr^2 = 0.019, 95\%CI(-.28, -.02)$
Perceived objectifying job features		$b = -0.44, SE = 0.07, t(191) = -6.40, p < .001, sr^2 = 0.142, 95\%CI(-.58, -.31)$
PBOS		$b = -0.17, SE = 0.06, t(191) = -2.86, p = .005, sr^2 = 0.028, 95\%CI(-.29, -.05)$
Perceived job insecurity	Well-being (0.33)	$b = -0.11, SE = 0.06, t(189) = -1.66, p = .098, sr^2 = 0.009, 95\%CI(-.24, .02)$
Perceived objectifying job features		$b = -0.14, SE = 0.07, t(189) = -1.81, p = .071, sr^2 = 0.011, 95\%CI(-.29, .01)$
PBOS		$b = -0.17, SE = 0.06, t(189) = -2.70, p = .016, sr^2 = 0.025, 95\%CI(-.29, -.05)$
Self-attribution of human mental states		$b = 0.32, SE = 0.07, t(189) = 4.40, p < .001, sr^2 = 0.069, 95\%CI(.18, .47)$
Perceived job insecurity	Self-perception as instrument-like (0.36)	$b = 0.43, SE = 0.13, t(191) = 3.29, p = .001, sr^2 = 0.036, 95\%CI(.17, .69)$
Perceived objectifying job features		$b = 0.56, SE = 0.14, t(191) = 4.03, p < .001, sr^2 = 0.053, 95\%CI(.29, .83)$
PBOS		$b = 0.63, SE = 0.13, t(191) = 5.16, p < .001, sr^2 = 0.090, 95\%CI(.39, .88)$
Perceived job insecurity	Well-being (0.33)	$b = -0.09, SE = 0.06, t(189) = -1.33, p = .184, sr^2 = 0.006, 95\%CI(-.22, -.04)$
Perceived objectifying job features		$b = -0.19, SE = 0.07, t(189) = -2.64, p = .009, sr^2 = .025, 95\%CI(-.33, -.05)$
PBOS		$b = -0.12, SE = 0.06, t(189) = -1.89, p = .059, sr^2 = 0.013, 95\%CI(-.25, -.01)$
Self-perception as instrument-like		$b = -0.16, SE = 0.04, t(189) = -4.41, p < .001, sr^2 = 0.069, 95\%CI(-.23, -.09)$
<i>Indirect effects</i>		
Perceived job insecurity → Self-attribution of mental states → Well-being		$a*b = -0.05, 95\% CI [-0.10, -0.004]$
Perceived job insecurity → Self-perception as instrument-like → Well-being		$a*b = -0.07, 95\% CI [-0.14, -0.02]$

Note: In grey, the variables entered as covariates in the study. sr^2 = unique variance in the considered outcome accounted uniquely by each predictor variable. Abbreviation: PBOS, Perception of being objectified by superiors.

TABLE 3 Means, standard deviations, and univariate tests of the variables as a function of the type of contract: Study 2

Variables	Permanent Contract Mean (SD)	Temporary Condition Mean (SD)	F-test Condition
Perceived job insecurity	2.49 (1.31)	3.79 (1.54)	$F(1,289) = 60.19, p < .001, \eta_p^2 = 0.17$
Self-attribution of human mental states	4.70 (1.19)	4.82 (1.19)	$F(1,289) = 0.64, p = .424$
Self-perception as instrument- versus human-like	-2.24 (2.43)	-2.41 (2.64)	$F(1,289) = 0.31, p = .576$
Well-being	3.84 (1.22)	3.77 (1.39)	$F(1,289) = 0.17, p = .684$

permanent) MANOVA. The findings revealed a main effect of the type of contract, $\lambda = 0.81, F(4,286) = 16.73, p < .001, \eta_p^2 = 0.19$. The univariate tests (see Table 3) revealed that temporary workers perceived more insecurity than permanent workers. In contrast, the other variables, including self-objectification, did not differ as a function of the type of contract.

However, bivariate correlations (Table 1) confirmed the expected relationship between the perception of job insecurity and all the considered variables: the higher the participants' perception of job

insecurity was, the lesser their self-attribution of human mental states, the higher their self-perception as being instrument-like (vs. human-like) and the lower their well-being. Furthermore, decreased self-attribution of human mental states and increased self-perception as instrument-like were significantly associated with undermined well-being.

Given this correlational evidence, we ran the same two mediational models of Study 1, using the PROCESS macro (Model 4) for SPSS with 5000 bootstrapping samples (Hayes, 2017), in which we

TABLE 4 Mediation models (Model 4; Hayes, 2017): Study 2

Predictors	Outcomes (R^2)	Direct effects
Perceived job insecurity	Self-attribution of mental states (0.03)	$b = -0.13, SE = 0.04, t(291) = -2.99, p = .003, 95\%CI(-.22, -.05)$
Perceived job insecurity	Well-being (0.25)	$b = -0.10, SE = 0.04, t(290) = -2.35, p = .019, sr^2 = 0.014, 95\%CI(-.18, -.02)$
Self-attribution of mental states		$b = 0.51, SE = 0.05, t(290) = 9.10, p < .001, sr^2 = 0.213, 95\%CI(.40, .62)$
Perceived job insecurity	Self-perception as instrument-like (0.03)	$b = 0.30, SE = 0.09, t(289) = 3.22, p = .001, 95\%CI(.12, .48)$
Perceived job insecurity	Well-being (0.12)	$b = -0.13, SE = 0.05, t(288) = -2.76, p = .006, sr^2 = 0.022, 95\%CI(-.22, -.04)$
Self-perception as instrument-like		$b = -0.14, SE = 0.03, t(288) = -4.87, p < .001, sr^2 = 0.073, 95\%CI(-.20, -.08)$
<i>Indirect effects</i>		
Perceived job insecurity \diamond Self-attribution of mental states \diamond Well-being		$a*b = -0.07, 95\% CI [-0.12, -0.02]$
Perceived job insecurity \diamond Self-perception as instrument-like \diamond Well-being		$a*b = -0.04, 95\% CI [-0.00, -0.01]$

Note. sr^2 = unique variance in the considered outcome accounted uniquely by each predictor variable

considered perceived job insecurity as the predictor and self-mental states attribution or self-perception as instrument-like (vs. human-like) as mediators.

As reported in Table 4, the perception of job insecurity was associated with the two markers of self-objectification. Furthermore, the two dimensions of self-objectification were related to decreased well-being. Accordingly, the indirect effects of increased job insecurity on well-being via self-attribution of human mental states and self-perception as instrument-like (vs. human-like) were significant.

6.3 | Discussion

Study 2 corroborated the correlational findings of the previous study by involving both temporary and permanent workers. Perceived job insecurity was found to be significantly related to self-objectification (Hypothesis 1). Furthermore, as in Study 1, self-objectification, in terms of self-attribution of human mental states and self-perception as instrument-like, was associated with decreased well-being (Hypothesis 2). Finally, the two dimensions of self-objectification significantly concurred in explaining the link between perceived job insecurity and undermined well-being (Hypothesis 3).

However, we did not find a direct link of the type of contract on the self-objectifying process and perception of well-being. However, this is consistent with previous research (e.g., Russo & Terraneo, 2020) that suggests that although the type of contract might have an impact on workers' reactions, it is not necessarily related to the consequent effects of the perception of job insecurity. In this regard, it should be noted that when considering the type of contract as a covariate, the results were substantially unchanged (see Supplementary Materials, Table S1).

7 | STUDY 3

Study 3 aimed to experimentally corroborate the previous findings by employing an ecologically valid paradigm that consisted of a work simulation in a laboratory setting. The participants were asked to play the role of a proofreader. In the experimental condition, unlike in the control condition, they were confronted with job insecurity, a threat of layoff due to decreased sales in a time of economic crisis (for similar manipulation of job insecurity, see Probst et al., 2007). In line with Study 1, perception of the objectifying features of the requested activities (i.e., repetitiveness, fragmentation, and other direction) was assessed and included as a covariate in the analyses.

7.1 | Method

7.1.1 | Participants

In total, 111 Italian undergraduates (83 females) participated in the study in exchange for partial course credit. The participants' ages ranged from 18 to 46 years ($M = 23.48, SD = 4.12$). A sensitivity analysis conducted with G*Power (ver. 3.1.9.2; Faul et al., 2009) showed that our sample was large enough to detect a small to medium effect size, $f^2 = 0.09$, assuming an α of 0.05 and power of 0.80.

7.1.2 | Procedure and materials

The participants were individually examined under the supervision of an experimenter. In both conditions, the experimenter first clarified that the simulation represented a whole working day and consisted of two work periods (15 min each) with a short break in the middle

of the working day (5 min). In this simulation, the participants were hired as a proofreader by a (fictitious) Italian journal (*Il Paese*), and they received an email account to which the fictitious editorial staff sent messages. When opening this account, the participants found a welcoming message from the staff and a series of instructions for their work. They were then asked to start the first work period by reviewing four brief articles. After the first 15 min, the experimenter invited the participants to take a 5-min break and to check their email account.

In the insecurity condition, they received the following email that contained the threat of a layoff:

Dear collaborators, we are sorry to inform you that due to the low sales of our newspaper and due to falling advertising revenues, unfortunately about 50% of our workers will have to be laid off.

The selection of who will be fired will take place in the next few days, and those selected for the dismissal will have to abandon the newspaper.

It is with real regret that we inform you of this decision, which we have been forced to take because of the insecure economic context in which we find ourselves.

We will contact you later with further information.

Thanks for the attention.

In the control condition, the participant did not receive any emails during the break.

After the break, the participants performed the second working period, in which they reviewed another four brief articles in 15 min. At the end of the working day, they were asked to complete a series of self-report measures to assess their perception of job insecurity, self-objectification and well-being.

Perceived job insecurity

Perception of job insecurity was measured by considering two items ($r = 0.82$) of the scale from De Witte (2000; see Schreurs et al., 2010) that could be adapted in the considered simulation. The items were 'By doing this job, I felt uncertain about what my future career would have reserved for me' and 'By doing this job, I felt a sense of job insecurity'. The participants rated each item on a 7-point scale (1 = *strongly disagree*, 7 = *strongly agree*).

Self-objectification

Self-objectification was measured through the same two measures as in Studies 1 and 2, that is, *self-attribution of human mental states* ($\alpha = 0.94$) and *self-perception as being instrument-like (vs. human-like)* with the four instrument-related items ($\alpha = 0.90$) and the four human-related items ($\alpha = 0.95$).

Well-being

As in Studies 1 and 2, we used the *Who-5 Well-Being Index* (Bech, 2004) to measure the participants' well-being. The participants were asked to rate on a 7-point scale (1 = *totally disagree*, 7 = *totally agree*) the five statements ($\alpha = 0.85$) regarding how they felt in that moment.

Covariate

Objectifying Job Features. Given that the literature showed a strong link between peculiar job features and self-objectification, we decided to control for the perception of the proofreader activity as characterised by objectifying features. Therefore, the participants rated the extent to which they perceived the proofreading activity as repetitive, fragmented and other-directed on six items ($\alpha = 0.74$; e.g., repetitive, controlled, fragmented).

Attentional check

To check the participant's attention during the manipulation, we added two attentional check items in which we asked the participants if they received an email during the break (possible alternatives: yes, no) and, if yes, which message they found in the email. The possible alternatives were as follows: the newspaper announced its intention to lay off approximately 50% of the workers; the newspaper announced its intention to lay off approximately 20% of the workers; and the newspaper did not report any kind of layoff.

Finally, the participants were thanked and fully debriefed.

7.2 | Results

Five participants were excluded from the analysis because they did not correctly answer one of the attentional check items. Therefore, 106 participants were considered in the final sample. A second sensitivity analysis conducted with G*Power (ver. 3.1.9.2; Faul et al., 2009) showed that our final sample was large enough to detect a small to medium effect size, $f^2 = 0.09$, assuming an α of 0.05 and power of 0.80.

A preliminary *t* test showed that the control measure of perception of objectifying job features did not differ in the two conditions (experimental condition: $M = 4.74$, $SD = 1.05$; control condition: $M = 4.53$, $SD = 1.13$), $t(104) = -.95$, $p = .341$. We then computed a MANCOVA on perceived job insecurity, dimensions of self-objectification and well-being, considering the manipulation as the main factor and the perception of objectifying job features as a covariate.⁷ Our findings revealed a main effect of the condition, $\lambda = 0.83$, $F(4,100) = 5.22$, $p = .001$, $\eta_p^2 = 0.17$, and a main effect of the covariate, $\lambda = 0.72$, $F(4,100) = 9.96$, $p < .001$, $\eta_p^2 = 0.29$. As shown in Table 5, the univariate tests revealed a significant effect of the condition on the participants' perception of job insecurity: participants in the experimental condition

⁷ Analyses that did not consider the covariate had similar results: see the additional analyses in the Supplementary materials, Table S2.

TABLE 5 Means, standard deviations and univariate tests of the variables as a function of conditions: Study 3

Variables	Experimental condition Mean (SD)	Control condition Mean (SD)	F-test condition	F-test covariate
Perceived job insecurity	4.60 (1.47)	3.32 (1.40)	$F(1,103) = 20.76, p < .001, \eta_p^2 = 0.17$	$F(1,103) = 21.06, p < .001, \eta_p^2 = 0.17$
Self-attribution of human mental states	4.33 (1.13)	4.39 (1.24)	$F(1,103) = 0.003, p = .959$	$F(1,103) = 11.47, p = .001, \eta_p^2 = 0.10$
Self-perception as instrument- versus human-like	-1.36 (2.55)	-2.27 (2.55)	$F(1,103) = 1.93, p = .168$	$F(1,103) = 29.18, p < .001, \eta_p^2 = 0.22$
Well-being	4.08 (1.16)	4.39 (0.99)	$F(1,103) = 1.87, p = .174$	$F(1,103) = 2.23, p = .139$

TABLE 6 Mediation models (Model 4; Hayes, 2017): Study 3

Predictors	Outcomes (R^2)	Direct effects
Perception of job insecurity	Self-attribution of mental states (0.05)	$b = -0.17, SE = 0.07, t(104) = -2.42, p = .017, 95\%CI(-.32, -.03)$
Perception of job insecurity	Well-being (0.16)	$b = -0.16, SE = 0.06, t(103) = -2.45, p = .016, sr^2 = 0.049, 95\%CI(-.29, -.03)$
Self-attribution of mental states		$b = 0.25, SE = 0.08, t(103) = 3.02, p = .003, sr^2 = 0.074, 95\%CI(.09, .43)$
Perception of job insecurity	Self-perception as instrument-like (0.23)	$b = 0.85, SE = .15, t(104) = 5.53, p < .001, sr^2 = 0.001, 95\%CI(.54, 1.16)$
Perception of job insecurity	Well-being (0.21)	$b = -0.06, SE = 0.15, t(103) = -0.99, p = .320, sr^2 = 0.007, 95\%CI(-.21, .07)$
Self-perception as instrument-like		$b = -0.16, SE = 0.04, t(103) = -4.07, p < .001, sr^2 = 0.126, 95\%CI(-.23, -.08)$
<i>Indirect effects</i>		
Perception of job insecurity → Self-attribution of mental states → Well-being		$a*b = -0.04, 95\% CI [-0.098, -0.005]$
Perception of job insecurity → Self-perception as instrument-like → Well-being		$a*b = -0.13, 95\% CI [-0.21, -0.06]$

Note. sr^2 = unique variance in the considered outcome accounted uniquely by each predictor variable

perceived more job insecurity than participants in the control condition. However, there were no significant direct effects of the condition on self-objectification and well-being.

However, bivariate correlations (Table 1) confirmed the expected relationship between the perception of job insecurity and all the considered variables: the higher the participants' perception of job insecurity after the work simulation was, the lesser their self-attribution of human mental states, the higher their self-perception as being instrument-like (vs. human-like) and the lower their well-being. Furthermore, decreased self-attribution of human mental states and increased self-perception as instrument-like were significantly associated with decreased well-being.

On the basis of on these correlational results, we tested the two mediational models (Model 4, Hayes, 2017) run in the previous studies. As displayed in Table 6, participants' perception of job insecurity was related to self-perception as instrument-like (vs. human-like) and to self-attribution of mental states that, in turn, were associated with decreased well-being. Crucially, the indirect effects of perception of job insecurity on well-being via self-objectification were significant.

7.3 | Discussion

Study 3 aimed to support experimentally the findings provided by Studies 1 and 2. However, we did not find an effect of our manipulation on the dependent variables except for the perception of job insecurity. The manipulated factual condition of insecurity indeed did exert a direct effect only on the subjective perception of job insecurity. It is possible that our manipulation was not strong enough to yield a difference between participants large enough to affect self-objectification (for this issue, see also the General Discussion).

Nevertheless, we still found correlational support for our hypotheses. The perception of job insecurity due to the experimental condition was significantly associated (and in the expected direction) with self-objectification (*Hypothesis 1*) and well-being. Furthermore, both dimensions of self-objectification were related to well-being (*Hypothesis 2*). When testing a mediational hypothesis (*Hypothesis 3*), we found a significant indirect effect of perceived job insecurity on well-being through self-perception as instrument-like (vs. human-like) and self-attribution of human mental states. Again, this result supports the idea, at least at a correlational level, that the perception of job insecurity

is a core issue associated with self-objectification and well-being (e.g., Russo & Terraneo, 2020).

8 | STUDY 4

Study 4 was designed to provide experimental evidence on the hypothesised link between perceived job insecurity and self-objectification. A new experimental paradigm was then used in which job insecurity was manipulated in a scenario. Such a simple paradigm is particularly useful when researchers need to control independent variables while excluding factors that might confound the results (Aguinis & Bradley, 2014). Thus, we reasoned that a scenario paradigm would allow us to verify the impact of job insecurity on the investigated process without having the interference of other work features strongly connected with self-objectification. For this reason, we followed the indication provided by Aguinis and Bradley (2014; see also Eckerd et al., 2021) by creating a design in which participants first read baseline information that provided a similar contextual background for all conditions. Then, we manipulated the source of perceived job insecurity by creating different versions of the final scenarios that were randomly assigned to participants. In these scenarios, the participants were exposed to the two main factors triggering the perception of job insecurity currently and in our research context (Lozza et al., 2020): the threat of losing a permanent contract and unstable economic contextual conditions. Indeed, research found that when combined in a scenario, these factors affect levels of perceived job insecurity in Italian samples (Lozza et al., 2020). More concretely, the participants were asked to imagine working in an economically unstable company in which their job contract was threatened (experimental condition) or to work in a stable company with a non-threatened job contract (control condition).

8.1 | Method

8.1.1 | Participants

In total, 96 undergraduates (82 females) participated in the study in exchange for partial course credit. The participants' ages ranged from 20 to 50 years ($M = 24.30$, $SD = 5.48$). The participants were Italians, except for one Ecuadorian and one Romanian. A sensitivity analysis conducted with G*Power (ver. 3.1.9.2; Faul et al., 2009) showed that our sample was large enough to detect a small to medium effect size, $f^2 = 0.08$, assuming an α of 0.05 and power of 0.80.

8.1.2 | Procedure and materials

The undergraduates were asked to participate in an online study by using a link that randomly assigned them to one of two conditions (experimental vs. control). In each condition, the participants were asked to imagine working in a company. Depending on the condition, the participants were then asked to imagine that the company has been affected by a crisis and consequently that their contract is threat-

ened. After the scenario task, the participants were asked to complete a series of self-report measures to assess their perception of job insecurity and their levels of self-objectification and well-being. On the final page of the online experiment, they were fully debriefed and thanked.

Manipulation of the scenario

In both conditions, the participants first read the following:

Dear participant, read the following lines carefully and try to identify yourself as much as possible in the scenario that will be described. We ask you to imagine being hired at a company with a very good contract, with a net salary of 1500 euros per month. The company you work for is robust and solid, and there are excellent career advancement opportunities.

Think carefully about it and imagine that you are living in this situation now.

Then, in the experimental condition, the scenario ended as follows:

Imagine now that 3 months have passed, and things have changed.

The company was hit by a major economic crisis and therefore lost its stability, and career opportunities are scarce. Furthermore, without warning, the company has begun to lay off some employees, suggesting further possible layoffs, and your contract is at risk.

We ask you to focus on this scenario and think about how you would feel experiencing such a situation.

Think carefully about it and imagine that you are living in this situation now.

In the control condition, the scenario ended as follows:

Imagine now that 3 months have passed. The company continues to be robust and solid, and your permanent contract has been confirmed.

We ask you to focus on this scenario and think about how you would feel experiencing such a situation.

Think carefully about it and imagine that you are living in this situation now.

In both conditions, the participants were asked to:

Write below how you would feel (for example, what your emotions and thoughts would be) experiencing the situation described.

The participants were then asked to respond to the following measures by maintaining their focus on the scenario they were asked to imagine.

Perceived job insecurity

Perceived job insecurity was measured using the four items ($\alpha = 0.96$) adapted from the scale of De Witte (2000; see Schreurs et al., 2010). The items were 'I would be sure that I will be able to keep my job' (reverse item); 'I would feel the risk that I will lose my present job in the near future'; 'I would feel uncertain about the future of my job'; 'I would think that I will lose my job in the near future'. The participants rated each item on a 7-point scale (1 = *strongly disagree*, 7 = *strongly agree*).

Self-objectification

Self-objectification was measured through the two measures used in previous studies: the *Self-Mental State Attribution task* (SMSA; $\alpha = 0.94$), and *self-perception as being instrument-like* ($\alpha = 0.91$) versus human-like ($\alpha = 0.78$).

Well-being

To measure the participants' well-being, we used the same *Who-5 Well-Being Index* (Bech, 2004). The participants were asked to rate on a 7-point scale (1 = *never*, 7 = *everyday*) the extent to which five statements ($\alpha = 0.93$; e.g., 'I would feel cheerful and in good spirits'; 'I would feel active and vigorous') would apply to them when they imagine living the scenario.

Attentional check

We added two attentional check items in which we asked the participants to remember some specificities of the scenario (i.e., 'In the scenario you read: after 3 months your contract was confirmed; after 3 months your contract was at risk; I do not remember'; 'In the scenario you read: after 3 months the company was hit by a crisis; after 3 months the company was not hit by any crisis; I do not remember').

8.2 | Results

Six participants were excluded from the analysis because they did not correctly answer one of the attentional check items. Therefore, 90 participants were considered in the final sample. A second sensitivity analysis conducted with G*Power (ver. 3.1.9.2; Faul et al., 2009) showed that our final sample was enough to detect a small to medium effect size, $f^2 = 0.09$, assuming an α of 0.05 and power of 0.80.

We conducted a between-participants MANOVA to test the effect of the condition on perceived job insecurity, self-objectification dimensions and well-being. The findings revealed a main effect of the condition, $\lambda = 0.17$, $F(4,85) = 102.65$, $p < .001$, $\eta_p^2 = 0.83$. As shown in Table 7, the univariate tests revealed a significant effect of the condition on all the considered variables, so that participants in the experimental condition displayed a greater perception of job insecurity, self-objectified more and reported less well-being than those in the control condition.

We then analysed the correlations (Table 1) between the considered variables. All the correlations were consistent with previous studies and the hypothesised pattern.

To examine the hypothesised path, we then conducted two mediational models, in which the experimental condition was considered the predictor variable, perceived job insecurity was considered the first mediator, and self-mental state attribution and self-perception as instrument-like (vs. human-like) were alternatively considered second mediators (Model 6, with 5000 bootstrapping samples, Hayes, 2017; see Figure S2 in the Supplementary Materials).

As reported in Table 8, participants in the experimental condition reported more perceptions of job insecurity than those in the control condition. These elicited perceptions were associated with the two markers of self-objectification. Furthermore, these two dimensions of self-objectification were significantly associated with well-being. Accordingly, the indirect effects of the condition on well-being via self-attribution of human mental states and self-perception as instrument-like (vs. human-like) were significant.

8.3 | Discussion

Study 4 experimentally confirmed the expected pattern. *Hypothesis 1* was confirmed: participants who experienced job insecurity self-attributed lesser human mental states and self-perceived as more instrument-like than human-like than participants in the control condition. Furthermore, participants in the experimental condition reported lower levels of well-being than those in the control group, confirming the well-established link between job insecurity and well-being. Working self-objectification was also related to decreased well-being (*Hypothesis 2*). Finally, the mediational model confirmed the contribution of self-objectification in explaining the link between perceived job insecurity and decreased well-being (*Hypothesis 3*).

9 | SINGLE-ARTICLE META-ANALYSES

As recommended by Goh et al. (2016), we performed mini meta-analyses to confirm the robustness of the new links that we propose in our set of studies: self-objectification and perceived job insecurity on the one hand, and self-objectification and well-being on the other. We used fixed effects in which the mean effect size (i.e., mean correlation) was weighted by sample size. All correlations were Fisher's z transformed for analyses and converted back to Pearson correlations for presentation, and significance was based on Stouffer's Z test. These meta-analyses confirmed that across the four studies, self-perception as instrument-like (vs. human-like) was significantly and positively associated with perceived job insecurity, showing a medium effect size magnitude ($M r = 0.34$, $p < .001$; Cohen, 1988), while self-attribution of human mental states was significantly and negatively related to perceived job insecurity, showing a medium effect size magnitude ($M r = -0.30$, $p < .001$). Furthermore, self-perception as instrument-like (vs. human-like) was significantly and

TABLE 7 Mean, standard deviation and univariate tests of the variables as a function of conditions. Study 4

Variables	Experimental condition Mean (SD)	Control condition Mean (SD)	F-test
Perceived job insecurity	5.69 (1.15)	2.08 (0.74)	$F(1,88) = 316.82, p < .001, \eta_p^2 = 0.78$
Self-attribution of human mental states	4.12 (1.25)	5.42 (0.99)	$F(1,88) = 29.79, p < .001, \eta_p^2 = 0.25$
Self-perception as instrument-like versus human-like	-1.16 (3.11)	-3.29 (1.93)	$F(1,88) = 15.47, p < .001, \eta_p^2 = 0.15$
Well-being	2.37 (1.03)	5.08 (0.93)	$F(1,88) = 172.90, p < .001, \eta_p^2 = 0.66$

TABLE 8 Serial mediation models (Model 6; Hayes, 2017): Study 4

Predictors	Outcomes (R^2)	Direct effects
Conditions	Perception of job insecurity (0.78)	$b = 3.61, SE = 0.21, t(88) = 17.80, p < .001, 95\%CI(3.20, 4.01)$
Conditions	Self-attribution of mental states (0.47)	$b = 1.00, SE = 0.43, t(87) = 2.32, p = .023, sr^2 = 0.032, 95\%CI(.14, 1.85)$
Perception of job insecurity		$b = -0.64, SE = 0.11, t(87) = -6.03, p < .001, sr^2 = 0.219, 95\%CI(-.85, -.43)$
Conditions	Well-being (0.80)	$b = -1.40, SE = 0.36, t(86) = -3.92, p < .001, sr^2 = 0.036, 95\%CI(-2.10, -.69)$
Perception of job insecurity		$b = -0.21, SE = 0.10, t(86) = -2.06, p = .042, sr^2 = 0.01, 95\%CI(-.41, -.01)$
Self-attribution of mental states		$b = 0.43, SE = 0.07, t(86) = 5.04, p < .001, sr^2 = 0.059, 95\%CI(.26, .60)$
Conditions	Self-perception as instrument-like (0.30)	$b = -1.90, SE = 1.06, t(87) = -1.79, p = .077, sr^2 = 0.026, 95\%CI(-4.01, .21)$
Perception of job insecurity		$b = 1.12, SE = 0.26, t(87) = 4.29, p < .001, sr^2 = 0.149, 95\%CI(.60, 1.63)$
Conditions	Well-being (0.75)	$b = -1.09, SE = 0.39, t(86) = -2.79, p = .007, sr^2 = 0.022, 95\%CI(-1.88, -.31)$
Perception of job insecurity		$b = -0.41, SE = 0.10, t(86) = -3.89, p < .001, sr^2 = 0.044, 95\%CI(-.61, -.20)$
Self-perception as instrument-like		$b = -0.07, SE = 0.04, t(86) = -1.80, p = .075, sr^2 = 0.009, 95\%CI(-.15, .01)$
<i>Indirect effects</i>		
Conditions → Perception of job insecurity → Well-being		$a*b = -0.75, 95\% CI [-1.53, -0.03]$
Conditions → Self-attribution of mental states → Well-being		$a*b = 0.43, 95\% CI [0.02, 0.93]$
Conditions → Perception of job insecurity → Self-attribution of mental states → Well-being		$a*b*c = -0.99, 95\% CI [-1.59, -0.49]$
Conditions → Perception of job insecurity → Well-being		$a*b = -1.46, 95\% CI [-2.28, 0.80]$
Conditions → Self-perception as instrument-like → Well-being		$a*b = 0.13, 95\% CI [-0.04, 0.39]$
Conditions → Perception of job insecurity → Self-perception as instrument-like → Well-being		$a*b*c = -0.28, 95\% CI [-0.68, -0.004]$

Note. sr^2 = unique variance in the considered outcome accounted uniquely by each predictor variable.

negatively associated with well-being, showing a medium to large effect size magnitude ($M r = -0.42, p < .001$), while self-attribution of human mental states was significantly and positively associated with well-being, showing a large effect size magnitude ($M r = 0.49, p < .001$).

10 | GENERAL DISCUSSION

In the present set of studies, we investigated whether the perception of job insecurity was associated with people's self-perception as human beings. In particular, we examined the link between perceived job insecurity and people's tendency to self-objectify (i.e.,

self-viewing as objects rather than fully human). We also tested whether self-objectification mediates the well-established relation of perceived job insecurity with well-being. In doing so, we ran four studies that employed different designs and involved different samples. The findings of Studies 1–3 supported our hypotheses at the correlational level. Study 4 provided experimental evidence: participants in the insecurity condition perceived more job insecurity but also self-objectification and less well-being than those in the control condition. Although job insecurity was also manipulated in Study 3, the manipulation was probably not strong enough to affect self-objectification. In this regard, note that the manipulation of Study 4 induced a stronger between-conditions difference in perceived job

insecurity compared to that in the Study 3 manipulation (see Tables 5 and 7).

Taken together, our results are highly relevant for the working objectification literature. They show for the first time that in the work domain, people's perception of their own humanness is related not only to the kind of activity they perform or the kind of treatment they are subjected to but also to the perceived (in)security of the work context they inhabit. We suggest that this occurs as perceived job insecurity does not allow people to exert control, planning and reasoning about the future; thus, people view themselves as objects that are at the mercy of the event and of external forces. Importantly, our results also allow a comparison with these potential antecedents of self-objectification at work, showing that perceived job insecurity contributes to this self-perception, although comparatively less than objectifying job features and objectification by superiors.

Moreover, the present research expands the knowledge on the consequences of self-objectification at work. As in the sexual domain (for reviews, see Calogero et al., 2011; Daniels et al., 2020), self-objectification is related to a decreased sense of well-being. This shows the detrimental impact of this self-dehumanizing perception on human beings in the work domain as well.

In parallel, our results confirmed and expanded the knowledge on the psychological processes related to job insecurity. Our findings suggest that job insecurity not only threatens people's well-being, health and work experiences but also shapes how people view themselves. It undermines people's humanness by leading workers to self-perceive as being more similar to objects than to human beings. Furthermore, our results are consistent with research showing that the perception of job insecurity cannot be reduced to the factual condition only. In Study 2, indeed, the effect of perceived job insecurity was significant even when controlling for type of contract.

11 | LIMITATIONS AND FUTURE DIRECTIONS

To the best of our knowledge, the present research is the first to reveal the link between perceived job insecurity and self-objectification. Future research should be developed to overcome the limitations of the present study and to deepen our knowledge of the bond between job insecurity and self-objectification.

In Study 2, the type of contract was related to perceived job insecurity but not to self-objectification. This finding suggests that other factors, for example, economic and organisational conditions (for example, experiencing downsizing processes) or self-perception of employability, can contribute to self-objectification due to perceived job insecurity. Future studies should investigate the roles of these other contextual variables.

In Study 4, we found experimental evidence in support of our hypotheses. However, this is a scenario study. The scenario and vignette paradigms are widely used in social psychology to analyse isolated variables, and we followed the best practices to create vignettes (Eckerd et al., 2021) by providing baseline information about the

scenario consistent across conditions and then manipulating the independent variable with different final versions of the scenario that were randomly distributed to participants. This of course does not overcome the intrinsic limitations of fictitious scenarios (ibid.). Therefore, even if we used the typical manipulations of job insecurity consistently employed in the literature, future research should replicate our findings by considering other plausible manipulations to provide further evidence of the investigated process.

Another important issue concerns the direction of the processes we analysed. In three of our four studies, the data and results rest at a correlational level. This opens the possibility of different interpretations of the tested models, with the possibility of a bidirectional process. Like many processes analysed in the social reality, bidirectional processes are indeed highly plausible: those who are self-objectified could be more sensitive to job insecurity conditions and, thus, perceive more job insecurity or decreased well-being. In turn, these negative psychological states can feed self-objectifying perceptions. Future research should consider a longitudinal study design to rule out these interpretations.

Future research should also expand our findings by disentangling the specific psychological process underlying the link between perception of job insecurity and self-objectification. As exposed throughout the article, perception of job insecurity can be linked to self-dehumanizing feelings because of different psychological processes triggered by this peculiar perception. Perception of job insecurity is indeed related to the perception of basic human needs threat, lacking control, power and agency, to the break of psychological contract and to meta-dehumanizing perceptions in terms of feelings of being seen as interchangeable tools. Scholars should understand which of these processes can better explain the rise of self-objectification in times of uncertainty to develop specific interventions aimed at supporting the humanness of workers.

Moreover, given the importance of the psychological contract in explaining the detrimental consequence of a state of job insecurity, it is plausible that the degree of willingness and choice of being a temporary worker could have an important role in promoting or not promoting self-objectifying perceptions among temporary workers. This future direction becomes even more challenging if considering that a large number of companies now mainly employ temporary workers. Despite the spread of these kinds of contracts, it is noteworthy that a temporary relationship by definition implies the view of the worker as 'flexible, adaptable, changeable, precarious and reviving as a thing' (Andreoni, 2005). Under these circumstances, workers not only experience the instability of the labour market but are also subjected to a stipulated objectifying gaze. Therefore, the roles of the choice and control of workers on the kind of contract could be determinant in the emergence of self-objectifying perceptions. Related to this issue, future research should also consider the time spent in a company and the overall potential generational gap in dealing with job insecurity, among other experienced psychological factors (e.g., identification with organisation), and therefore how individuals are being affected by this perception (see Magni & Manzoni, 2020; Teresi et al., 2022, Wray-Lake et al., 2011).

12 | CONCLUSIONS

The literature has consistently found that job insecurity deeply affects our lives, feelings and perceptions, threatening the health of workers and organisations. In this article, we added an additional title to this bewildering array by rolling out a more inner process that can be triggered by the lack of security: the reduction of people's ability to self-perceive as full human beings. Given the central role that work still has in our self-definition, the problem of job insecurity should be seriously considered not only by every company but also by political institutions, considering the pervasiveness of uncertainty in the work system of the century in which we live. For this reason, scholars should further investigate this process with the final aim of protecting people's humanness from the widespread perception of job insecurity.

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CONFLICT OF INTERESTS

The authors declare that there are no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

DATA AVAILABILITY STATEMENT

The datasets for these studies and the Supplementary Materials are available through the Open Science Framework (<https://osf.io/huc8b/>). The design and analysis plans were not preregistered. We report all measures, manipulations and exclusions in these studies.

ETHICS STATEMENT

These studies were carried out in accordance with the APA ethical guidelines. All participants gave written informed consent in accordance with the Declaration of Helsinki. The studies were approved by the ethical commission of the first author's Institution (protocol RM-2021-394; 2017-107; 2015-4).

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SUPPORTING INFORMATION

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