

Make Your Publications Visible.

A Service of



Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre

Bichler-Riedl, Wolfgang; Gold, Stefan

Article — Published Version
Implications of Deep Meaningfulness for Sustainability:
Reimagining the Literature on Vocational Calling

Sustainable Development

Provided in Cooperation with:

John Wiley & Sons

Suggested Citation: Bichler-Riedl, Wolfgang; Gold, Stefan (2025): Implications of Deep Meaningfulness for Sustainability: Reimagining the Literature on Vocational Calling, Sustainable Development, ISSN 1099-1719, John Wiley & Sons, Inc., Chichester, UK, Vol. 33, Iss. 5, pp. 7591-7602, https://doi.org/10.1002/sd.3530

This Version is available at: https://hdl.handle.net/10419/330202

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.



https://creativecommons.org/licenses/by/4.0/

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.







Implications of Deep Meaningfulness for Sustainability: Reimagining the Literature on Vocational Calling

 1 Faculty of Economics and Management, University of Kassel, Kassel, Germany 1 Sustainability Management, TUM Campus Straubing for Biotechnology and Sustainability, Technical University of Munich, Straubing, Germany

Correspondence: Wolfgang Bichler-Riedl (bichler-riedl@uni-kassel.de)

Received: 6 March 2025 | Accepted: 9 May 2025

Keywords: decent work | deeply meaningful work | escalation of commitment | precarious work | sustainable labor markets | vocational calling

ABSTRACT

Decent work is a pivotal aspect of sustainable development. However, recent developments suggest that precarious work is rising. This is particularly true for prosocial workers who exhibit extraordinary self-sacrifice despite working in detrimental conditions. In this manuscript, we shed light on how the individual sensemaking of called prosocial workers impacts the sustainability of professions. We achieve this by appropriating escalation of commitment determinants to meaningful careers. This reveals how enrichment and devaluation are necessary to maintain callings in precarious conditions that prevent the achievement of those callings' goals. Accordingly, we argue that following one's calling can significantly increase the psychological sustainability of one's career in the short term but decreases the sociological sustainability of one's profession in the long term. Based on our review, we discuss potential avenues for de-escalation, the responsibilities of the current status of meaningful yet precarious professions, and implications for sustainable development.

1 | Introduction

Since the introduction of the United Nation's Sustainable Development Goals, scholars have investigated how to promote each of these ambitious goals, which will lead to a more sustainable future. While many initiatives have sown the seeds of sustainable development, several areas have struggled to develop toward sustainability in a meaningful manner. For instance, the rise of precarious work in Western labor markets (Campbell and Price 2016; Kalleberg 2009; Standing 2011), such as the Gig economy or disguised wrongful self-employment (e.g., Petriglieri et al. 2019), directly oppose goal 8, which, among other things, aims to "achieve full and productive employment and decent work for all" (Target 8.5; United Nations 2015). Notably, as this aberration in the labor market negatively impacts individual workers and societies alike, scholars have long pointed out that precariousness at an individual or societal level "just isn't sustainable" (Clarke et al. 2007: 311). Furthermore, despite positive developments toward more decent work and increased academic interest (Ralph and Arora 2024), the COVID-19 pandemic has eroded much of the progress (Grzebyk et al. 2023).

Since precariousness at work severely affects individual workers both mentally and physically (Benach et al. 2014), and even transnational organizations calling for its eradication (United Nations 2015), the question arises as to why it is still widespread and, arguably, even spreading, particularly during crises (Grzebyk et al. 2023; Kalleberg 2009). In this manuscript, we aim to investigate this from an individual-level perspective, arguing that sensemaking processes play a role in sustaining such unsustainable systems. We achieve this by shedding light on meaningfulness at work and corresponding work goals for professions with strong inherent meaning. To illustrate our argument, we appropriate findings from prosocial work, since it is a particularly revealing example that encapsulates both precariousness and meaningfulness. On the one hand, as crises typically erode public funding, prosocial work is usually among the most affected, with severe impacts on staffing and resources. Correspondingly,

This is an open access article under the terms of the Creative Commons Attribution License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

© 2025 The Author(s). Sustainable Development published by ERP Environment and John Wiley & Sons Ltd.

Pentaraki and Dionysopoulou (2019) called social workers the new precariat even before the pandemic. On the other hand, such work is still regularly chosen due to its meaning and idealism (Wu et al. 2015), and workers are "particularly valuable to employers" (Anastasiadis and Zeyen 2022: 843) because they exhibit exceptional willingness to self-sacrifice to achieve their goals (e.g., Bunderson and Thompson 2009). Furthermore, the debate on the role of meaningfulness in precarious conditions is controversial. For instance, Blustein et al. (2023) positioned meaningfulness as an antecedent of decent work, while Petriglieri et al. (2019) illustrated experiencing meaningfulness at work as a pivotal point for sustaining a precarious career.

We follow the guidelines of Alvesson and Sandberg's (2020) problematizing review. Since vocational calling is often considered the most extreme form of deep meaningfulness (e.g., Wrzesniewski et al. 1997), we use it as the basis of our review of empirical evidence to ultimately reimagine the literature on the dark side of vocational calling with a strong beneficiary focus (Thompson and Bunderson 2019) from an escalation of commitment (EoC) perspective (Sleesman et al. 2012). In this review, we argue that workers' sacrifices are part of escalating their commitment to serving their beneficiaries. Workers do so because forfeiting their calling is rarely possible and is often considered a "moral failure" (Bunderson and Thompson 2009: 41). Correspondingly, this escalating process has the power to transform a calling's idealism into an empty shell of impossible aspirations and unsustainable behaviors. We conceptualize this argument from an individual-level perspective to subsequently discuss potential de-escalation, the responsibility of different actors, and implications for sustainable development.

The remainder of this manuscript is structured as follows. We first define relevant concepts, namely vocational calling and meaningful work, as well as decent and precarious working conditions for prosocial workers. Subsequently, we bridge the gap between both concepts. Following this, we outline our methodological approach based on Alvesson and Sandberg (2020) and Weick (1995). Our core argument reimagines published articles on the dark side of calling from an EoC perspective, first by highlighting the justification processes of called workers and then by proposing the relevant EoC determinants that can either be enriched or devalued by callings. We follow this with a discussion of potential de-escalation and responsibilities for change and highlight more implications for sustainability in labor markets. We conclude our manuscript by outlining potential avenues for future research.

2 | Materials

2.1 | Meaningful Work and Vocational Calling

Scholars have differentiated between the meaning of work and meaningful work. The former describes the type of meaning of work, while the latter is based on individual ascriptions of meaning and is regularly described as the amount of meaning. Hence, the meaning of work can become meaningful to individuals, depending on their personal ascriptions (Rosso et al. 2010). Arguably, prosocial work has an inherent meaning, since caring for a typically vulnerable beneficiary is considered meaningful

from a societal standpoint (Rosso et al. 2010). Correspondingly, studies have revealed that workers across cultures choose prosocial professions for altruistic reasons (e.g., Liao et al. 2022; Wu et al. 2015). The most extreme form of deeply meaningful work arises when a worker considers their profession their calling (Rosso et al. 2010; Wrzesniewski et al. 1997).

Publications on vocational callings have increased significantly in recent years, with several conducive outcomes reported (e.g., Dobrow et al. 2023; Duffy et al. 2018; Thompson and Bunderson 2019). However, the typically positive findings of living out a calling at work (Dobrow et al. 2023) have been contrasted by a few empirical studies on the so-called dark side of calling (Bunderson and Thompson 2009; Cardador et al. 2011; Cinque et al. 2021; Schabram and Maitlis 2017). Arguments from this perspective problematize callings as prone to sacrifice (e.g., Bunderson and Thompson 2009), which can easily be exploited by employers (e.g., Berkelaar and Buzzanell 2015). Furthermore, beyond a calling's potentially detrimental impact on a worker's health, such as burnout (Vinje and Mittelmark 2007; Xie et al. 2024), it is notable that much of the burden of their personal sacrifice is carried by their social environment (Anastasiadis and Zeyen 2022). Callings also entail exceptional stickiness (Cardador et al. 2011; Schabram et al. 2023), preventing workers from engaging in career-related behaviors. This is of particular interest for work that entails conditions that can harm workers; for instance, missing machines in nursing can result in heavy lifting, ultimately making the necessities of work unsustainable.

Empirical evidence of the dark side of callings is typically based on prosocial contributions. Bunderson and Thompson (2009) interviewed zookeepers, Cardador et al. (2011) investigated health-care professionals, Cohen et al. (2019) outlined the pathway of a welfare rights adviser, Lopez (2006) worked in healthcare himself, Schabram and Maitlis (2017) shed light on animal shelter workers, and Cinque et al. (2021) interviewed theater actors. Even for theater actors, numerous artists explained their career reasoning by highlighting their prosocial focus and impact.

2.2 | Continuum of Working Conditions and Sustainability

Scholars have conceptualized working conditions as a continuum between precarious and decent (Blustein et al. 2016). Precariousness includes low employee participation; insecurity, such as lacking legislative protection and job insecurity; and low wages (Campbell and Price 2016). In contrast, decent working conditions arise in a sustainable context, contain appropriate labor protection, promote social dialog and participation, and fulfill the fundamental rights of a dignified workplace (ILO 2008; Blustein et al. 2016). Henceforth, the promotion of decent work is considered part of sustainable development (United Nations 2015). Notably, organizational psychologists have positioned meaningfulness as an antecedent of decent work (Blustein et al. 2023), implicitly contextualizing prosocial work on the more decent side of the spectrum. Sociologically, however, Pentaraki and Dionysopoulou (2019) called social workers a new precariat due to financial and occupational insecurities and health burdens. Where a position with inherent meaning falls on the precariousness-decent work spectrum is

thus dependent on individual ascriptions and perceptions (e.g., Campbell and Price 2016).

Following the definition of the International Labor Organization (ILO 2008) and the targets of the United Nations (United Nations 2015), sustainable development in labor markets means the promotion of decent work. Research on the current achievement levels of this goal remains somewhat sparse despite increasing academic interest (e.g., Grzebyk et al. 2023; Ralph and Arora 2024), while research on precariousness has been rising (e.g., Blustein et al. 2023; Campbell and Price 2016; Kalleberg 2009). We suspect that this may be due to the intriguing nature of precarious work as something clearly unsustainable (e.g., Clarke et al. 2007) yet surprisingly stable despite many initiatives combating it (e.g., Kalleberg 2009). Particularly from an organizational psychology perspective, sensemaking processes reframing precariousness into something conducive to one's work identity have been of regular interest (e.g., Ashforth and Kreiner 1999; Campbell and Price 2016; Cinque et al. 2021; Petriglieri et al. 2019). Furthermore, since the COVID-19 pandemic has foiled much of the progress regarding decent work (Grzebyk et al. 2023), the question arises of how unsustainable (in the true meaning of the word) precarious work really is.

2.3 | Bridging the Gap: Sustainable Development and Meaningful Work

Given the ambiguous outcomes of how sustainable work in problematic conditions is, we see benefit in splitting sustainability into an individual-level view—what we call "psychological sustainability"—and a societal perspective—what we call "sociological sustainability." Our core argument on the impact of meaningfulness on sustainability is that meaningfulness at work can increase sustainability at the individual level, which, when exploited, can decrease sustainability at the sociological level. Such mechanisms are often used during crises because cost cutting is ostensibly required, particularly for sectors such as prosocial work.

For instance, scholars have regularly emphasized the stickiness of considering work a calling despite adverse conditions (e.g., Schabram et al. 2023). Callings have a specific focus ranging from self-centered to outer-focused (Thompson and Bunderson 2019). These foci typically entail deeply meaningful work goals that workers aim to achieve (e.g., Rosso et al. 2010) and sacrifice for (Anastasiadis and Zeyen 2022). Some workers even engage in excesses to achieve their goals (Bailey et al. 2019). We consider such workers stuck in their professions or positions since they remain despite objectively detrimental job characteristics harming them, their beneficiaries, their colleagues, and their social environments. Notably, remaining regularly includes rationalizing problematic working conditions (e.g., Petriglieri et al. 2019; Price 2009) into something conducive and peaks when workers prioritize work over other areas of life because of this rationalization (e.g., Bunderson and Thompson 2009). In such cases, experiencing work as a calling increases the longevity of one's career, arguably making it more sustainable at the individual level, as negative impacts are offset. However, such conditions regularly restrain interested new recruits from actually taking up a profession or reframe new staffing quotas as sufficient, thereby decreasing the sociological sustainability of the profession as a whole. Notably, in times of crisis, we consider these workers the core reason for the system not collapsing. They achieve this by filling in, overworking, and generally making sure their work keeps the system running. Examples of this argument are widespread: zookeepers frame their profession as the last bastion against extinction (e.g., Bunderson and Thompson 2009), nurses refuse to go on strike out of fear for the well-being of their patients (e.g., Mavis Mulaudzi et al. 2021), and theater actors take on martyr roles against an increasingly materialistic society that has brought the planet to its limits (Cinque et al. 2021). Based on such ascriptions, we hypothesize the impact of psychological sustainability on sociologically (un)sustainable professions.

3 | Methods

Weick's (1995) timeless view of theorizing and disciplined imagination was the core inspiration for this manuscript. Regarding conditions, the ambivalent perspectives on precariousness in prosocial work may leave the critical reader with the impression that "there are more combinations of symptoms than there are diagnoses or theories" (Weick 1995: 387). Furthermore, as callings can change (e.g., Zhou et al. 2024) and, as we argue, can even take the shape of an empty shell justifying continuous self-sacrifice, there is a need to untangle the willingness to self-sacrifice for a calling from working conditions. This is exemplified by discussions regarding the dark side of callings (Duffy et al. 2016). Therefore, we argue that individual calling ascriptions may also be subject to deterioration, depending on the surroundings. This also implies that callings cannot be uniformly applied to all professions without careful psychological and sociological evaluations.

This manuscript thus adopts Alvesson and Sandberg's (2020) approach of a problematizing review to illustrate an alternative view on vocational callings. Problematizing reviews aim to "re-evaluate existing understandings of phenomena, with a particular view to challenging and reimagining our current ways of thinking about them" (Alvesson and Sandberg 2020: 8). A focus on very specific areas of a phenomenon achieves this goal. Hence, this article follows Weick's (1995) principles of "disciplined imagination" (388) to provide an alternative picture of called workers and their ambiguous relationship to conditions and their callings. By continuously reading through the dark side of the calling literature in combination with specific findings from prosocial work, where calling levels among staff are high while conditions are adverse, this article aims to achieve what Weick (1995) described as "a series of thought trials corresponding to treatments" and, ultimately, "seeing which concepts made a difference" (388). Of particular interest beyond the dark side literature are publications on nursing. On the one hand, callings and nursing have been linked from the very beginning. On the other hand, reports of the increasingly precarious nature of nursing due to staffing shortages have persisted mostly unresolved for decades (Aiken et al. 1981; Yett 1966).

We apply the meta-analytical results of the EoC literature (Sleesman et al. 2012), which include several determinants that can be applied to the psychological sensemaking mechanisms

of workers. These determinants explain which aspects of the work context and individual situation (Rosso et al. 2010) impact the EoC and, therefore, the psychological sustainability of prosocial work. Notably, problematizing reviews do not achieve their goals by reading and integrating large numbers of studies but by focusing on specific areas of a phenomenon and providing new possible points of view. Regarding vocational callings and their interaction with conditions, existing discussions on the dark side (e.g., Duffy et al. 2016) and recent publications that call the uniformity of the concept into question (e.g., Zhou et al. 2024) are therefore appropriate. We begin our critique by highlighting several notable cases that question the core aspects of callings, as stated by workers themselves.

4 | Results

4.1 | A Critique of Calling Ascriptions

Reading through the dark side of calling literature, we identified a twofold process of justifying sacrifice: (1) enriching one's work impact by emphasizing competence and capability and (2) devaluing contradictory aspects. Notably, both regularly occur simultaneously; thus, we provide examples of each. We wish to point out that the critical evaluation of the responses of called workers who self-sacrifice was not conducted with arrogance or disbelief; rather, it aimed to understand how callings should be adapted in conditions that generally contradict the idealism associated with them.

We thus begin our critique by highlighting the roles of competence and capability. For nurses, a great starting point is the striking personal report of Lopez (2006), which illustrates how notions of personal capability brush off concerns and quality standards. The author volunteered in a nursing home with above average staffing for 9 months and participated in daily nursing work. He described vividly—despite management and personnel knowing exactly how resource limitations shaped daily work—a theater of efforts to increase nursing quality, despite the staff's inability to achieve daily goals without cutting corners or defying legislative rules (Lopez 2006):

The mismatch between time, tasks, and official rules [...] raises an obvious question: what shortcuts did nurse aides adopt in order to get their work done on time? When I oriented with Sheryl [...] I took two and she took four [patients]. Working side by side, we just managed to get everyone [done in time]. I [...] asked her how she managed it by herself. "Makes you wonder, don't it?" she said. "I wish the nurses would ask themselves that question..." Since I had help today I had time to do a few things that I usually just have to skip. (68)

Given that scholars have long shown a link between staffing and the quality of care (Aiken et al. 2012), all of this is anything but new. However, in Lopez's (2006) words, one might wonder what "terrible choices our society forces on nursing home workers" (61).

We argue that an unwillingness of workers to candidly assess such issues' impact on their working quality is a necessity when experiencing it in the long term. This can be illustrated with Zookeepers (Bunderson and Thompson 2009); one explained: "There is no wild for a lot of these animals, none whatsoever. The habitat is gone. [...] [We've] got to do something, and if captive breeding is the one thing I can do to stop extinction, then I'm fine with that" (40). Once again, we do not wish to doubt the existence of such idealistic values. However, it is questionable from a conservationist point of view that it is "the only thing he could do," and there are ongoing debates on whether zoos actually contribute to species conservation at all due to a "lack of appropriate "wild" type behaviors [...], lack of immunities [...] and/or [...] an unnatural confidence toward humans" (Jule et al. 2008: 361). One could also point to the economic nature of private zoos at this point as directly opposing idealistic values, with practices such as killing healthy animals in zoos for economic reasons (so-called management euthanasia) (Browning 2018). Furthermore, workers not only overestimate their impact but also denigrate comparable alternatives with more conducive impacts. For instance, zookeepers devalue comparative professions, such as working in wildlife reserves or animal shelters: "My little way of preserving what we have left is taking care of these animals. I'm not one of those people to go out in the jungle and tell people don't do this, this is bad. That's not me... This is my life." (Bunderson and Thompson 2009: 40). This zookeeper states the content of their calling while simultaneously devaluing the contributions of others and omitting all professions between. After all, the zookeeper compares the zookeeping profession not to a more impactful but similar alternative (e.g., a wildlife refuge ranger) but to an extreme (a wildlife activist). One could even wonder, if their goal was conservation, why make a comparison at all?

We consider such explanations a way to enrich one's impact and justify living in precarious conditions. Work impact is then proven by capability and competence. Correspondingly, many workers name pivotal events: "Three months before I graduated I was offered a full time job in [my] department. I understand that's the only time that department has ever been offered in that way" (Bunderson and Thompson 2009: 38). In summary, workers who consider themselves exceptionally able to serve a specific beneficiary cannot ignore their destiny; rather, following this destiny becomes their main goal. Accordingly, objective characteristics not directly relevant to a calling's work goals become less relevant compared to this destiny: "Well, I don't know what they could do that would make me leave. Even if I wasn't getting paid I would still be here" (Bunderson and Thompson 2009: 35).

We find similar interpretations of working realities throughout the dark side of the calling literature. Regarding theater actors, Cinque et al. (2021) showed how many called workers adopt martyr roles. By doing so, sacrifices such as suffering socioeconomic distress and finding oneself in precarious conditions can be reinterpreted as serving society. Cinque et al. (2021) put it eloquently:

This other, the interlocutor for whom the actors sacrifice, embodies the spiritually impoverished souls of contemporary capitalistic society, the infidels blinded by values of materiality, career and success

who do not believe in the value of art as a way to ameliorate the human condition: "Every time I get on stage it's like I'm shouting to the audience ... to those with sad faces going back and forth from work, 'Look! All this fire we have as human beings cannot be sedated!' It is like I am telling them, 'You can liberate yourself!'" (1769)

Calling scholars have recently argued that callings take different shapes (e.g., Thompson and Bunderson 2019; Zhou et al. 2024). Earlier studies tended to lack this nuance regarding the distinct focuses of a calling. However, the dark side of calling research has brought to the forefront how a calling focus can manifest in handling problems differently. For instance, Schabram and Maitlis (2017) categorized animal shelter workers into three groups. While two of these groups would not remain in this profession (and either leave the field altogether or change professions within the field), one group with specific sensemaking was able to withstand the problematic aspects of animal shelter work in the long term. They noted that "while all of our study participants enter animal shelter work with similar passion and purpose, and face the same kinds of challenges, individuals on different paths interpret these challenges differently, have different emotional responses to them, and negotiate them through different kinds of enacted sensemaking" (Schabram and Maitlis 2017: 585). Indeed, statements from this group indicated that a shift in calling from idealism toward competence was necessary to maintain the career path. A very similar mechanism is well known in nursing, with nurses adapting their calling from caring as compassion toward caring as competence and rationalizing this adaptation as a necessity for withstanding conditions (e.g., Price 2009). Arguably, workers use such notions of competence despite explicitly missing resources as proof of their capabilities, enriching their precarious situation: "This often meant they worked more hours, for example doing "an unprecedented number of rescues and unprecedented number of cases" [...]. Still, they reasoned that it was "worth that little piece of me that I have to give" (Schabram and Maitlis 2017: 601).

In summary, we interpret the empirical evidence on called workers in problematic working conditions as a twofold process entailing enrichment and devaluation. The former unfolds by highlighting competence to emphasize one's impact despite working conditions that complicate an impactful contribution. The latter, which includes denigrating any more impactful alternatives and devaluing contradictory aspects, is arguably a necessity for enrichment. After all, having an impact necessitates an impactful environment. By engaging in this twofold process, precariousness, such as working for low wages, can transcend the realm of objective job characteristics toward serving society exceptionally well and proving one's commitment to the cause. In such a sensemaking process, facts contradicting one's commitment are unwelcome and quickly denigrated. Based on this reimagination of called workers' situations, we outline the determinants of both processes based on the EoC (Sleesman et al. 2012). By doing so, we can pinpoint specific aspects of called workers' work identities responsible for enrichment and devaluation, which

explains why such careers are surprisingly sustainable for the individuals affected.

4.2 | Adopting Escalation of Commitment Determinants to Vocational Callings

The literature on EoC has been applied foremost to decision-makers in a specific situation, whereby objectively negative feedback is offset to continue a failing project, therefore escalating commitment (Sleesman et al. 2012). Escalating commitment has been investigated from multiple angles and can be summarized in four categories: (1) project determinants, which include project-specific characteristics influencing the escalation process; (2) psychological determinants based on individual information processing; (3) social determinants generally entailing one's social environment; and (4) structural determinants, which represent the organizational structure to which an individual belongs.

First, it is necessary to compare the situations of workers in detrimental conditions whose callings have a profound stickiness (Schabram et al. 2023) to decision-makers responsible for a failing project who still decide to escalate their commitment. In both cases, detrimental outcomes are likely: for the organization, in the case of a decision-maker, and for themselves, their social environment, and their beneficiary, in the case of a called worker. Both choose to continue their pathways despite substantial evidence of detriment. Regarding called workers, such as in terms of the health impacts of precarious conditions (e.g., Benach et al. 2014; Vinje and Mittelmark 2007) or an achievable quality of care (e.g., Aiken et al. 2012). In both cases, objective reports cannot change the minds of affected individuals. However, in the case of called workers, the results of remaining transcend job-specific outcomes, such as company losses or potential demotion. Instead, workers and their families (Anastasiadis and Zeyen 2022) pay the price with outcomes such as burnout or a loss of work-life boundaries. Furthermore, leaving a profession may exacerbate the situation of beneficiaries, making callings a particularly sticky example of escalating commitment.

Second, we outline how each of the determinants can unfold for called workers by combining similar determinants, discussing potential enrichment and devaluation, and garmenting this framework with published quotes from the dark side of calling literature. Table 1 provides an overview of all the determinants and hypothesizes how they relate to enrichment and devaluation.

A good place to start is to hypothesize why workers regularly emphasize competence, and what determinants might be responsible for this. Thompson and Bunderson (2019) hypothesized that callings have different foci, with neoclassical forms of callings aiming to serve a beneficiary in the best way possible. Studies on calling and prosocial work have highlighted that a significant share of workers choose their professions out of social considerations to serve beneficiaries (e.g., Wu et al. 2015). Accordingly, receiving positive feedback from beneficiaries or colleagues considered capable of serving the same other-oriented goal is a pivotal milestone for many workers.

 TABLE 1
 Determinants of EoC and adaptation to vocational callings.

| Determinant | Escalation of commitment results | Adaptation |
|--|--|---|
| Information set | (1) Acquisition: The more (negative) information is acquired by the individual, the less likely escalation is.(2) Uncertainty: More uncertainty about outcomes results in individuals taking an optimistic view of the situation. | (1) Enrichment of impact: Framing a profession as extremely impactful (e.g., Bunderson and Thompson 2009; Cinque et al. 2021) implies workers seldomly acquire contradictory information; it potentially includes devaluation of comparative professions. (2) Devaluation of care from others: The wellbeing of beneficiaries is uncertain if others take over care (e.g., Bunderson and Thompson 2009; Price 2009). |
| Positive performance trend information | Individuals tend to focus on positive trends, which allows for discounting potentially negative outcomes. | Enrichment of chosen path: Feeling special due to exceptional feedback is a pivotal event for many workers; focus on positive individual trends, such as professional development (e.g., Schabram and Maitlis 2017) and positive feedback (e.g., Bunderson and Thompson 2009) rather than structural deterioration. |
| Decision risk | Higher decision risk means increased likelihood of loss. Loss aversion of individuals means more risk de-escalates commitment. | (1) Enrichment of impact: Risk of leaving beneficiaries would be "moral failure" (Bunderson and Thompson 2009: 41). (2) Devaluation of less detrimental alternative careers: Despite being exceptionally valuable for employers due to their willingness to sacrifice, workers may fear becoming unemployed. |
| Opportunity cost information | Knowing the opportunity cost of continuing a path (or switching path) may increase (decrease) EoC. | (1) Calling as enrichment: A calling as the most noble form of work (e.g., Wrzesniewski et al. 1997) means that the opportunity cost of leaving a career is a calling itself. (2) Devaluation of alternatives: At least a significant share of called workers (Schabram and Maitlis 2017) remain in position despite the availability of less precarious alternatives. |
| Anticipated regret | Anticipated regret from continuing a failing course of action may lead to de-escalation. Anticipated regret from giving up too early may lead to escalation. | (1) Calling as enrichment: Giving up a calling is very unlikely (e.g., Schabram and Maitlis 2017) and a moral failure (Bunderson and Thompson 2009). (2) Devaluation of reports questioning the sustainability of the profession: Despite knowing the detrimental health outcomes, workers remain and reframe information (e.g., Price 2009). |
| Previous resource expenditures | Sunk cost and sunk time: Past expenditure (resource/time) on decisions increases EoC because decision-makers do not want to be wasteful with resources. | Calling as enrichment: Investment in identity, which having a calling likely entails (e.g., Duffy et al. 2019), is an additional category to already relevant career investments (e.g., education, trainings). |

(Continues)

TABLE 1 (Continued)

| Determinant | Escalation of commitment results | Adaptation |
|--|---|--|
| Familiarity with decision context | Experience/expertise: More experience influences how decision-makers react to negative information, in turn escalating commitment. Self-efficacy/confidence: More confidence often results in individuals being convinced that they can overcome problems, resulting in EoC. | Shifts in calling as enrichment: With increasing experience, nurses adapt calling from caring as compassion to caring as competence (Price 2009) to enrich their contributions. Devaluation of any contradictions: Zookeepers denigrating the impact of more impactful yet similar professions (Bunderson and Thompson 2009). Impact as enrichment: Confident called workers often believe they serve their beneficiaries better than colleagues (e.g., Bunderson and Thompson 2009; Cinque et al. 2021). |
| Personal responsibility for initial decision | Responsibility for a pathway may become part of an identity that needs to be justified, particularly when threatened. | Indicates relevance of how important identity aspects are regarding escalating commitment. Choosing a career means responsibility. |
| Expressed preference for initial decision | Preference for the initial decision implicitly means that the individual values this pathway and is thus more likely to escalate. | Calling as enrichment: Considering a career a calling is the highest form of expressing preference. |
| Ego threat | If negative feedback is directed at a decision that is part of one's ego, individuals will defend the decision and thus escalate. | Calling as enrichment: When asked about precarious nature, workers tend to defend their decision by highlighting idealistic goals (e.g., Cinque et al. 2021). Calling as a core part of (work) identity (e.g., Cardador and Caza 2012; Dalla Rosa et al. 2020). |
| Public evaluation of decision | When under public scrutiny, decision- makers are more likely to escalate to manage impressions. | Social impact as enrichment: Social workers contribute to the public, implicitly putting them under public scrutiny. "Doing good" can then become a starting point for EoC. |
| Resistance to decision from others | Disagreeing with the decision and resisting increases EoC to brush away resistance. | Little research on whether workers follow their callings if, for instance, their families disagree. Since families carry much of the burden of callings (Anastasiadis and Zeyen 2022), resistance is possible. |
| Group identity or cohesiveness strength | The more cohesive a group is, the more likely shared escalation becomes. | Following shared calling as enrichment: Callings can be part of a collective identity (e.g., Buis et al. 2019); work groups with high levels of calling among their staff may be most cohesive. |

Source: Own adaptation of Sleesman et al. (2012): 543.

For instance, being the first person ever offered a position in a specific department (Bunderson and Thompson 2009) or hearing one's care is better than everybody else's (Price 2009). From this perspective, when an individual is convinced that they can make a positive impact *despite* the conditions, focusing on this positive impact becomes natural. Correspondingly, the EoC literature has established two related concepts: information sets and positive performance trend information. Within an information set, it has been argued in the EoC literature that more uncertainty regarding outcomes will increase optimism, thereby increasing escalation (Bragger et al. 1998; Sleesman et al. 2012). Regarding positive performance trend information, any positive trend within a system can escalate

commitment, as individuals tend to focus on positive reports (Moon and Conlon 2002; Sleesman et al. 2012). We argue that this is something observable for called prosocial workers. As the only certainty in the ever-changing work environment is their contribution to their beneficiaries' well-being, for which there are pivotal moments proving their impact, workers enrich their contribution as highly competent, while devaluing anything contradicting their impact. One zookeeper illustrated our argument: "If there was any gross misconduct or animal [mis]treatment or anything like that, I wouldn't really tend to think that I would leave the zoo because of that. In fact, it would make me try and work harder to try and solve the problem" (Bunderson and Thompson 2009: 44). Here, the

zookeeper enriches his expected contribution ("solve the problem") while ignoring the possibility of whether this is realistically achievable.

Closely tied to information sets and positive trend information is the evaluation of risk. It is proposed in the EoC literature that more risk associated with a decision will decrease escalation, as individuals are loss averse, and high risk implies a potential loss (Kahneman and Tversky 1979; March and Shapira 1987; Sleesman et al. 2012). Furthermore, because decisions have opportunity costs, individuals de-escalate when more opportunity cost information exists (Northcraft and Neale 1986; Sleesman et al. 2012). Similarly, anticipated regret can inform (de-)escalating behaviors (Ku 2008; Sleesman et al. 2012; Wong and Kwong 2007) depending on whether regret is associated with continuing or resigning the pathway. Accordingly, in the vocational calling literature, there is evidence that workers fear what might happen to their beneficiaries when leaving their profession. By enriching their own contributions as exceptionally valuable, implicitly devaluing potential replacements and the impact they would have in less precarious professions, workers escalate to ensure that their beneficiaries are taken care of rather than to take care of themselves. Generally, risk and regret are two sides of the same coin here. As workers worry about their beneficiaries, they devalue the negative impact for themselves rather than leave their beneficiaries. One zookeeper explains exactly that: "If I don't stay then who's going to be here to make sure that the animals are taken care of the way I want them to be taken care of? I'm here for that" (Bunderson and Thompson 2009: 41). By doing so, it leaves the impression that the workers' core aim is to prevent precariousness for their beneficiaries, even if it means experiencing precariousness themselves.

Beyond information and risk, time spent in a specific environment plays an important role (Bailey and Madden 2017). Accordingly, sunk costs and sunk time have been proposed in the EoC literature as factors increasing escalation, as individuals fear they are wasteful with resources (Arkes and Blumer 1985; Sleesman et al. 2012). In turn, increased confidence and expertise further increase escalation, as confident individuals tend to offset any information contradicting this and believe that their expertise will allow them to overcome anything (Bragger et al. 2003; Judge et al. 1998; Sleesman et al. 2012). These findings seem intriguingly similar to our argument that workers devalue contradictions while emphasizing their own capabilities. Accordingly, we hypothesize that living out a calling is an extreme of confidence and expertise. Being made for a profession or task, particularly one shaped by a lack of resources, grants an exceptional amount of confidence and expertise. However, this also indicates the importance of calling for one's work identity identifying oneself so deeply with positive contributions based on expertise and confidence that it becomes nearly impossible to candidly evaluate negative impacts. Or, to put it in terms of sustainability, sustaining this identity becomes so pivotal that the unsustainability of the profession becomes secondary.

Accordingly, several determinants are closely tied to identity research. If one prefers the initial decision, escalation becomes more likely (Schulz-Hardt et al. 2009; Sleesman et al. 2012). Being responsible for this decision will also increase escalation

(Brockner et al. 1986; Sleesman et al. 2012). Such determinants are obviously more relevant to specific projects than careers; however, they reveal how aspects relevant to one's identity (i.e., career choice) predict escalating behaviors. After all, a worker who has chosen their career both is responsible and expresses a preference, arguably highlighting their belief in how important they consider their profession by considering it their calling.

A profound indicator of the role work identity can play is ego threat (Zhang and Baumeister 2006). In the sense of selfjustification theory, ego threat is among "the most powerful drivers" of escalating commitment (Sleesman et al. 2012: 554). Correspondingly, many scholars have shown that a vocational calling can manifest as a central aspect of one's identity (Cardador and Caza 2012; Cinque et al. 2021; Dalla Rosa et al. 2020). When such an aspect of an identity is threatened, self-justification needs are triggered (e.g., Steele 1988) and may exacerbate commitment (Sleesman et al. 2012). Career choice is naturally the starting point of one's work identity, and facing marginalization, seemingly lacking support from legislators, or enduring sorrow from one's social environment can then become an ego threat. Reacting to such a threat by highlighting idealistic goals or distorting contradictory information is consistent with theories explaining how individuals defend threatened aspects of their identities (Steele 1988). However, this prevents an earnest evaluation of the work of affected individuals since it implies that workers will defend their work identities if reports tend to overly highlight precariousness.

Beyond project-specific determinants, such as decision risk, and individual-specific determinants, such as ego threat, an individual's social environment can also increase escalation. This is particularly true when facing public scrutiny for one's decision-making (Brockner et al. 1981; Sleesman et al. 2012) and opposition from others (Fox and Staw 1979) and when being a member of a particularly cohesive social group (Hogg and Terry 2000). Particularly, the latter is of interest for called workers, since many prosocial professions require close teamwork (e.g., due to shifts) and arguably have surprisingly stable shared work identities with similar goals and evaluations (e.g., Buis et al. 2019). Sleesman et al. (2012) described how individual escalation then becomes shared escalation. Correspondingly, teamwork can also make work deeply meaningful (Rosso et al. 2010).

In summary, researchers have established the EoC determinants to understand how professional decision-makers rationalize sustaining a losing decision and what determinants predict (de-)escalation. Given that even professional decision-makers fall into this trap despite organizational measures to prevent it, one can imagine how a chosen pathway that is close to an individual's heart can be of particular stickiness (e.g., Schabram et al. 2023). We thus argue that called workers escalate their commitment by distorting negative feedback regarding alternatives or realistic impacts in what we call devaluation processes, while enriching aspects connected to their calling by emphasizing their values and their capabilities in contributing to these. Similar to decision-makers who continuously invest in failing courses of action by distorting facts and relying on optimism, called prosocial workers engage in comparable activities. However, their prosocial focus arguably exacerbates escalation since the perceived importance of their work and their regular

feedback from beneficiaries is arguably more profound. This perspective thus follows the paradox of EoC, in which scholars have long wondered why something is sustained despite obvious unsustainability.

5 | Discussion

Given this framework and line of thought, we see benefit in first outlining the potentially de-escalating factors at an individual level, which then allows us to discuss responsibilities for improving situations as well as implications for promoting decent working conditions and thus transforming prosocial work into something more sustainable.

5.1 | De-Escalation

One might wonder if even professional decision-makers are unable to circumnavigate the siren calls of escalating commitment, how are called workers supposed to do so, given that the decision at hand includes deeply held notions of calling and meaningfulness (e.g., Rosso et al. 2010). Several de-escalating factors have been proposed in the EoC literature that we wish to highlight.

First, many determinants are based on what information is salient and how it is perceived by individuals. When, for instance, opportunity costs for continuing become apparent, workers may de-escalate (e.g., Northcraft and Neale 1986; Sleesman et al. 2012). Regarding career choices and working conditions, the question thus arises of who would make such information salient. The first thing that comes to mind is the direct social environment, including family, friends, and colleagues. However, evidence on calling suggests that workers can prioritize work over private life, as Anastasiadis and Zeyen (2022) argued. Correspondingly, Bunderson and Thompson (2009) quoted a zookeeper who stated, "Working here at the zoo has cost me a marriage" (42). We thus argue that, while these groups can play an important role, particularly responsible actors also include government officials and employers. It has been proposed in the EoC literature that external information framing can lead to de-escalating commitment: "When objectively negative situations are framed in a positive manner, people become more riskaverse and are consequently less likely to escalate" (Schoorman et al. 1994; cf. Sleesman et al. 2012). For prosocial workers, we argue that such framing is regularly done by officials and employers. For instance, during the COVID-19 pandemic, statements from officials whitewashed the situation of nurses, in turn sparking outrage for many workers and ultimately resulting in many resigning their positions (e.g., Danesh et al. 2021). Similarly, a personal report by a British welfare rights adviser called Pete concluded that a deterioration of funding for his line of work due to a changing government disagreeing with his values, as well as statements from officials derogatorily talking about social workers, made him lose his faith in what contribution was possible. He ultimately resigned his calling (Cohen et al. 2019).

Second, it is worth noting that calling stickiness seems indissoluble only for a specific share of called workers (Schabram and Maitlis 2017). Many called workers can engage in career

crafting, searching for a better position in the field, or quitting their calling altogether. There is an ongoing debate in the calling literature about exactly what scope or focus callings entail (e.g., Thompson and Bunderson 2019; Zhou et al. 2024). Such a scope may also explain the level of stickiness. We hypothesize that there may be specific wake-up calls for workers with a different emphasis on what they want to achieve, such as prosocial workers taking care of children who realize they have little time for their own or workers with health-related issues who care about their physical and mental well-being. While we see escalating commitment factors as a suitable lens for understanding why called workers remain despite their issues, the individual situations of workers and the goals of their callings (e.g., Zhou et al. 2024) need to be taken into account to understand where personal boundaries are drawn and what is sustainable. Schabram and Maitlis (2017) provided indicators such as the ability to personally improve in a specific environment or whether a worker can achieve what their specific calling focus wants to achieve. For our adoption, this means that determinants such as ego threat or opportunity cost rely on workers' specific identities.

5.2 | Responsibilities

It is fruitful to remember that EoC investigates professional decision-makers, who are tasked to distribute finite resources of an organization in an efficient manner but fail to do so. However, called workers follow their own idealism, which is typically rooted in prosocial contributions (e.g., Rosso et al. 2010). We have argued that their tasks themselves carry inherent meaningfulness by being societally necessary. Simply abandoning these professions does not seem to be a realistic option for many, and escalating commitment in this sense is not about wasting organizational resources but about maintaining a societally relevant aspect of community while following one's heart. Therefore, while it still explains why workers continue a course of action that harms themselves, their social environments, and arguably their beneficiaries and is prone to being exploited, this lens foremost sheds light on how callings can be maintained despite their precariousness.

However, as the goal is to promote more decent work (United Nations 2015), the question arises as to whether workers themselves are responsible for bettering their conditions by, for instance, protesting against harmful aspects. We would argue that since this is not part of a worker's core calling, such efforts become unlikely. After all, if professional decision-makers fall into this trap, how could we expect workers following their idealism to de-escalate this idealism? We thus want to make the argument that the question is not about whether workers can change their conditions but about what incentives are present in such working environments. As it is, for-profit systems may be the ones that exploit callings the most (e.g., Berkelaar and Buzzanell 2015), as there are prevalent reasons to cut costs. Since workers typically offset missing resources through sacrifice, they arguably sustain sociologically unsustainable professions. As their callings involve caring for beneficiaries (e.g., Thompson and Bunderson 2019), workers tend to make sure the conditions and care are decent. They consider this aspect their main responsibility.

Notably, Sleesman et al. (2012) categorized agency problems as an EoC determinants. Indeed, the goals of for-profit employers often contradict the goals of called workers, resulting in typical agency problems. This perspective thus problematizes an overly worker-centric description of responsibility and instead puts employers, society, and legislators in this position. If prosocial workers' work is societally necessary—and we would obviously argue so—the working conditions should be sustainable (i.e., decent) so that the workers can achieve their goals. However, current incentives remain focused on cost cutting because the current legislative paradigm seems to be concerned with efficiency rather than protection (e.g., Kalleberg 2009). Practices such as the import of cheap nurses from less-developed countries, which weaken labor markets by skimming off the most talented personnel while deincentivizing an improvement in working conditions domestically (e.g., Brush 2008), substantiate this impression.

5.3 | Implications for Sustainability

Precariousness at work has been called unsustainable (e.g., Clarke et al. 2007) because it entails various detrimental outcomes (e.g., Benach et al. 2014). Therefore, a core goal of sustainable labor markets is to implement more decent working conditions (ILO 2008; United Nations 2015). However, developments toward decent work regressed during the COVID-19 pandemic (Grzebyk et al. 2023). Such developments during crises are particularly relevant for prosocial workers (Pentaraki and Dionysopoulou 2019), whose resources are typically connected to societal resource allocation preferences (e.g., Kalleberg 2009). Therefore, the question arises of how workers themselves are dealing with deterioration and why many remain despite a working environment that includes several dimensions of precariousness (Campbell and Price 2016).

We hypothesize that workers are able to withstand deteriorating conditions by enriching their impact with calling-related aspects while devaluing aspects that might contradict this enrichment. By doing so, workers become exceptionally resilient while still being able to perform, as their other-oriented goals transcend personal considerations. Therefore, we hypothesize that these processes are able to increase the psychological sustainability of individual workers. If the underlying meaningfulness is sufficiently strong, the psychological sustainability of a large share of workers can be affected. However, we also wish to argue that the prevalence of mechanisms increasing sustainability at the individual level is a core reason why such professions are particularly prone to cost cutting and deterioration during crises, making them more unsustainable on a sociological level. As it has been proven that workers escalate their commitment to ensuring their ability to provide decent care despite conditions, further deterioration usually results in increased sacrifices rather than resigning callings. While this is meaningful for the individual, it becomes precarious for society. We thus argue that the power of deeply meaningful work and callings, while benefiting many workers in more privileged professions (e.g., Dobrow et al. 2023), entails mechanisms that sustain working conditions generally deemed unsustainable. The pivotal point of whether a calling's conducive outcomes take a dark side, however, is rarely shaped by the affected individuals.

6 | Conclusion

Academic interest in decent work has been growing (Ralph and Arora 2024). To investigate the recently decreasing level of implementation (Grzebyk et al. 2023), we shed light on two mechanisms that run counter to each other: individual sensemaking based on deeply meaningful work and the societal deterioration of working conditions based on cost cutting. A great starting point for future research is thus to empirically investigate the EoC determinants for prosocial and called workers. Following this line of thought, we see benefit in investigating whether work with a strong meaning also entails a sociological price to pay for workers regarding conditions. Staffing levels and instances of overworking could be an appropriate beginning. After all, when thinking about professions in which deep meaningfulness empowers workers to escalate their commitment to reaching their goals, more privileged professions, such as academia, also come to mind.

Furthermore, we outlined the role of incentives in such a system. Scholars have highlighted how called workers are particularly valuable to employers (e.g., Anastasiadis and Zeyen 2022; Berkelaar and Buzzanell 2015). Based on our argument, the mechanism causing this becomes apparent: As called workers prioritize their goals over personal considerations, incrementally deteriorating conditions mean surprisingly stable outcomes, as workers offset the missing resources. Put to an extreme, incrementally decreasing resources will rarely result in a collapse of the system, therefore eliminating a profound reason to improve conditions. A great way to investigate this suspected reason would be to adopt a longitudinal sociological approach to shed light on the interaction of work performance of called workers, on the one hand, and staffing levels, on the other, particularly during a crisis, such as the COVID-19 pandemic. Empirical research on reactions to an unwelcome change of support indeed suggests that workers increase their commitment first (e.g., Cohen et al. 2019).

Finally, an intriguing avenue for research focuses on workers experiencing a turning point leading them to de-escalate. We outlined a few potential determinants for resigning in this manuscript, and events during the pandemic seem to back up these ideas; for instance, a false framing of conditions in nursing by officials led to many nurses breaking their silence. Meaningful work scholars have been calling for more research on workers resigning from their callings (e.g., Thompson and Bunderson 2019), and the inclusion of the development of working conditions is no doubt necessary for explaining such resignation. Bringing both areas of research closer together would thus be a fruitful avenue for deeper understanding. How callings must change to enable workers to continuously sacrifice, in turn increasing psychological sustainability while de-incentivizing profound change in conditions and thus decreasing sociological sustainability, remains a highly relevant topic for society after all.

Acknowledgments

The authors have nothing to report. Open Access funding enabled and organized by Projekt DEAL.

Conflicts of Interest

The authors declare no conflicts of interest.

References

Aiken, L. H., R. J. Blendon, and D. E. Rogers. 1981. "The Shortage of Hospital Nurses: A New Perspective." *American Journal of Nursing* 81, no. 9: 1612–1618.

Aiken, L. H., W. Sermeus, K. van den Heede, et al. 2012. "Patient Safety, Satisfaction, and Quality of Hospital Care: Cross Sectional Surveys of Nurses and Patients in 12 Countries in Europe and the United States." *BMJ* 344: e1717. https://doi.org/10.1136/bmj.e1717.

Alvesson, M., and J. Sandberg. 2020. "The Problematizing Review: A Counterpoint to Elsbach and Van Knippenberg's Argument for Integrative Reviews." *Journal of Management Studies* 57, no. 6: 1290–1304. https://doi.org/10.1111/joms.12582.

Anastasiadis, S., and A. Zeyen. 2022. "Families Under Pressure: The Costs of Vocational Calling, and What Can be Done About Them." *Work, Employment and Society* 36, no. 5: 841–857. https://doi.org/10.1177/0950017020980986.

Arkes, H. R., and C. Blumer. 1985. "The Psychology of Sunk Cost." *Organizational Behavior and Human Decision Processes* 31, no. 1: 124–140.

Ashforth, B. E., and G. E. Kreiner. 1999. "How Can You Do It?: Dirty Work and the Challenge of Constructing a Positive Identity." *Academy of Management Review* 24, no. 3: 413–434.

Bailey, C., and A. Madden. 2017. "Time Reclaimed: Temporality and the Experience of Meaningful Work." *Work, Employment and Society* 31, no. 1: 3–18. https://doi.org/10.1177/0950017015604100.

Bailey, C., M. Lips-Wiersma, A. Madden, R. Yeoman, M. Thompson, and N. Chalofsky. 2019. "The Five Paradoxes of Meaningful Work: Introduction to the Special Issue 'Meaningful Work: Prospects for the 21st Century." *Journal of Management Studies* 56, no. 3: 481–499.

Benach, J., A. Vives, M. Amable, C. Vanroelen, G. Tarafa, and C. Muntaner. 2014. "Precarious Employment: Understanding an Emerging Social Determinant of Health." *Annual Review of Public Health* 35: 229–253. https://doi.org/10.1146/annurev-publhealth-032013-182500.

Berkelaar, B. L., and P. M. Buzzanell. 2015. "Bait and Switch or Double-Edged Sword? The (Sometimes) Failed Promises of Calling." *Human Relations* 68, no. 1: 157–178. https://doi.org/10.1177/0018726714526265.

Blustein, D. L., C. Olle, A. Connors-Kellgren, and A. J. Diamonti. 2016. "Decent Work: A Psychological Perspective." *Frontiers in Psychology* 7: 407. https://doi.org/10.3389/fpsyg.2016.00407.

Blustein, D. L., E. I. Lysova, and R. D. Duffy. 2023. "Understanding Decent Work and Meaningful Work." *Annual Review of Organizational Psychology and Organizational Behavior* 10, no. 1: 289–314. https://doi.org/10.1146/annurev-orgpsych-031921-024847.

Bragger, J. D., D. A. Hantula, D. Bragger, J. Kirnan, and E. Kutcher. 2003. "When Success Breeds Failure: History, Hysteresis, and Delayed Exit Decisions." *Journal of Applied Psychology* 88, no. 1: 6–14.

Bragger, J. D., D. Bragger, D. A. Hantula, and J. Kirnan. 1998. "Hyteresis and Uncertainty: The Effect of Uncertainty on Delays to Exit Decisions." *Organizational Behavior and Human Decision Processes* 74, no. 3: 229–253.

Brockner, J., J. Z. Rubin, and E. Lang. 1981. "Face-Saving and Entrapment." *Journal of Experimental Social Psychology* 17, no. 1: 68–79.

Brockner, J., R. Houser, G. Birnbaum, et al. 1986. "Escalation of Commitment to an Ineffective Course of Action: The Effect of Feedback Having Negative Implications for Self-Identity." *Administrative Science Quarterly* 31: 109–126.

Browning, H. 2018. "No Room at the Zoo: Management Euthanasia and Animal Welfare." *Journal of Agricultural and Environmental Ethics* 31, no. 4: 483–498. https://doi.org/10.1007/s10806-018-9741-8.

Brush, B. L. 2008. "Global Nurse Migration Today." *Journal of Nursing Scholarship* 40, no. 1: 20–25.

Buis, B. C., A. J. Ferguson, and J. P. Briscoe. 2019. "Finding the "I" in "Team": The Role of Groups in an Individual's Pursuit of Calling." *Journal of Vocational Behavior* 114, no. 3: 88–99. https://doi.org/10.1016/j.jvb.2019.02.009.

Bunderson, S. J., and J. A. Thompson. 2009. "The Call of the Wild: Zookeepers, Callings, and the Double-Edged Sword of Deeply Meaningful Work." *Administrative Science Quarterly* 54, no. 1: 32–57.

Campbell, I., and R. Price. 2016. "Precarious Work and Precarious Workers: Towards an Improved Conceptualisation." *Economic and Labour Relations Review* 27, no. 3: 314–332. https://doi.org/10.1177/1035304616652074.

Cardador, M. T., and B. B. Caza. 2012. "Relational and Identity Perspectives on Healthy Versus Unhealthy Pursuit of Callings." *Journal of Career Assessment* 20, no. 3: 338–353. https://doi.org/10.1177/1069072711436162.

Cardador, M. T., E. Dane, and M. G. Pratt. 2011. "Linking Calling Orientations to Organizational Attachment via Organizational Instrumentality." *Journal of Vocational Behavior* 79, no. 2: 367–378. https://doi.org/10.1016/j.jvb.2011.03.009.

Cinque, S., D. Nyberg, and K. Starkey. 2021. "Living at the Border of Poverty': How Theater Actors Maintain Their Calling Through Narrative Identity Work." *Human Relations* 74, no. 11: 1755–1780. https://doi.org/10.1177/0018726720908663.

Clarke, M., W. Lewchuk, A. de Wolff, and A. King. 2007. "this Just Isn't Sustainable': Precarious Employment, Stress and Workers' Health." *International Journal of Law and Psychiatry* 30, no. 4–5: 311–326. https://doi.org/10.1016/j.ijlp.2007.06.005.

Cohen, L., J. Duberley, and P. Smith. 2019. "Losing the Faith: Public Sector Work and the Erosion of Career Calling." *Work, Employment and Society* 33, no. 2: 326–335. https://doi.org/10.1177/0950017017746906.

Dalla Rosa, A., M. Vianello, E. M. Galliani, and R. D. Duffy. 2020. "Moderators of Career Calling and Job-Search Behaviors Among Unemployed Individuals." *Career Development Quarterly* 68, no. 4: 318–331. https://doi.org/10.1002/cdq.12239.

Danesh, M. K., E. Garosi, and H. Golmohamadpour. 2021. "The COVID-19 Pandemic and Nursing Challenges: A Review of the Early Literature." *Work* 69, no. 1: 23–36. https://doi.org/10.3233/WOR-213458.

Dobrow, S. R., H. Weisman, D. Heller, and J. Tosti-Kharas. 2023. "Calling and the Good Life: A Meta-Analysis and Theoretical Extension." *Administrative Science Quarterly* 68, no. 2: 508–550. https://doi.org/10.1177/00018392231159641.

Duffy, R. D., B. J. Dik, R. P. Douglass, J. W. England, and B. L. Velez. 2018. "Work as a Calling: A Theoretical Model." *Journal of Counseling Psychology* 65, no. 4: 423–439. https://doi.org/10.1037/cou0000276.

Duffy, R. D., R. P. Douglass, K. L. Autin, J. England, and B. J. Dik. 2016. "Does the Dark Side of a Calling Exist? Examining Potential Negative Effects." *Journal of Positive Psychology* 11, no. 6: 634–646. https://doi.org/10.1080/17439760.2015.1137626.

Duffy, R. D., R. P. Douglass, N. P. Gensmer, J. W. England, and H. J. Kim. 2019. "An Initial Examination of the Work as Calling Theory." *Journal of Counseling Psychology* 66, no. 3: 328–340. https://doi.org/10.1037/cou0000318.

Fox, F. V., and B. M. Staw. 1979. "The Trapped Administrator: Effects of Job Insecurity and Policy Resistance Upon Commitment to a Course of Action." *Administrative Science Quarterly* 24: 449–471.

Grzebyk, M., M. Stec, and P. Hejdukova. 2023. "Implementation of Sustainable Development Goal 8 in European Union Countries—A Measurement Concept and a Multivariate Comparative Analysis." *Sustainable Development* 31, no. 4: 2758–2769. https://doi.org/10.1002/sd.2545.

Hogg, M. A., and D. J. Terry. 2000. "Social Identity and Self-Categorization Processes in Organizational Context." *Academy of Management Review* 25, no. 1: 121–140.

International Labor Organization. 2008. *ILO Declaration on Social Justice for a Fair Globalization*. International Labor Organization.

Judge, T. A., A. Erez, and J. E. Bono. 1998. "The Power of Being Positive: The Relation Between Positive Self-Concept and Job Performance." *Human Performance* 11, no. 2–3: 167–187.

Jule, K. R., L. A. Leaver, and S. E. G. Lea. 2008. "The Effects of Captive Experience on Reintroduction Survival in Carnivores: A Review and Analysis." *Biological Conservation* 141, no. 2: 355–363. https://doi.org/10.1016/j.biocon.2007.11.007.

Kahneman, D., and A. Tversky. 1979. "Prospect Theory: An Analysis of Decision Under Risk." *Econometrica* 47, no. 2: 363–391.

Kalleberg, A. L. 2009. "Precarious Work, Insecure Workers: Employment Relations in Transition." *American Sociological Review* 74: 1–22.

Ku, G. 2008. "Learning to de-Escalate: The Effects of Regret in Escalation of Commitment." *Organizational Behavior and Human Decision Processes* 105, no. 2: 221–232.

Liao, H., R. Su, and J. Nielsen. 2022. "Feeling Good, Doing Good, and Getting Ahead: A Meta-Analytic Investigation of the Outcomes of Prosocial Motivation at Work." *Psychological Bulletin* 148, no. 3–4: 158.

Lopez, S. H. 2006. "Culture Change Management in Long-Term Care: A Shop-Floor View." *Politics and Society* 34, no. 1: 55–80.

March, J. G., and Z. Shapira. 1987. "Managerial Perspectives on Risk and Risk Taking." *Management Science* 33, no. 11: 1404–1418.

Mavis Mulaudzi, F., M. Mulaudzi, R. A. Anokwuru, and M. Davhana-Maselesele. 2021. "Between a Rock and a Hard Place: Ethics, Nurses' Safety, and the Right to Protest During the COVID-19 Pandemic." *International Nursing Review* 68, no. 3: 270–278. https://doi.org/10.1111/inr.12703.

Moon, H., and D. E. Conlon. 2002. "From Acclaim to Blame: Evidence of a Person Sensitivity Decision Bias." *Journal of Applied Psychology* 87, no. 1: 33–42.

Northcraft, G. B., and M. A. Neale. 1986. "Opportunity Costs and the Framing of Resource Allocation Decisions." *Organizational Behavior and Human Decision Processes* 37, no. 3: 348–356.

Pentaraki, M., and K. Dionysopoulou. 2019. "Social Workers: A New Precariat? Precarity Conditions of Mental Health Social Workers Working in the Non-Profit Sector in Greece." *European Journal of Social Work* 22, no. 2: 301–313. https://doi.org/10.1080/13691457.2018. 1529664.

Petriglieri, G., S. J. Ashford, and A. Wrzesniewski. 2019. "Agony and Ecstasy in the Gig Economy: Cultivating Holding Environments for Precarious and Personalized Work Identities." *Administrative Science Quarterly* 64, no. 1: 124–170. https://doi.org/10.1177/0001839218759646.

Price, S. L. 2009. "Becoming a Nurse: A Meta-Study of Early Professional Socialization and Career Choice in Nursing." *Journal of Advanced Nursing* 65, no. 1: 11–19. https://doi.org/10.1111/j.1365-2648.2008. 04839.x.

Ralph, A., and A. Arora. 2024. "Mapping the Literature on Decent Work: A Bibliometric Analysis of Sustainable Development Goal 8." *Sustainable Development* 32, no. 4: 3937–3952. https://doi.org/10.1002/sd.2879.

Rosso, B. D., K. H. Dekas, and A. Wrzesniewski. 2010. "On the Meaning of Work: A Theoretical Integration and Review." *Research in*

 $\label{eq:conditional} \textit{Organizational Behavior } 30, \text{no.} 5: 91–127. \ \text{https://doi.org/} 10.1016/j.riob. \\ 2010.09.001.$

Schabram, K., and S. Maitlis. 2017. "Negotiating the Challenges of a Calling: Emotion and Enacted Sensemaking in Animal Shelter Work." *Academy of Management Journal* 60, no. 2: 584–609. https://doi.org/10.5465/amj.2013.0665.

Schabram, K., J. Nielsen, and J. Thompson. 2023. "The Dynamics of Work Orientations: An Updated Typology and Agenda for the Study of Jobs, Careers, and Callings." *Academy of Management Annals* 17, no. 2: 405–438. https://doi.org/10.5465/annals.2021.0153.

Schoorman, F. D., R. C. Mayer, C. A. Douglas, and C. T. Hetrick. 1994. "Escalation of Commitment and the Framing Effect: An Empirical Investigation." *Journal of Applied Social Psychology* 24, no. 6: 509–528.

Schulz-Hardt, S., B. Thurow-Kröning, and D. Frey. 2009. "Preference-Based Escalation: A New Interpretation for the Responsibility Effect in Escalating Commitment and Entrapment." *Organizational Behavior and Human Decision Processes* 108, no. 2: 175–186.

Sleesman, D. J., D. E. Conlon, G. McNamara, and J. E. Miles. 2012. "Cleaning up the Big Muddy: A Meta-Analytic Review of the Determinants of Escalation of Commitment." *Academy of Management Journal* 55, no. 3: 541–562. https://doi.org/10.5465/amj.2010.0696.

Standing, G. 2011. "The Precariat." Contexts 13, no. 4: 10-12.

Steele, C. M. 1988. "The Psychology of Self-Affirmation: Sustaining the Integrity of the Self." *Advances in Experimental Social Psychology* 21: 261–302. https://doi.org/10.1016/S0065-2601(08)60229-4.

Thompson, J. A., and J. S. Bunderson. 2019. "Research on Work as a Calling...and How to Make It Matter." *Annual Review of Organizational Psychology and Organizational Behavior* 6, no. 1: 421–443. https://doi.org/10.1146/annurev-orgpsych-012218-015140.

United Nations. 2015. The 2030 Agenda for Sustainable Development. United Nations.

Vinje, H. F., and M. B. Mittelmark. 2007. "Job Engagement's Paradoxical Role in Nurse Burnout." *Nursing & Health Sciences* 9, no. 2: 107–111. https://doi.org/10.1111/j.1442-2018.2007.00310.x.

Weick, K. E. 1995. "What Theory is not, Theorizing is." *Administrative Science Quarterly* 40, no. 3: 385–390.

Wong, K. F. E., and J. Y. Kwong. 2007. "The Role of Anticipated Regret in Escalation of Commitment." *Journal of Applied Psychology* 92, no. 2: 545

Wrzesniewski, A., C. McCauley, P. Rozin, and B. Schwartz. 1997. "Jobs, Careers, and Callings: People's Relations to Their Work." *Journal of Research in Personality* 31, no. 1: 21–33. https://doi.org/10.1006/jrpe. 1997.2162.

Wu, L. T., M. M. J. Low, K. K. Tan, V. Lopez, and S. Y. Liaw. 2015. "Why Not Nursing? A Systematic Review of Factors Influencing Career Choice Among Healthcare Students." *International Nursing Review* 62: 547–562.

Xie, S.-J., J. Jing, R. Li, S.-Q. Yan, G. Yu, and Z.-J. Xu. 2024. "The Impact of Career Calling on Nurse Burnout: A Moderated Mediation Model." *International Nursing Review* 71, no. 4: 969–976. https://doi.org/10.1111/inr.12957.

Yett, D. E. 1966. "The Nursing Shortage and the Nurse Training Act of 1964." ILR Review 19, no. 2: 190–200.

Zhang, L., and R. F. Baumeister. 2006. "Your Money or Your Self-Esteem: Threatened Egotism Promotes Costly Entrapment in Losing Endeavors." *Personality and Social Psychology Bulletin* 32, no. 7: 881–893.

Zhou, S., J. A. Aitken, and L. Kuykendall. 2024. "Callings Can Take Different Shapes: Scope, Proximity and Duration as New Complexifications of Calling." *Journal of Occupational and Organizational Psychology* 97, no. 1: 27–46. https://doi.org/10.1111/joop.12459.