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# Self-care practices and relationships with vitality and health complaints in self-employed workers

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## Abstract

Self-employed workers face numerous demands, including high uncertainty, workload, and personal responsibility for business success, that have the potential to jeopardize their well-being. This study integrates aspects of the conservation of resources (COR) theory, the theory of planned behavior (TPB), and the literature on intention–behavior gaps to offer insights into how self-employed workers can influence their well-being. We propose that their intention to adopt self-care practices acts as a motivational element that links assumptions about the well-being-protecting and -enhancing effects of self-care practices to the enactment of such practices. Moreover, we investigate the role of entrepreneurial stressors as potential hindering factors in the translation of self-care practice intentions into actual behavior. In a sample of 290 self-employed workers and employing a two-wave study design with a one-month time lag, we found that frequently practicing self-care was positively associated with workers' vitality, negatively associated with mental health complaints, and unrelated to somatic health complaints. Among the various types of self-care, physical exercise was most consistently associated with well-being outcomes. Self-care intentions significantly predicted the engagement in self-care practices. Entrepreneurial stressors did not act as barriers to the adoption of self-care practices. By underscoring the utility of self-care practices for self-employed workers' well-being and the key role of self-care practice intentions, this study responds to the call for a research focus shift towards identifying practices that protect well-being among self-employed workers.

**Keywords** Self-care · Well-being · Health complaints · Self-employed workers

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Some preliminary findings of this research were presented at the 21st EAWOP Congress in Katowice, Poland. Approval for running this study was obtained from the ethics board of the Department of Psychology, Faculty of Behavioural and Social Sciences at the University of Groningen prior to commencing the study. Anonymized data underlying the results presented in this paper may be obtained from the first author upon reasonable request. No specific funding was available to carry out this research. The authors have no known conflicts of interest to disclose.

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## Self-care practices and relationships with vitality and health complaints in self-employed workers

In today's labor market, self-employment has rapidly become a popular occupational choice. Self-employment has characteristics that differ from those of salaried employment in organizations. For instance, it has high autonomy and personal accountability but is associated with high uncertainty, operation in a competitive environment, personal responsibility for others and for business success, and a high workload (Grant & Ferris, 2012; Stephan, 2018; Williamson et al., 2021). These demanding aspects have the potential to threaten self-employed workers' well-being, which may, in turn, harm their work productivity and success (de Oliveira et al., 2023). Thus, self-employed workers must find ways to promote and sustain their well-being.

Self-care practices—that is, self-directed behaviors aimed to promote one's health and well-being (Lee & Miller, 2013)—have been found to renew individuals' personal

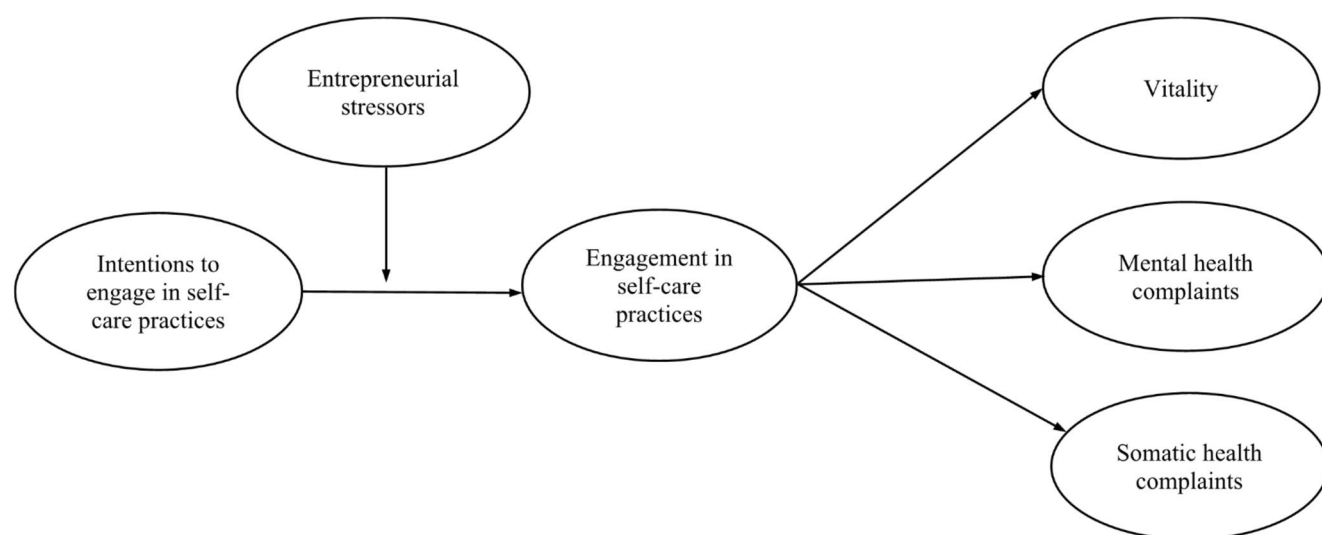
resources, such as physical and mental energy, which help them to thrive and maintain their healthy functioning in the face of challenges caused by their work (Kaluza et al., 2021). We argue that self-employed workers may particularly benefit from engaging in self-care practices to protect and promote their well-being. Unlike salaried employees, self-employed workers do not work in an organization that takes responsibility for promoting individuals' well-being and health (Williamson et al., 2021). That is, they cannot rely on support and advice from organizational leaders or enjoy interventions initiated by the organization aiming to protect individuals from ill-health. Rather, they are solely responsible for their own well-being and functioning (Stephan, 2018). Thus, the present study aimed to gain insights into the previously unstudied relationships between self-employed workers' self-care practices and their well-being. We also aimed to explore self-employed workers' unique practices in their daily lives and identify which of them are particularly predictive of well-being outcomes. Specifically, we focused on vitality as a positive well-being indicator and on mental and somatic health complaints as negative well-being indicators.

The well-being-protecting and -enhancing effects of self-care practices can be explained by assumptions drawn from the conservation of resources (COR) theory (Hobfoll, 1989). COR theory states that individuals are motivated by their needs to conserve resources, avoid resource loss, and build new resources. Self-care practices, such as engaging in a healthy lifestyle or strategically planning the work week, can serve as internal resources (Kaluza et al., 2021) that help preserve other valued resources (e.g., energy and well-being) and prevent distress (Hobfoll, 1989). However, while the COR theory outlines the motivational potential of resource protection and conservation, it falls short of

identifying and explaining the distinct motivational elements that drive them. Self-care practices must be actively initiated and planned by individuals, and self-employed workers must manage to incorporate such practices into their often very stressful daily lives (Grant & Ferris, 2012; Lerman et al., 2021). According to the theory of planned behavior (TPB; Ajzen, 1991), behavioral intentions are considered as key proximal predictors of actual behavior. This premise has been examined in diverse studies, including those on self-employment and entrepreneurship (e.g., Sommer & Haug, 2011). Drawing from TPB, we argue that self-employed workers' intention to adopt self-care practices acts as a motivational element that links assumptions about the well-being-protecting and -enhancing effects of self-care practices to the enactment of such practices.

However, based on the intention–behavior gap approach, intentions do not always translate into actual behavior (Gollwitzer & Sheeran, 2006; Sheeran & Webb, 2016), which indicates the presence of potential moderators in the association between intentions and actions (e.g., Lortie & Castogiovanni, 2015). Leveraging this knowledge, we also aimed to investigate the role of entrepreneurial stressors as potential hindering factors in the translation of self-care practice intentions into actual self-care practice engagement. Specifically, high levels of entrepreneurial stressors, such as workload, should act as unique barriers to the adoption of self-care practices in self-employed workers (Costantini et al., 2022). Our conceptual model is shown in Fig. 1.

By integrating aspects of the COR theory, TPB, and the intention–behavior gap literature, we offer insights into how self-employed workers can maintain their well-being despite the inherently challenging nature of self-employment (Lerman et al., 2021), an issue that is poorly understood (Wach et al., 2021; Williamson et al., 2021).



**Fig. 1** Conceptual model

Adopting the perspective that engaging in self-care practices (grounded in strong intentions) is essential to realize the well-being benefits of these practices as highlighted by the COR theory, we aimed to broaden the understanding of behaviors promoting resource conservation, protection, and acquisition (Rotem et al., 2009). We also aimed to contribute to the literature on the intention–behavior gap by determining whether dealing with entrepreneurial stressors could undermine one’s likelihood of enacting self-care practices despite strong intentions to do so, which, as a consequence, could threaten self-employed workers’ well-being. Overall, we answer the call to move the focus of attention in the research on entrepreneurial well-being to the identification of distinct strategies that self-employed workers initiate and enact (Wach et al., 2021; Williamson et al., 2021), while also addressing the factors that may hinder engagement in self-care practices and the consequences of this for individuals’ well-being.

## Well-being in self-employed workers

Research into the well-being of self-employed workers has increased steadily over the last 20 years (Stephan, 2018; Williamson et al., 2021). This literature has emphasized the need to distinguish between positive and negative well-being indicators (Stephan et al., 2022). Positive well-being encompasses hedonic components, such as positive emotions, cognitions (e.g., satisfaction), and eudaimonic well-being (e.g., self-realization, vitality) (Stephan et al., 2022). Eudaimonic well-being can play a particularly important role in the pursuit of entrepreneurial goals and venture success (Ryff, 2019). Negative well-being encompasses negative emotions and health problems (Stephan et al., 2022; Wach et al., 2021) in terms of mental (e.g., feeling anxious, tense, facing difficulties concentrating) and somatic (e.g., headache, neck pain) complaints. Self-employed workers were found to experience both types of well-being simultaneously. For example, Bencsik and Chuluun (2021) showed that self-employed workers tend to experience more positive emotions and higher levels of stress than individuals who do not work self-employed.

In the present research, we focus on the eudaimonic well-being state of vitality (Ryan & Frederick, 1997) as a potential positive well-being outcome of self-care practices. Vitality is defined as a “positive feeling of having energy available to the self” (Nix et al., 1999, p. 266). It is embedded in the self-determination theory, which argues that vitality emerges from the satisfaction of the basic psychological needs of competence, autonomy, and belonging. The frustration of such needs, on the contrary, limits people’s perceptions of having energy and aliveness (Frederick &

Ryan, 2023; Nix et al., 1999). Research has revealed that individuals whose basic needs are satisfied at work (e.g., by stimulating certain job characteristics, such as social support and autonomy) show higher levels of vitality (Hakanen et al., 2019). Vitality, in turn, has been found to predict individuals’ productivity, performance, creativity, and proactive work behaviors (e.g., de Oliveira et al., 2023; Op den Kamp et al., 2018; Schmitt et al., 2017).

Mental and somatic health complaints as negative well-being indicators are prevalent among self-employed workers, potentially reducing their quality of life, functioning, and work productivity (Stephan, 2018; Williamson et al., 2021). Research, mostly done outside the context of self-employment, has demonstrated that symptoms of anxiety and depression are determined by stressors, such as economic hardship, role conflicts, and workload (Gonzalez-Mulé et al., 2021; Sonnentag & Frese, 2012). Such experiences, particularly interpersonal stressors (e.g., social and work–family conflict, harassment, and incivility at work), have also been linked to somatic health complaints, including headache, gastrointestinal problems, and back pain (Allen et al., 2020; Meier et al., 2013; Nixon et al., 2011; Spector & Jex, 1998).

Research has examined various individual, interpersonal, and environmental predictors of well-being in self-employed workers (for an overview, see Lerman et al., 2021; Stephan, 2018; Stephan et al., 2022; Williamson et al., 2021). Influential predictors can be clustered into personal resources and traits (e.g., educational level, self-efficacy, and emotional stability), work characteristics (e.g., job autonomy and meaningfulness), characteristics of the market (e.g., competition) and venture (e.g., the firm’s financial problems), and physical contexts (e.g., dangerous work environment), as well as interpersonal or social demands and resources (e.g., conflicts with customers and social support from one’s family) (Stephan, 2018; Stephan et al., 2022). While much of the research on well-being predictors has traditionally concentrated on job characteristics, external conditions, and stressors, recent studies have started to underscore the critical role played by individuals in actively shaping their well-being in the context of self-employment (see Williamson et al., 2021). Practices such as taking time to detach and recover from one’s work (e.g., by taking breaks and vacations), practicing mindfulness, and prioritizing sleep were found to positively predict well-being and reduce mental and somatic health complaints in self-employed workers (Lechat & Torrès, 2017; Murnieks et al., 2020; Taris et al., 2008). Similarly, research existing outside of entrepreneurship showed that sleep quality predicted workers’ vitality (e.g., Schmitt et al., 2017), and actively managing one’s vitality across the week and implementing energy regulation strategies have benefits for

employees' vitality (Op den Kamp et al., 2018; Zacher et al., 2014). We aim to contribute to this literature by examining individuals' engagement in self-care practices as well-being-enhancing and -protecting strategies.

## Practicing self-care as a distinct concept

Various definitions of self-care exist in the literature (e.g., Lee & Miller, 2013; Riegel et al., 2021). For the purpose of the current study, self-care is defined as individuals' personal self-directed engagement in behaviors that promote their functioning and health; (Lee & Miller, 2013). Self-care describes individuals' everyday behaviors, highlighting its proactive and self-initiated approach to well-being and health (Klug et al., 2022). Self-care includes physical, mental, social, and spiritual practices. Examples include exercising, engaging in relaxing activities, spending time with supportive people, but also, taking a healthy diet, seeking spiritual support, or planning the work week (Kaluza et al., 2021; Lee & Miller, 2013).

Self-care practices can be distinguished from similar concepts: work recovery activities (Alameer et al., 2023; Sonnentag et al., 2022; Wach et al., 2021) and off-job activities (e.g., Ten Brummelhuis & Trougakos, 2014). They partly overlap with work recovery activities because they have similar facets and characteristics (e.g., social, physical, and outdoor activities), resulting in individual benefits, and because they both embrace the notion that individuals have autonomy over the maintenance of their well-being and health (Lucock et al., 2011; Wach et al., 2021). However, recovery is defined as "unwinding and restoration processes during which a person's strain level that has increased as a reaction to a stressor or any other demand returns to its prestressor level" (Sonnentag et al., 2017, p. 366). This definition suggests that people engaging in work recovery activities are motivated to restore their energy, which has been depleted by work-related activities. For instance, taking a walk in a park after work or during work breaks to replenish one's depleted energy caused by work can be classified as a recovery activity. The recovery literature highlights various psychological processes through which recovery takes place and that are functional for energy replenishment, such as relaxation, psychological detachment from work, control, and mastery (Alameer et al., 2023; Sonnentag et al., 2017; Williamson et al., 2021). Off-job activities are closely linked to recovery activities because they both cover leisure activities (e.g., reading a book and meeting friends), but off-job activities also include high-duty tasks that are performed off-work, such as household chores (Ten Brummelhuis & Trougakos, 2014). Such high-duty tasks and activities do not necessarily have well-being benefits (Oerlemans et al., 2014).

Self-care practices have been developed based on the belief that they can promote or maintain one's general health and well-being, but they are not specifically practiced for the purpose of replenishing one's energy after work or during work breaks (Lee & Miller, 2013). Self-care practices are broader; they also include activities that are usually not described as recovery activities, such as following a healthy diet or planning one's workdays to create enough time for non-work-related activities (Hansson et al., 2005). For instance, when an individual takes a walk in a park to maintain their well-being or consume vegetables regularly for a healthy diet, these activities can be classified as self-care practices.

## Self-care practices and well-being outcomes in self-employed workers

The notion that engagement in self-care practices may foster self-employed workers' well-being and prevent health complaints builds on the COR theory (Hobfoll, 1989), which postulates that individuals have an evolutionary need to prevent resource loss, preserve or maintain existing resources, and build new resources. Resources are broadly defined as anything (e.g., personal characteristics or external conditions) that may help individuals satisfy their core needs and attain their goals (Halbesleben et al., 2014; Hobfoll et al., 2018). Some examples are individuals' knowledge and skills, family status (e.g., being married), social support services (e.g., medical care), and "energies," such as feeling well and having financial resources and available time. Individuals invest in behaviors to gather such resources, and protecting and building resources can stimulate further resource gain. Conversely, when individuals realize that their valued resources are threatened or lost while they fail to pursue new resources, they develop feelings of distress (Hobfoll, 1989). Thus, individuals are motivated to invest in practices that can preserve their resources (e.g., energy) and prevent distress, such as engaging in a healthy lifestyle (Hobfoll et al., 2018).

Practicing self-care can be considered an effective strategy and internal resource (Kaluza et al., 2021) to protect against stress and further build one's well-being. This is because it can optimize one's physical functioning, help one maintain a positive and compassionate self-view, and foster connectedness (Lee & Miller, 2013). Various studies have revealed that practicing self-care is negatively related to health problems and complaints and positively related to well-being among salaried employees from various sectors and industries (e.g., Brillon et al., 2023; Kaluza et al., 2021; Riegel et al., 2021).



We propose that engaging in self-care practices is particularly important for self-employed individuals. Unlike salaried or wage employees, self-employed workers operate their own businesses and take ownership of and responsibility for their success. They may contract with clients but are not tied to formal labor agreements that are typical of salaried workers, nor do they earn fixed salaries. Self-employed workers can work as independent contractors (solo entrepreneurs) or hire employees (Prottas & Thompson, 2006). They experience multiple stressors and challenges and must take full responsibility for fostering their well-being by themselves (Stephan, 2018) because they usually lack organizational stakeholders (e.g., supervisors and human resource managers) who are concerned about their well-being. Ill-being has detrimental consequences not only for them personally but also for their entrepreneurial outcomes, such as the success of their business (Ryff, 2019; Stephan, 2018). Accordingly, we argue that self-employed workers who frequently engage in self-care practices are more likely to maintain their vitality and report lower mental and somatic health complaints than those who do not or hardly engage in such practices.

### Self-care intentions as predictors of engagement in self-care practices

Despite taking the motivational perspective that individuals are driven by the desire to satisfy their needs to conserve resources, avoid resource loss, and build new resources, the COR theory does not explain the motivational factors underlying behavior (Rotem et al., 2009). Drawing from TPB (Ajzen, 1991), we argue that for one to engage in self-care practices and leverage their positive effects on well-being, these practices must be based on strong intentions. According to TPB, the primary driver of behavior is a person's intention to act. Intentions refer to people's decisions to enact a behavior and invest effort in attaining their intended outcomes. Intentions have been shown to be predictive of well-being-promoting behaviors in numerous studies (Sheeran & Webb, 2016). Action planning was found to act as an important underlying process—such that people's intentions to engage in health-promoting behaviors (e.g., physical activity and fruit intake) trigger action planning—that resulted in a higher likelihood of actual engagement in the behavior (Reuter et al., 2010).

Accordingly, based on theory and research highlighting the role of intentions as motivational forces and proximal predictors of actual behavior, we expect that self-employed workers who have strong intentions to engage in self-care practices tend to practice self-care more often than those

with weak intentions, which may positively predict their vitality and prevent health-related complaints.

### Entrepreneurial stressors as barriers to the engagement in self-care practices

Although past research has supported the notion that intentions act as key predictors of human behavior, there are circumstances in which individuals fail to translate their intentions into actual behaviors (Gollwitzer & Sheeran, 2006). Intention-behavior gaps have been examined in relation to various types of behaviors, including well-being-enhancing practices (Sheeran & Webb, 2016). The failure of intentions to translate into behaviors suggests that the link between self-care intentions and self-care practice engagement is complex, and that it can be weakened or strengthened through the potential involvement of other variables.

We propose that entrepreneurial stressors act as potential barriers to the translation of self-care intentions into self-care practices. Entrepreneurial stressors refer to demands associated with entrepreneurial work that emanate from the environment, such as high responsibility, uncertainty, workload, and time management demands (Grant & Ferris, 2012; Lerman et al., 2021). Such stressors are an issue of concern for many self-employed workers, and, when resources are lacking and self-employed workers struggle to cope effectively, these stressors are predictive of detrimental outcomes, such as reduced recovery and strain (Lerman et al., 2021).

When facing entrepreneurial stressors, self-employed workers must mobilize their available resources, such as energy, attention, and time, to address the issues at hand, to meet performance standards, and generally ensure effective functioning in their professional role (Lerman et al., 2021). Hence, despite initial self-care practice intentions, entrepreneurial stressors likely leave self-employed workers feeling overwhelmed, with too little time, energy, and attention to practice self-care. Similarly, Sheeran and Webb (2016) argued that the failure to translate intentions into actions can be caused by the presence of competing goals that consume the time or effort required to realize the intentions. Similarly, research has shown that it is particularly difficult for individuals to detach and recover from work at times when work is demanding, or in other words, high levels of occupational stressors can impair people's recovery processes after work and prevent them from engaging in health-promoting behaviors, such as physical exercise (Sonnentag et al., 2017; Williamson et al., 2021). Taken together, entrepreneurial stressors are assumed to reduce self-employed workers' likelihood to practice self-care despite positive intentions to

do so, which should in turn negatively predict their vitality and positively predict health complaints.

## Hypotheses of the current study

Based on the theoretical background and empirical evidence, we develop and test the following hypotheses.

*Hypothesis 1:* Self-employed workers engagement in self-care practices positively predicts their vitality.

*Hypothesis 2a:* Self-employed workers engagement in self-care practices negatively predicts their mental health complaints.

*Hypothesis 2b:* Self-employed workers engagement in self-care practices negatively predicts their somatic health complaints.

*Hypothesis 3:* Intention to engage in self-care practices positively and indirectly predicts self-employed workers' vitality through engagement in self-care practices.

*Hypothesis 4a:* Intention to engage in self-care practices negatively and indirectly predicts self-employed workers' mental health complaints through engagement in self-care practices.

*Hypothesis 4b:* Intention to engage in self-care practices negatively and indirectly predicts self-employed workers' somatic health complaints through engagement in self-care practices.

*Hypothesis 5:* The positive indirect effect of self-care intentions on self-employed workers' vitality through engagement in self-care practices is mitigated by entrepreneurial stressors.

*Hypothesis 6a:* The negative indirect effect of self-care intentions on self-employed workers' mental health complaints through engagement in self-care practices is mitigated by entrepreneurial stressors.

*Hypothesis 6b:* The negative indirect effect of self-care intentions on self-employed workers' somatic health complaints through engagement in self-care practices is mitigated by entrepreneurial stressors.

There is limited research on the specific types of self-care practices that self-employed workers engage in and the extent to which these practices correlate with well-being outcomes. Self-care practices include a diverse range of categories, including physical exercise, relaxation activities, goal planning, and social interaction. Research based on a heterogeneous sample of Swedish participants showed that practices that refer to physical exercise are most commonly reported by participants, "followed by social support,

engaging in pleasurable activities, and relaxation." (Hansson et al., 2005, p. 135). Furthermore, practices related to physical exercise, social interaction, physical health, and relaxation were most strongly and positively related to well-being (Hansson et al., 2005). Similarly, research on work recovery strategies reveals that activities including physical effort, social interactions, and outdoor activities, foster hedonic and eudaimonic well-being (for an overview, see Alameer et al., 2023). Based on these findings, we explore the use of distinct self-care practices and their differential effects on well-being in our particular sample of self-employed workers.

## Method

### Design and participants

To test the hypotheses, we conducted a two-wave study with a time lag of four weeks. Individuals were eligible to participate in the study if they were at least 18 years old and either part-time or full-time self-employed workers. We recruited participants using a convenience sampling approach. At T1, we recruited 302 self-employed workers from the United Kingdom (UK) through the research participant recruitment platform Prolific Academic. Self-employed workers registered in Prolific Academic could sign up for the study via a link on a first-come, first-served basis. They could find the link to our online study in their Prolific studies dashboards and/or emails. Twelve out of the 302 participants were excluded from the dataset. Exclusions were based on several reasons, such as failing one or more of the three attention check items, having less than five working hours per week, and several missing details regarding the self-employed activity, such as missing information about the offered products or services, number of employees, and the duration of self-employment. The self-employed participants had on average 1.58 employees ( $SD=3.63$ ; range between 0 and 40 employees) as reported at T1. One participant represented an outlier or extreme case because they indicated that they employed 250 employees. This participant was removed from the dataset. Overall, 290 participants provided suitable data at T1 and were invited to the second survey four weeks later. Of those invited, 272 participated at T2 (response rate of 93.8% relative to T1). We excluded T2 data points provided by 18 participants for several reasons, such as having more than 70% missing data and failing one or more of the attention check items, resulting in data from 254 participants at T2.

Of the 290 participants, 55.20% were female; participant mean age was 41.73 years ( $SD=11.79$ ; one participant did

not report their age, two participants did not report their gender). Most participants ( $N=200$ , 69.00%) reported that they had a university degree. On average, the participants have been running their businesses for 7.07 years ( $SD=6.57$ ). Most participants (83.80%) were solo self-employed. Diverse industries were represented. Most of the businesses were operating in the wholesale and retail sector ( $N=67$ ), the information, communication, and technology sector ( $N=56$ ), health, education, government, or social and consumer services sectors ( $N=42$ ), finance, real estate, or business services sector ( $N=37$ ), and other sectors ( $N=64$ ).

## Procedure

The current study was conducted in 2021 and was part of a larger study including various study variables that are not of relevance in the current paper. No other publications based on this dataset are available. Correlations between variables in the study that are not part of the current paper are available upon request. The current study was approved by the ethics committee of the Department of Psychology at the University of Groningen. At T1, participants were informed about the purpose and procedure of the study and asked to give informed consent. Then, they provided information regarding their self-employment, such as whether or not they were involved in the founding of their business, the products and services that they offered, and the number of employees hired. Participants were subsequently presented with a text describing the concept of self-care practices to ensure that they had an equal level of understanding of these practices. Specifically, we explained to them: "This research is focused on self-care practices. In this research, self-care is defined as engagement in strategies that can be used to maintain one's well-being and healthy functioning. These strategies can be used in personal life and in working life." Participants were then asked to respond to items assessing their levels of intentions to practice self-care in the following four weeks. Participants were also asked to report the distinct self-care practices that they intended to implement. Finally, participants were asked to respond to demographic items, such as their gender, age, and educational level. The study took about eight minutes to complete and participants received £1 for their participation. Four weeks later, participants were invited to complete the T2 survey. In this survey, they were asked to complete items on their engagement in self-care practices in the past four weeks, entrepreneurial stressors, as well as well-being outcomes (vitality, mental, and somatic health complaints). Participants were then again provided with the definition of self-care practices and were asked to report the distinct practices that they implemented

in the past four weeks. The T2 survey took about seven minutes to complete and participants were rewarded with £1 for their participation.

A drop-out analysis was performed to test if participants who only participated at T1 differed from those who participated at both T1 and T2 in terms of core demographic and business-related variables (gender, age, educational level, number of employees, duration of self-employment) and self-care intentions. The results based on t-tests revealed that the self-employed workers who participated in both waves (coded 1) were significantly older than those who only participated at T1 (coded 0;  $p=.019$ ) and they were less highly educated (i.e., less likely to hold a university degree;  $p=.035$ ). There were no other differences found between these two groups of participants. In our hypothesis tests, we included age and educational level as control variables.

## Measures

### Self-care practice intentions (T1)

Self-care intentions at T1 were measured by using five items from the business growth intentions scale (Prasastyoga et al., 2021). The items were adapted to the context of self-care practices. Specifically, participants were asked to indicate the likelihood that the statements applied to them (e.g., "I intend to practice self-care in the next four weeks", "I plan to engage in self-care practices in the next four weeks", "The idea of practicing self-care in the next four weeks has never crossed my mind at all" [r]). The items were rated on a 7-point scale, ranging from 1 = *extremely unlikely* to 7 = *extremely likely*. Cronbach's alpha was 0.93.

### Engagement in self-care practices (T2)

Participants' actual engagement in self-care practices at T2 was measured by using a single item (Fishbein & Ajzen, 2010), directly tapping into the target behavior. Participants were asked "How often did you practice self-care in the past four weeks?" and responded to the item on a 7-point scale, ranging from 1 = *never* to 7 = *always*.

To explore the distinct self-care practices that participants realized in the past four weeks, they were asked to write down specific practices at T2. Specifically, we asked the participants "What strategies have you used in the past four weeks to care for yourself (self-care practices)? Please name these strategies briefly in the space provided below." The responses were then sorted into self-care practice categories by two trained raters.



## Entrepreneurial stressors (T2)

Entrepreneurial stressors at T2 were measured with three items from the Sources of Entrepreneurial Stress Scale (SESS) (Grant & Ferris, 2012) that assesses aspects of workload and time management. The items are: “In the past four weeks, how often did you have too much work to do?”, “In the past four weeks, how often did you not have enough time in your day to do everything you want to do?”, and “In the past four weeks, how frequently did you struggle with dividing your time across multiple tasks within the business?”. Participants were asked to respond to the items on a 5-point scale, ranging from 1 = *very rarely/never* to 5 = *very often/several times an hour*. Cronbach’s alpha was 0.86.

## Positive and negative well-being outcomes (T2)

We assessed self-employed workers’ vitality as positive well-being indicator at T2 with three items using the established measure by Ryan and Frederick (1997) (see also, Schmitt et al., 2017). The participants were asked to indicate how energized and vital they felt during the past four weeks (i.e., “I felt alive and vital”, “I felt very energetic”, “I felt alert and awake”). The response options ranged from 1 = *not at all* to 5 = *severely*. Cronbach’s alpha was 0.91. To assess mental health complaints, we used a shortened measure by Bono et al. (2013), based on the established General Health Questionnaire (GHQ, Goldberg, 1972; Goldberg & Hillier, 1979). Mental health complaints were assessed with three items asking participants to indicate to which extent they had experienced complaints (i.e., feeling tired or fatigued, difficulty concentrating, difficulty making decisions) in the past four weeks with response options ranging from 1 = *not at all* to 5 = *severely* ( $\alpha=0.82$ ). To assess somatic health complaints, participants were asked to indicate the extent to which they had experienced somatic complaints in the past four weeks using four items (i.e., upset stomach, neck or back pain, headaches, and painful or tense muscles) with response options ranging from 1 = *not at all* to 5 = *severely* ( $\alpha=0.71$ ).

## Control variables (T1)

Gender (1 = female, 2 = male), chronological age (in years), level of education (1 = below university degree, 2 = university degree), and number of employees (all measured at T1) were included as control variables. For gender, previous research has shown that women report lower mental and somatic health than men (e.g., Kleine et al., 2022). We included the number of employees as a control variable due to its potential impact on self-employed workers’ well-being.

Managing employees can potentially be a stressor (Grant & Ferris, 2012); however, having employees may also be a resource that helps to deal with task-related demands (e.g., delegating tasks) and, hence, benefits self-employed workers’ well-being (van der Zwan & Hessels, 2019; Williamson et al., 2021). As for workers’ educational level, its inclusion as a control variable is based on past research demonstrating that educational levels can account for variation in engagement in health behaviors and psychological well-being (e.g., Ryff, 2019). Moreover, we found significant differences in educational degrees and age among complete and incomplete responders, which justifies the inclusion of educational level and age as control variables.

## Analytical strategy

To test our hypotheses, structural equation modeling (SEM) with maximum likelihood estimation to account for measurement error was performed in Mplus 8.7. SEM consists of a measurement model (based on confirmatory factor analysis [CFA]) and a structural model, in which the relationships between the latent variables are estimated. The single-item variable engagement in self-care practices at T2 was treated as a single indicator latent variable, in which case the factor loading of this indicator should be fixed to 1 and the error variance should be fixed to a certain value based on the expected reliability of the indicator and its variance. We calculated the error term with an assumed reliability of 0.80. To handle missing data, the full information maximum likelihood (FIML) method was used, the default method for SEM implemented in Mplus. FIML takes advantage of and uses all available data to estimate the paths. The hypotheses were tested by controlling for gender, age, level of education, and number of employees, and these control variables had some missing data. Because FIML only applies to dependent variables, we estimated the means and variances of the control variables (as independent variables) in the model command. Thereby, FIML could also be used for the control variables (Klug et al., 2021). For the CFA, to evaluate model fit, we report the chi-square ( $\chi^2$ ) statistics, comparative fit index (CFI), root-mean-square error of approximation (RMSEA), and root-mean-square residual (SRMR) values as fit indices (Hu & Bentler, 1999). For the SEM, we first ran the indirect effects model to test Hypotheses 1 to 4 using bootstrapping at a 95% confidence interval (CI) based on 10,000 boot samples. Next, we calculated the interaction between self-care practice intentions T1 and entrepreneurial stressors T2 as latent variables to test Hypotheses 5 and 6. This requires numerical integration in Mplus, and standard fit statistics are not available. We estimated the index of moderated mediation (IMM) to establish evidence of the conditional indirect effects (Hayes, 2015). Conditional indirect effects

exist if the 95% CI of the IMM of the models predicting vitality and health complaints at T2 exclude zero.

For the open-response answers on self-care practices reported by the participants at T2, we followed a deductive approach to categorize the responses. Two trained raters coded participants' responses based on the categorization of self-care practices developed by Hansson et al. (2005). Hansson et al. (2005) explored the practices that were reported in open-response questions by a heterogeneous sample of Swedish participants. The authors identified 10 categories: physical exercise, physical health, pleasurable activities, relaxation, plan/set limits, social strategies, professional contacts, positive thinking, work-related strategies, and others. Our participants' responses to the open-ended question were coded 1 if they referred to a specific category based on Hansson et al. (2005). Cohen's Kappa scores were computed to assess the level of agreement between the two raters. Cohen's Kappa of 0.81 indicates that there was substantial agreement between the two raters. In cases in which the raters differed, the final decision regarding the categorization was made by the first author.

### Results

To present an overview of the relationships between our study variables, Table 1 provides their mean scores, standard deviations, and correlations. Age was negatively related to health complaints and entrepreneurial stressors at T2. Female self-employed workers intended to practice self-care at T1 to a stronger degree and reported more health complaints at T2. Self-care practice intentions at T1 were significantly and positively related to the actual engagement in self-care practices and vitality at T2. The engagement in self-care practices was positively related to vitality and negatively related to health complaints and entrepreneurial stressors at T2.

The results of the CFA including all latent variables with engagement in self-care practices at T2 as a single indicator latent variable are shown in Table 2. All items loaded significantly on their respective factors; the standardized factor loadings varied between 0.45 and 0.97. The hypothesized six-factor model showed a good fit with the data ( $\chi^2 = 238.99$ ,  $df = 138$ ,  $p < .01$ ,  $CFI = 0.97$ ,  $RMSEA = 0.05$ ,  $SRMR = 0.05$ ) and fitted better than plausible alternative models (see Table 2).

The SEM analyses are shown in Table 3. Hypothesis 1 stated that engagement in self-care practices at T2 positively predicts vitality at T2. This hypothesis was supported. Hypothesis 2 was partially supported. The engagement in self-care practices at T2 negatively predicted mental but not somatic health complaints at T2.

**Table 1** Means, standard deviations, and correlations of the study variables

	M	SD	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1. Age T1	41.73	11.79	-									
2. Gender T1	1.44	0.50	0.07	-								
3. Educational level T1	1.69	0.46	-0.14*	-0.11	-							
4. Number of employees T1	1.58	3.63	-0.01	0.04	0.12	-						
5. Self-care practice intentions T1	5.89	1.30	0.08	-0.20**	-0.01	-0.16**	-					
6. Engagement in self-care practices T2	4.67	1.65	-0.04	0.04	0.16*	-0.02	0.37**	-				
7. Vitality T2	2.82	0.86	-0.04	0.15*	0.03	0.11	0.17**	0.30**	-			
8. Mental health complaints T2	2.46	0.89	-0.21**	-0.17**	0.07	-0.03	-0.19**	-0.52**	-0.52**	-		
9. Somatic health complaints T2	2.04	0.72	-0.13*	-0.25**	0.03	0.07	-0.08	-0.16*	-0.35**	0.58**	-	
10. Entrepreneurial stressors T2	2.72	1.02	-0.26**	-0.10	0.15*	0.08	-0.10	-0.13*	-0.08	0.36**	0.19**	-

N = 254 - 290. T = Time. Gender was coded 1 = female and 2 = male. Educational level was coded 1 = below university-degree and 2 = university degree. \*  $p \leq .05$ . \*\*  $p \leq .01$

**Table 2** Results of Confirmatory Factor Analyses (CFA)

Model	$\chi^2$	df	CFI	RMSEA	SRMR	BIC	$\Delta\chi^2$	$\Delta df$
One factor	2927.494	159	0.130	0.245	0.250	15516.467	-	-
Two factors <sup>a</sup>	1430.089	153	0.599	0.170	0.175	14053.082	1497.405 <sup>e</sup>	6
Four factors <sup>b</sup>	621.196	147	0.851	0.105	0.087	13278.208	808.893	6
Five factors <sup>c</sup>	315.881	143	0.946	0.065	0.049	12995.573	305.315	4
Six factors <sup>d</sup>	238.990	138	0.968	0.050	0.045	12947.031	76.891	5

$N=290$ . *CFI* = Comparative fit index, *RMSEA* = Root mean square error of approximation, *SRMR* = Standardized root mean square residual, *BIC* = Bayesian information criterion. <sup>a</sup> Self-care practice intentions T1 as one factor and all other constructs assessed at T2 as second factor. <sup>b</sup> Self-care practice intentions T1, engagement in self-care practice T2, entrepreneurial stress T2, and vitality and health complaints T2 as overall factor. <sup>c</sup> Self-care practice intentions T1, engagement in self-care practice T2, entrepreneurial stress T2, vitality T2, mental and somatic health complaints T2 as overall factor. <sup>d</sup> Hypothesized factor model. Engagement in self-care practices at T2 is treated as a single indicator latent variable. <sup>e</sup> All  $p$ -scores for the  $\chi^2$  difference tests were  $p=.000$

**Table 3** Results of structural equation modeling testing hypotheses 1–6

Hypothesis	<i>B</i>	<i>SE</i>	95% CI	Inference HS test
HS1: Engagement in self-care practices T2 → Vitality T2	0.16**	0.05	[0.08; 0.25]	✓
HS2a: Engagement in self-care practices T2 → Mental health complaints T2	-0.12**	0.05	[-0.22; -0.05]	✓
HS2b: Engagement in self-care practices T2 → Somatic health complaints T2	-0.05	0.03	[-0.11; 0.01]	X
HS3: Intention to engage in self-care practices T1 → Engagement in self-care practices T2 → Vitality T2	0.08**	0.03	[0.07; 0.26]	✓
HS4a: Intention to engage in self-care practices T1 → Engagement in self-care practices T2 → Mental health complaints T2	-0.06*	0.03	[-0.21; -0.03]	✓
HS4b: Intention to engage in self-care practices T1 → Engagement in self-care practices T2 → Somatic health complaints T2	-0.02	0.02	[-0.12; 0.01]	X
HS5: Intention to engage in self-care practices T1 × Entrepreneurial stressors T2 → Engagement in self-care practices T2 → Vitality T2				X
IMM	-0.01	0.01	[-0.03; 0.02]	
Indirect effect moderator – 1 SD	0.08**	0.03	[0.03; 0.13]	
Indirect effect moderator + 1 SD	0.07**	0.03	[0.01; 0.12]	
HS6a: Intention to engage in self-care practices T1 × Entrepreneurial stressors T2 → Engagement in self-care practices T2 → Mental health complaints T2				X
IMM	0.01	0.01	[-0.01; 0.02]	
Indirect effect moderator – 1 SD	-0.06**	0.02	[-0.11; -0.02]	
Indirect effect moderator + 1 SD	-0.05*	0.02	[-0.10; -0.01]	
HS6b: Intention to engage in self-care practices T1 × Entrepreneurial stressors T2 → Engagement in self-care practices T2 → Somatic health complaints T2				X
IMM	0.00	0.00	[-0.01; 0.02]	
Indirect effect moderator – 1 SD	-0.03	0.02	[-0.06; 0.00]	
Indirect effect moderator + 1 SD	-0.02	0.02	[-0.05; 0.01]	

$N=290$ . *HS* = Hypothesis, *T* = Time. All hypotheses were tested controlling for participants' gender, age, educational level, and number of employees. IMM = index of moderated mediation. \*  $p < .05$ . \*\*  $p < .01$

Based on participants' open responses, the four most frequently represented categories were relaxation (e.g., "Taking hot, aromatic baths", "do nothing"), physical exercise (e.g., "Daily walks", "indoor and outdoor exercise"), pleasurable activities (e.g., "being creative i.e. painting"), and physical health-related practices (e.g., "better sleep hygiene"), see Table 4. The participants reported the use of the remaining self-care practices (social practices, plan/

set limits, professional contacts, positive thinking, and 'others') to a lower degree. Practices from the category 'work' (e.g., focusing on work; "my job is important" according to Hansson et al., 2005) were not reported. We performed exploratory analyses on the associations of distinct self-care practices with vitality and health complaints while controlling for age, gender, educational level, and number of employees. For these analyses, the self-care practice

**Table 4** Relationships between distinct self-care practices and the outcome variables at T2 (exploratory analyses)

Predictor	Example	Vitality T2			Mental health complaints T2			Somatic health complaints T2			
		<i>N</i>	<i>B</i>	<i>SE</i>	$\beta$	<i>B</i>	<i>SE</i>	$\beta$	<i>B</i>	<i>SE</i>	$\beta$
Control variables T1											
Age			-0.00	0.00	-0.05	-0.01	0.00	-0.19**	-0.00	0.00	-0.05
Gender			0.27	0.10	0.17**	-0.19	0.11	-0.13	-0.25	0.08	-0.25**
Educational level			0.01	0.11	0.00	0.08	0.1	0.05	0.02	0.07	0.02
Number of employees			0.02	0.01	0.09	-0.00	0.01	-0.01	0.02	0.01	0.11
Self-care practice T2											
Relaxation	“Meditation”	137	0.04	0.10	0.03	0.05	0.10	0.04	0.14	0.07	0.14*
Physical exercise activities	“Indoor and outdoor exercise”	124	0.49	0.10	0.31**	-0.19	0.11	-0.13	-0.24	0.08	-0.25**
Pleasurable activities	“Going to the cinema”	83	-0.06	0.11	-0.04	0.06	0.11	0.04	0.03	0.08	0.03
Physical health	“Balanced diet”	56	0.01	0.12	0.01	-0.02	0.12	-0.01	-0.00	0.08	-0.00
Social practices	“Spending time with family and friends”	33	0.12	0.15	0.05	0.05	0.15	0.12	0.27	0.11	0.18**
Plan/set limits	“Planning my work day”	32	0.10	0.15	0.05	0.00	0.15	0.00	-0.05	0.10	-0.03
Mixed others	“Positive thinking”	25	0.18	0.16	0.07	0.14	0.16	0.06	0.03	0.11	0.02

*N*=253. *T* = Time. Gender was coded 1=female and 2=male. Educational level was coded 1=below university-degree and 2=university degree. The participants were asked: “What strategies have you used in the past four weeks to care for yourself (self-care practices)? Please name these strategies briefly in the space provided below. Example practices from the study participants are mentioned. The category ‘Mixed others’ combines the categories professional contacts, positive thinking, and others. The strategies are sorted according to the frequency of their occurrence. \* $p \leq .05$ . \*\* $p \leq .01$

categories of professional contacts and positive thinking were combined with the category ‘others’ into the category ‘mixed others’ due to their low occurrence, resulting in seven categories that were investigated as independent variables. The model fit was acceptable:  $\chi^2 = 245.29$ ,  $df = 137$ ,  $p < .01$ ,  $CFI = 0.92$ ,  $RMSEA = 0.06$ ,  $SRMR = 0.06$ . The results are reported in Table 4. Physical exercise positively predicted vitality at T2 ( $\beta = .31$ ,  $p < .01$ ) and negatively predicted somatic health complaints at T2 ( $\beta = -.25$ ,  $p < .01$ ). Interestingly, relaxation and social practices were positively related to somatic health complaints at T2 ( $\beta = .14$ ,  $p < .05$  and  $\beta = .18$ ,  $p < .01$ ). None of the self-care practices predicted mental health complaints at T2.

The SEM results provide full support for Hypothesis 3: self-employed workers’ intentions to engage in self-care practices in the next four weeks reported at T1 indirectly and positively predicted vitality at T2 through the frequent engagement in self-care practices at T2 (see Table 3). The 95% confidence interval (95% CI) excluded zero for the indirect effect of self-care practice intentions at T1 on mental health complaints at T2 but included zero for the effect on somatic health complaints at T2 through engagement in self-care practices. Thus, Hypothesis 4a was supported while Hypothesis 4b was not supported. The model fit for the indirect effect model was acceptable ( $\chi^2 = 333.447$ ,  $df = 194$ ,  $p < .01$ ,  $CFI = 0.96$ ,  $RMSEA = 0.05$ ,  $SRMR = 0.06$ ).

Entrepreneurial stressors at T2 did not moderate the association between self-care intentions at T1 and engagement in self-care practices at T2 ( $B = -0.04$ ,  $SE = 0.07$ ,  $p = .601$ ).

The indirect effects of self-care intentions on self-employed workers’ vitality and health complaints through engagement in self-care practices were not conditional upon levels of entrepreneurial stressors (see the IMM in Table 3). Hypotheses 5, 6a, and 6b were not supported. The full model explained 24.4% of the variance in self-care practice engagement at T2, 17.2% in vitality, 13.7% in mental, and 9.8% in somatic health complaints at T2. We reran all analyses without the control variables, and the results remained consistent.

## Discussion

### Summary and implications

The purpose of the present study was to determine whether self-employed workers benefit from self-care practices in terms of their well-being. First, based on the COR theory (Hobfoll, 1989), we argued that engaging in the self-care practices that have so far been studied among the employed workforce (e.g., Klug et al., 2022), is particularly beneficial for self-employed workers’ well-being, given the demanding nature and conditions of their work. In addition, we wanted to delve deeper into the specific self-care practices that self-employed workers adopt. Second, building on TPB (Ajzen, 1991), we sought to determine the role of self-care practice intentions as a motivational element that directly determines actual engagement in self-care practices among

self-employed workers. Third, to gain a more comprehensive understanding of the extent to which self-employed workers differ in engaging in self-care practices despite their strong intentions to do so, we studied the role of entrepreneurial stressors as conditions that might explain the intention–behavior gap (Sheeran & Webb, 2016). Based on the suggested importance of assessing positive and negative well-being indicators separately in the context of self-employment (Stephan et al., 2022), we studied vitality as a positive well-being indicator and mental and somatic health complaints as negative indicators.

The results revealed that self-employed workers who frequently engaged in self-care practices had higher subsequent vitality and fewer mental health complaints than those who did not or hardly engaged in such practices. The frequency with which self-employed workers engaged in self-care practices did not significantly predict somatic health complaints when controlling for participants' gender, age, educational level, and number of employees. However, based on our additional exploratory analyses, somatic health complaints were linked to the engagement in distinct self-care practices. While physical exercise predicted lower somatic health complaints, the participants who engaged in relaxation activities and social practices experienced more somatic complaints than those who did not. A potential explanation for these associations is that self-employed workers turn to relaxation activities and social practices when they are already experiencing somatic problems (Fritz et al., 2011). Because we concurrently measured distinct self-care practices and well-being outcomes, we could not provide strong arguments for the causal direction. Furthermore, somatic health complaints can be indicators of underlying (chronic) health issues (Kroenke, 2006), which we did not measure in the present study. Frequent engagement in various self-care practices may not have been sufficient to address the underlying health issues that initially caused somatic complaints. However, the workers who engaged in physical exercise benefited in terms of their somatic well-being. Physical exercise was also positively related to participants' vitality. Furthermore, social self-care practices (e.g., spending time with others) may carry the risk of creating situations and experiences that are detrimental to well-being (e.g., interpersonal conflicts), and the accumulation of such negative interpersonal experiences has been shown to predict somatic health complaints (Meier et al., 2013; Spector & Jex, 1998). Self-employed workers with strong intentions to practice self-care in the upcoming four weeks were more likely to engage in such practices than those with weak intentions, which had positive associations with motivational and mental aspects of well-being. We could not support the assumption that individuals who face stronger stressful entrepreneurial demands are less likely to

translate their intentions into actual behavior than those who face weaker demands.

## Theoretical implications

By integrating principles from the COR theory—which considers self-care practices an internal personal resource (Kaluza et al., 2021)—with tenets from the TPB, we offer a broader view of self-care practices. Specifically, while the COR theory states that behavior is driven by the evolutionary need to conserve resources that are essential for survival and achieving one's goals (Hobfoll, 1989; Hobfoll et al., 2018), the TBP (Ajzen, 1991) highlights the role of behavioral intentions as a distinct motivational element. Thereby links individuals' needs for resource conservation with their engagement in practices that enable them to conserve resources. By and large, the present study supported the following assumptions based on the two aforementioned theories: the frequency of engagement in self-care practices and the intention to engage in such practices serve as internal resources with positive well-being outcomes for self-employed workers. These workers, who have no supervisors and cannot rely on established organizational strategies to guide them in managing their well-being and health, benefit from having strong intentions to practice self-care. This highlights the roles of proactivity and intentionality in maintaining personal well-being (Williamson et al., 2021). However, this argument did not hold equally for all well-being facets. For somatic health complaints, we found evidence for more nuanced resource conservation and the enhancing effects of certain practices. Future research is needed to unravel the effects of various combinations of self-care practices and well-being outcomes.

Our findings do not support the perspectives of some previous studies on the intention–behavior gap (Gollwitzer & Sheeran, 2006; Sheeran & Webb, 2016), because entrepreneurial stressors did not function as a hindering factor in the relationship between behavioral intentions and subsequent engagement in self-care practices. There are several possible explanations for this finding. First, with aspects related to time management and workload, we took a limited scope of entrepreneurial stressors, and these stressors might have been appraised as predominantly challenging rather than hindering (Kleine et al., 2023; Lerman et al., 2021). We missed other relevant stressors, such as uncertainty, personal accountability, financial hardship, and dealing with competitive markets (e.g., Grant & Ferris, 2012; Stephan, 2018), which are more likely than others to be categorized as hindrances and to create intention–behavior gaps. Second, the self-employed workers in our sample might have applied coping strategies that allowed them to be less negatively affected by these stressors (Lerman et al., 2021), thus



not abandoning their intentions. Because facing high levels of stressors is an integral part of self-employed work (Lerman et al., 2021; Stephan, 2018), self-employed workers who thrive in their work may naturally learn to adjust to stressful situations. Moreover, the self-employed workers in the present study might have formed and acted on strong implementation intentions. These intentions cover the aspect of volition, which, in addition to the motivational component of forming intentions, is key in pursuing goals (Gollwitzer & Sheeran, 2006). Because we did not measure stress appraisal, coping strategies, strategy effectiveness, or volitional elements, we could not test the plausibility of the aforementioned arguments. We suggest that future research addresses this issue for a more in-depth approach to studying intention–behavior gaps in self-employed workers' self-care practices.

### Practical implications

The insights gained from the present study can be utilized for practical purposes. Frequent engagement in self-care practices was found to be positively associated with vitality and negatively associated with mental health complaints. Physical self-care practices were particularly associated with high levels of vitality and low levels of somatic health complaints. In addition, self-employed workers with strong intentions to practice self-care were likely to do so irrespective of their levels of entrepreneurial stressors. Practical suggestions for self-employed workers should thus highlight the importance of forming strong intentions to practice self-care and of establishing routines to engage in such practices. Our findings also underline the potential for self-care to be integrated into well-being support programs targeting self-employed workers. For example, health practitioners, consultants, and institutions offering entrepreneurial development and support programs may include information about the usefulness and importance of self-care practices in their programs, and may develop approaches to supporting self-employed workers act on their intentions to help them maintain their healthy functioning (Costantini et al., 2022).

### Limitations and suggestions for future research

The current study has several limitations. First, the results may have been influenced by common method bias (Podsakoff et al., 2012) since actual self-care practices, vitality, and health complaints as outcome variables were not temporally separated, and all variables were self-reported. Future research on self-employed workers' self-care practices should include and assess objective health indicators

(e.g., cortisol and heart rate variability) to examine whether the effects based on subjectively reported results manifest in physiological reactions.

Second, because the present study was part of a larger project, we were careful not to overburden the participants and used shortened measures that had been validated and applied in non-clinical samples. In particular, the measurement of health complaints included only a small selection of symptoms, which limited the representativeness and scope of the concept. More comprehensive scales must be used in future studies. For example, regarding somatic health complaints, care can be taken to ensure that central components, such as gastrointestinal, musculoskeletal, cardiopulmonary, and general health symptoms, are covered (Zijlema et al., 2013).

Third, because we did not measure the outcome variables at T1, we could not conclude that well-being and health complaints change as a result of engagement in self-care practices or that self-care practices contribute to an increase in vitality or a decrease in health complaints. Moreover, we could not test reversed effects in terms of opposite directions between self-care practices and well-being outcomes through the present study's research design. For instance, self-employed workers' mental health complaints may result in lower or higher engagement in self-care practices.

Fourth, we recruited self-employed workers from Prolific Academic using convenience sampling. We primarily sampled participants from the UK to minimize the potential influence of cultural and economic differences on engagement in self-care practices and well-being outcomes. This method likely resulted in a demographic distribution that does not accurately represent the population of self-employed workers in the UK. Indeed, most study participants were solo self-employed and our sample consisted of a higher proportion of female participants (55.2%) than is common among self-employed workers across the UK and Europe (Ferrín, 2023; Harris et al., 2020). Even though the percentage of self-employed women increased over the years, men are much more likely to work self-employed than women (Ferrín, 2023; Harris et al., 2020), with the percentage of female self-employed workers in the UK being about 32–33% by 2020 (Harris et al., 2020). Overall, the generalizability of these insights to self-employed workers with different backgrounds and from different countries and cultures remains unknown and is a task for future research to explore. Cultures differ in perspectives on well-being and health-related customs and behaviors (Riegel et al., 2021). For example, in non-western cultures where individuals have less individualized self-concepts (Pelham et al., 2022), the manner in which self-employed workers take care of

their well-being may include more collectivistic practices, such as spending time with family members or people from their close social networks (Stephan, 2018).

Finally, activity lists—such as the categories of self-care practices published by Hansson et al. (2005), as applied in our study—are not without criticism because they group very different activities into categories (e.g., sleep, healthy eating, and the intake of supplementary vitamins formed the category of physical health-promoting practices). However, these practices might, in fact, not have similar impacts on well-being and health outcomes (Alameer et al., 2023).

Future research could systematically investigate the associations of self-care practices with self-employed workers' outcomes based on more comprehensive conceptual models. For instance, studies could test the robustness of our findings by including other relevant variables that have been shown to affect individuals' well-being and health issues, such as trait positive and negative affect and chronic health conditions (e.g., diabetes) (Cook & Zill, 2021; Kleine et al., 2022; Stephan, 2018; Tunceli et al., 2005). In addition to exploring other (challenge and hindrance) stressors relevant to self-employment and the aforementioned process of stressor appraisal (Lerman et al., 2021; Williamson et al., 2021), studies should consider a broader array of outcome variables relevant for self-employed workers, such as the role of self-care practice engagement for individuals' creativity and venture performance. Moreover, because self-employed workers are heterogeneous and differ in characteristics, such as their responsibilities (for others), market and industry conditions, entrepreneurial motivations, and personal circumstances (e.g., family responsibilities), future studies may explore the effectiveness of certain self-care practices for different types or groups of entrepreneurs (Stephan, 2018; Williamson et al., 2021).

## Conclusion

We answered the call to shift the focus of the research on the well-being of self-employed workers to the identification of practices that they engage in to promote their well-being (Williamson et al., 2021). The present study generally supported the notion based on the COR theory that self-care practices have a well-being-enhancing potential, with physical exercise being particularly useful in terms of enhancing workers' vitality and decreasing their health complaints. Self-care practice intentions were identified as core proximal predictors of subsequent engagement in self-care practices, and their motivational potential was seen regardless of the levels of entrepreneurial stressors faced by self-employed workers.

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