A longitudinal approach to disentangle how conscientiousness creates happy people: The mediating role of self-leadership and the moderating role of perceived leadership effectiveness

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ABSTRACT

This study relied on the conservation of resources model to explore the interaction between individual differences (conscientiousness and behavior-focused self-leadership) and contextual factors (perceived leadership effectiveness) to predict well-being. Using results from a three-wave longitudinal study of working adults (N = 107*3 = 321, mean age = 46.05 years, 54% male), we examined: (1) the indirect effect of conscientiousness on well-being via behavior-focused self-leadership; and (2) the moderating role of perceived leadership effectiveness on the indirect effect. The multilevel results showed that conscientiousness influenced well-being through behavior-focused self-leadership over time. The results also showed that the indirect effect was moderated by perceived leadership effectiveness, in such a way that it became stronger when individuals had leaders perceived as less effective (versus more effective). Thus, behavior-focused self-leadership seems to be a process through which conscientiousness influences well-being; when conscientiousness was lower there was an increase behavior-focused self-leadership when the leader was perceived as effective; this contextual need decreased as conscientiousness increased. That is, it seems that when there is something external regulating the individual, s/he feels less need to self-regulate. The results highlight the role of personal (conscientiousness), cognitive (behavior-focused self-leadership) and contextual resources (perceived leadership effectiveness) for well-being.

1. Introduction

Well-being is an ancient concern[1,2]). It has been studied from two perspectives: eudemonic - psychological well-being with an emphasis on long-term human potential - and hedonic - subjective well-being (SWB) focused on seeking pleasure and avoiding pain in the short term[3].

Regardless of the well-being perspective, some personality traits have been considered antecedents of well-being, such as conscientiousness (e.g., Ref. [4]. Conscientiousness is related to being purposeful, strong-willed, planning-oriented, task-oriented, and determined[5]. For instance Refs. [6,7], showed that conscientiousness increases the probability of an individual experiencing positive affect in social situations, thereby predicting SWB.

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Conscientiousness is related to well-being (e.g., Ref. [8]; however, the mechanisms through which conscientiousness affects well-being have been poorly studied, and as such lack of understanding. Moreover, most studies have used cross-sectional designs and do not capture existing fluctuations, instead of longitudinal studies[9]. However, following the advice of [10]; it is crucial to understand how personality traits (i.e., conscientiousness) manifest in day-to-day life, including the precipitants and consequences of shifts in personality states (i.e., short-term expressions of personality traits), which is also key to explaining the well-established links between conscientiousness and well-being (e.g., Ref. [4,11,12]. At last, the boundary conditions of the relationship between such relationships are not fully understood.

As such, the purpose and contribution of this study are to explore self-leadership - a cognitive-behavioural strategy with influence on well-being (e.g. Ref. [13]; - as a possible mechanism through which conscientiousness impacts well-being and perceived leadership effectiveness - a judgment of how well the leader is behaving (e.g. Ref. [14]; - as a potential boundary condition.

2. Theoretical framework

2.1. The relationship between conscientiousness and well-being

Recently, researchers have drawn attention to well-being in unstable work environments or in times of mental exhaustion and stress, such as the Covid-19 pandemic (see Refs. [7, 8]; [15]. Well-being has been considered a crucial factor for health and job performance [16,17], thus proving to be relevant to organizations.

Well-being has been studied from two perspectives: the eudemonic – whose key concept is psychological well-being, related to human potential (e.g., [18] - and the hedonic perspective – whose key concept is the subjective well-being (SWB), related to happiness (e.g., Refs. [19, 21].

SWB is the way an individual evaluates and thinks about life [19]. For [20]; SWB represents what individuals think and feel about what is desirable in life, regardless of what others think. SWB has two dimensions: (1) affective (positive and negative affect), and (2) cognitive (life satisfaction) [21]. In general, most researchers consider life satisfaction as a key feature of SWB[22]. Accordingly, an individual is happier when s/he has a high level of life satisfaction and experiences more frequently positive affect than negative affect [23].

Personality theorists have suggested that personality is critical for SWB (e.g. Refs. [6 7] distinguished a temperamental and instrumental view of the relation between personality traits and SWB. The temperamental view suggests that certain personality traits, such as extraversion and neuroticism, represent enduring dispositions that directly influence SWB. Other personality traits, such as agreeableness and conscientiousness, have an indirect or instrumental role in SWB. This instrumental perspective argues that traits (i.e., conscientiousness) help people to develop specific characteristics, such as self-leadership, that in turn affect SWB [6,7,25–27].

Conscientiousness has been described as the ability to be purposeful, strong-willed, planning-oriented, task-oriented, and determined[5]. Moreover, it is linked to the tendency to be actively involved with work and to be self-disciplined (i; [28]. Some studies have shown that individuals high on conscientiousness tend to be happier because conscientiousness facilitates positive experiences, increases goal attainment, the success of social relationships[29] [6, 7]; and positively influences the internal locus of control – a feature of self-leadership [30].

2.2. The mediating role of self-leadership

Self-leadership is the set of behavioural and cognitive strategies that allow individuals to achieve their personal and professional goals [31]; it is a process of self-regulation and self-management through which the individual achieves the self-orientation and self-motivation necessary to fulfil his or her goals [32]. Some studies have shown that self-leadership positively influences well-being and job satisfaction, and, on the other hand, reduces negative affect and stress (e.g., [33,34].

[31, 17, 18] identified three types of self-leadership strategies: (1) behaviour-focused strategies, (2) natural reward strategies, and (3) constructive thinking pattern strategies.

Behaviour-focused strategies include aspects such as self-observation, goal setting, self-reward, self-punishment, and self-suggestion [31]. Self-observation presupposes the individual's awareness of the need to change ineffective behaviours to achieve personal goals. The definition of challenging goals together with the definition of rewards proved to be a motivational factor for attaining objectives and completing tasks[35]. These rewards can be intangible (e.g., taking a day off to do something pleasurable) or tangible (e.g., buying something desired). Self-punishment refers to the adjustment and correction of behaviours that are not aligned with established goals. Finally, autosuggestion refers to the self-motivation provided by small notes or phrases (e.g., "Life is more than just waiting for"). Overall, this strategy encourages positive behaviours directed to attain goals [36].

Natural reward strategies are focused on developing pleasant experiences and resources so that completing tasks becomes even more rewarding (e.g., self-giving a gift after completing a task). These strategies also shape the individual's perspective regarding the intrinsically rewarding aspects of the task [32]. Lastly, constructive thinking pattern strategies encourage the creation of successful mental images and positive self-talk as a self-motivation technique [31].

When individuals tend to be self-leaders and also score high on conscientiousness, they tend to be happier [37] because of the positive attributes that underly each characteristic and are more likely to engage in positive and conscious behaviours which in turn may improve SWB [38]. Furthermore, self-awareness – a feature of conscientiousness - is a strategy for self-leadership[35] as being aware of performance and behaviours will allow the individual to set realistic and relevant goals to improve their results [13] and as such feel better [21].

The conservation of resources theory (COR [39]; may be a well-suited model to examine these relationships. Accordingly, the central tenet of the theory is that individuals "strive to obtain, retain, foster, and protect those things they centrally value" [24]; p. 117). These centrally valued entities are the so-called resources that may be personal, social, material and energy resources [40]. The theory also argues that when individuals lose resources, they became vulnerable to more resource loss, which is the main cause of impaired well-being, psychological distress, health-related issues, and diminished functioning – the primacy of loss[41]. On the other hand, the preservation of resources, such as self-leadership, is the basis for an individual's well-being [39]. Further, the COR also argues that when individuals possess and retain a strong reservoir of both psychosocial and material resources, they become more resistant to resource losses that may occur. For the COR theory, well-being is thereby characterized by a strong reservoir of resources (e.g., self-leadership; [40].

In this study, we will focus on behavior-focused self-leadership because behavior-focused strategies of self-leadership are likely to be most strongly related to conscientiousness [38]. Although scarce, some studies have shown that some personality traits, such as conscientiousness, are related to self-leadership (e.g., Ref. [42–44]. For instance Ref. [42]; showed that conscientiousness was related to self-leadership behavioral strategies. [45] showed that conscientiousness was the Big-5 dimension with the greatest impact on self-leadership behavioral strategies. Further, self-leadership seems to be positively related to work performance, self-efficacy, SWB, and job satisfaction [46,47], and associated with stress, anxiety, and burnout[48,49]. Hence, behavior-focused self-leadership may be viewed as a cognitive resource (e.g., Ref. [50–52] that is enhanced by conscientiousness, which in turn, can enhance well-being. Thus, based on the COR theory, the following hypothesis was defined:

Hypothesis 1. Conscientiousness will positively predict well-being through behavior-focused self-leadership at the intra-individual level.

2.3. The moderating role of perceived leadership effectiveness

The relationship between personality traits and well-being seems to be influenced by contextual factors, as these act as boundary conditions that can both facilitate or attenuate their impact on well-being. For instance, perceived leadership effectiveness - a judgment of how well the leader is behaving (e.g. Ref. [14]; - seems to be a relevant condition that can either facilitate or impair well-being [53,54].

Perceived leadership effectiveness is described "as the process of being perceived by others as a leader", implying that "it is not the leader who acts, but how his action is perceived by his followers" [55]; p. 11). Relying on the COR theory, perceived leadership effectiveness is a contextual/environmental resource [39] that may facilitate employees' development of self-leadership particularly when combined with high levels of conscientiousness. The COR argues that when individuals are full of resources then they become more resistant to resource loss; hence, from this standpoint, a conscientiousness individual with a leader perceived as effective then s/he will be able to build blocks of self-leadership and, in turn, increase his/her plenitude and well-being [40].

Empirically, some studies have shown that perceived leadership effectiveness is a condition that facilitates not only individual and group effectiveness, but also well-being (e.g., Ref. [56,57]. For instance, [58] showed that perceived leadership effectiveness intensified the positive relationship between management practices and team performance and well-being. More recently, [59] showed that human resource management systems positively influenced employees' well-being and this relationship was moderated by perceived leadership effectiveness in such a way that it became stronger when workers saw the leader as someone effective and reliable. Similarly, [60] showed that mindfulness positively influenced well-being through authentic leadership and that the relationship became stronger when the perceived leadership effectiveness was higher (versus lower). Further, perceived leadership effectiveness was shown to be a positive moderator in the relationship between the person-organization adjustment and the followers' well-being [61].

Hence, perceived leadership effectiveness is a contextual/environmental resource that is likely to enhance the conditional indirect effect of conscientiousness on well-being through self-leadership. Thus, based on the COR theory, the following hypothesis was defined (see Fig. 1):

Hypothesis 2. Perceived leadership effectiveness moderates the positive relationship between conscientiousness and well-being through behavior-focused self-leadership, such that the relationship becomes stronger for higher (versus low) levels of perceived leadership effectiveness.
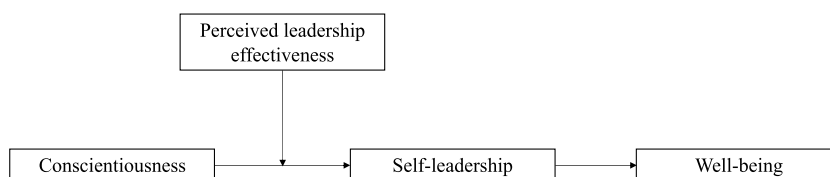

Fig. 1. Hypothesized moderated mediation model.

3. Method

3.1. Procedure and participants

This study was approved by University's Research Ethics Committee (ethical approval code 02_09/2022GRH). A 3-wave longitudinal study was conducted to capture the dynamic nature of the constructs involved (e.g., Ref. [21]). We recruited working adults from the professional network. We sent 243 emails with an invitation to voluntarily participate in a study about leadership in a pandemic context. It was also emphasized that the data was anonymous and confidential. Those who responded received informed consent and an explanation of the study procedure. After returning the signed informed consent, the survey link to Wave 1 was sent to the participant. Data were collected at three moments in time, between October and December 2021, with intervals of one month between these moments. Participants completed identical online questionnaires and, following Wave 1, participants received reminder emails at the 1-month interval to complete Waves 2 and 3. All participants received weekly telephone reminders until the questionnaire was completed. Participants completed Wave 2, on average, 32.65 (SD = 2.31) days after Wave 1 and Wave 3, on average, 33.41 (SD = 3.91) days after Wave 2.

Overall, 116 participants from educational (57%) and management areas (43%) completed Wave 1 (response rate: 47.7%), 111 completed Wave 2 (response rate: 45.6%) and 107 answered Wave 3 (response rate: 44%) (N = 107*3 = 321), of which 53.7% were male. On average, participants were 46.05 years old (SD = 17.86). Most participants had completed high school (54%), followed by those who had a degree (63%), and finally, those who had basic education (21.7%).

3.2. Measures

3.2.1. Behavior-focused self-leadership

To measure behavior-focused self-leadership, we used 10 items from the Revised Self-Leadership Questionnaire [62] that measured three dimensions: (1) self-goal setting (four items, e.g.: "I establish specific goals for my own performance"), (2) self-reward (three items, e.g.: "When I have successfully completed a task, I often reward myself with something I like"), and (3) self-observation (three items, e.g.: "I usually am aware of how well I am doing as I perform an activity"). All items were answered using a 5-point Likert scale, where 1 corresponded to "not at all" and 5 to "completely". The average Cronbach's alpha across waves was 0.92.

3.2.2. Conscientiousness

To measure conscientiousness, we used four items from The Mini-IPIP Scales [63]. An item example is "Get chores done right away". Participants answered using a Likert scale ranging from 1 to 5 (1 - strongly disagree; 5 - strongly agree). The average Cronbach's alpha across waves was 0.92.

3.2.3. Well-being

To measure subjective well-being, we used the 5-item Satisfaction with Life Scale [19]. It measures overall life satisfaction (e.g., "In most ways, my life is close to my ideal") through a 5-point Likert scale (1 - strongly disagree; 5 - strongly agree). The average Cronbach's alpha across waves was 0.81.

3.2.4. Perceived leadership effectiveness

Participants responded to four items adapted from [64] and [65]. An item example is "This team leader is very effective as a leader". Participants answered on a Likert scale ranging from 1 to 5 (1 - strongly disagree - 5 - strongly agree). The average Cronbach's alpha was 0.86.

3.3. Data analysis

Due to the longitudinal nature of the data, this study used multilevel analyzes with nested data to examine the hypothesized moderated mediation model. First, the results showed that there was significant variation in conscientiousness (ICC = 0.46), well-being (ICC = 0.86), behavior-focused self-leadership (ICC = 0.84), and perceived leadership effectiveness (ICC = 0.67). That is, the variables showed significant variation that justifies the multilevel analyses.

The hypotheses were tested using the Multilevel Mediation (MLMed) macro in SPSS [66]. This macro appears to be suitable for testing the 1-1-1 multilevel mediation model (conscientiousness – behavior-focused self-leadership – well-being) (H1) and the moderated mediation model (H2). Based on [67] recommendations for multilevel models, model fit was determined by observing the reduction in model deviation from data (-2LL) at each step, compared to the previous one.

To avoid the common method bias, some measures were taken [68]. First, questions from the various measurement instruments (listed above) were mixed and some random questions were used (e.g., I like cold weather). Second, we used Harman's single-factor test to assess common method variance; the results showed that the single factor only accounted for 31.29% of the variance, which is clearly below the 50% standard value proposed by Ref. [68].

Third, we conducted four multilevel confirmatory analyzes (MCFA) using the JASP software (version 0.14.1). We used a combination of fit indices to assess the model fit and compare the hypothetical model with alternative measurement models[69], namely the comparative fit index (CFI), Tucker-Lewis index (TLI), standard mean square residual (SRMR) and mean square error of approximation (RMSEA). CFI and TLI values above 0.88 and SRMR and RMSEA values below 0.07 were assumed as a model with a good fit to the data

[70].

We tested three alternative models. Model 1 was the four-factor hypothetical model comprising conscientiousness, behavior-focused self-leadership, well-being, and perceived leadership effectiveness. Model 2 was a three-factor model where behavior-focused self-leadership and perceived leadership effectiveness were combined into a single factor. Model 3 was a one-factor solution in which all items were loaded onto a single factor. Table 1 shows that the hypothetical model (model 1) provided a good fit to the data (CFI = 0.94, TLI = 0.93, SRMR = 0.07, and RMSEA = 0.08), and all other alternative models showed a worse fit. Therefore, the common method variance was not an issue for this study. These results along with the reliability indices (Cronbach's alpha) evidenced the discriminant and convergent validity of the study.

4. Results

4.1. Descriptive statistics and correlations

Table 2 shows the descriptive statistics and correlations.

4.2. Hypotheses testing

Hypothesis 1 suggested an indirect effect wherein conscientiousness would influence well-being through behavior-focused self-leadership. The fit of the model was: $-22LL = 189.51$, AIC = 197.51; BIC = 215.34. The direct effect of conscientiousness on well-being was non-significant ($\gamma = -0.02$, $p = 0.63$ 95% CI [-0.08, 0.05]) but significant to self-leadership ($\gamma = 2.05$, $p < 0.001$ 95% CI [1.10, 2.99]). Further, behavior-focused self-leadership positively predicted well-being ($\gamma = 0.27$, $p < 0.001$, 95%CI [0.18, 0.36]). The indirect effect was significant ($\gamma = 0.56$, $p < 0.001$, 95%CI [0.27, 0.91]), giving support for H1 (see Fig. 2).

Hypothesis 2 proposed that perceived leadership effectiveness would moderate the indirect effect of conscientiousness on well-being via behavior-focused self-leadership. The fit of the model was: $-22LL = 174.69$, AIC = 182.69; BIC = 200.49. The results showed a significant conditional indirect effect of perceived leadership effectiveness ($\gamma = -0.14$, CI 95% [-0.22, -0.07]), such that the indirect effect of conscientiousness on well-being via behavior-focused self-leadership was stronger for individuals who perceived their leaders as less effective. Thus, H2 received partial support because the moderating effect was significant but in the opposite direction (Fig. 3).

5. Discussion

This study aims to develop knowledge on the mechanisms and conditions that underly the relationship between conscientiousness and well-being. For that, we relied on the COR theory to develop a framework that explores (1) behavior-focused self-leadership as mechanism through which conscientiousness influences wellbeing and (2) perceived leadership effectiveness as a boundary condition. Overall, the findings disentangle how and when conscientiousness improves well-being.

In short, the results evidence that conscientiousness positively influences well-being through increases in behavior-focused self-leadership, and that perceived leadership effectiveness moderates this indirect effect, in a way that the relationship becomes stronger when the leader is perceived as less effective (versus perceived effective leaders).

5.1. Theoretical implications

First, the results show that conscientiousness positively influences well-being via behavior-focused self-leadership. Behavior-focused self-leadership – a set of behavioral strategies that help individuals achieve their goals [71] – seems to be related to both conscientiousness and well-being. Establishing goals can be seen as a challenge, to which the person will commit and be motivated to attain them. This study shows that behavior-focused self-leadership explains how conscientiousness influences well-being. Some studies have shown relationships between conscientiousness and self-leadership[33]. For example, [72]; showed that conscientiousness can stimulate self-leadership because it not only supports the individuals' goal setting but also helps them to organize themselves in order to achieve them [38]. A conscientious, self-disciplined, goal-oriented individual, who commits him/herself and is satisfied with work, creates conditions for self-leadership and, as a result, improves well-being[45]. In addition, conscientiousness can stimulate self-leadership due to the self-confidence, proactivity, and organizational skills that characterize this trait[73]. Thereby, these characteristics may stimulate certain self-leadership behaviors (self-goal setting), and in turn, well-being[74,75]. When the

Tabel 1
Multilevel confirmatory factor analyses.

Models	SRMR	CFI	TLI	RMSEA
Model 1 (four factors)	0.07	0.94	0.93	0.08
Model 2 (three factors: PLE e BFSL together)	0.18	0.87	0.86	0.21
Model 3 (unifatorial)	0.19	0.82	0.80	0.23

Note. N = X; SRMR = standardized root mean square residual; CFI = comparative fit index; TLI = Tucker–Lewis index; RMSEA = root mean square error of approximation. PLE: perceived leadership effectiveness; BFSL: behavior-focused self-leadership.
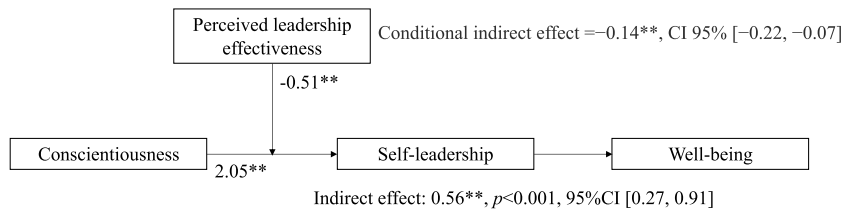
Table 2
Descriptive statistics.

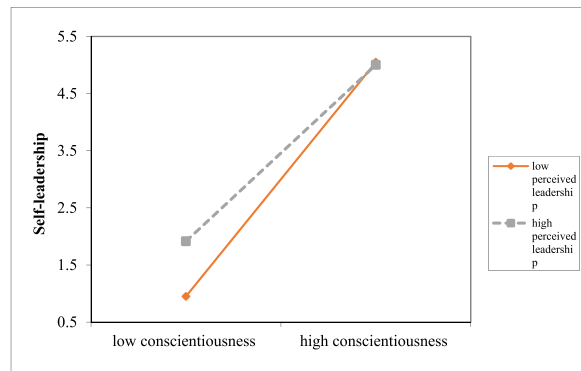| Variable	M	SD	1	2	3	4
1. Well-being	3.55[1]	0.53	(0.81)			
2. BFSL	3.59[1]	0.61	.52**	(0.92)		
3.Conscientiousness	3.73[1]	0.46	0.02	−0.07	(0.71)	
4. PLE	3.72[1]	0.61	0.28**	0.23**	−0.11.	(0.86)

Note: $N = 107*3 = 321$; *$p < 0.05$ **$p < 0.001$.
Cronbach's alfas are in brackets.
BFSL: behavior-focused self-leadership. PLE: perceived leadership effectiveness.

Fig. 2. Moderated mediation results.

Fig. 3. The interaction between perceived leadership effectiveness and conscientiousness.

individual is organized, proactive and has personal goals, achieving these will be beneficial to well-being. By not being afraid to go ahead and having self-efficacy and self-confidence, the individual will have a sense of accomplishment and intrinsic motivation, which will lead to a decrease in stress that is harmful to well-being. In short, conscientiousness influences well-being through the dynamic stimulation of behavior-focused self-leadership.

The results show that the indirect relationship between conscientiousness and well-being through behavior-focused self-leadership is moderated by perceived leadership effectiveness. However, the moderation effect was not in the expected direction as the results show that there is some overlap between external (perceived leadership effectiveness) and internal factors (behavior-focused self-leadership) in the indirect relationship between conscientiousness and well-being via behavior-focused self-leadership. This result was unexpected, considering that, for example, individuals who score high on conscientiousness tend to appreciate recognition, encouragement from the leader, trust, and a good working environment, characteristics that effective leaders promote. On the other hand, perceived leadership effectiveness proved to be an external condition to the individual that, when scarce, forces him/her to develop ways for self-regulation and to use behavior-focused self-leadership strategies (e.g., Ref. [50–52]).

On the opposite, when individuals perceive their leader as effective, they do not feel the need to self-manage so much because they already have a leader who supports and guides them [14]; hence, they can save some personal resources to invest in other work areas. This may be explained by the COR theory; accordingly, its central tenet is that individuals strive to maintain and protect their resources (e.g., self-leadership) as a way of reinforcing well-being and avoid psychological distress [40]. Thus, if individuals have a contextual resource – perceived leadership effectiveness – then they do not need to spend resources (behavior-focused self-leadership) to feel good, because they already have external guidance to supports their way to attain goals. That is, perceived leadership effectiveness is a contextual resource that, by reinforcing cooperation, transparency, giving space to creativity, and thinking "outside the box" or by establishing clear goals, helps followers to save some energy in terms of self-regulation – primacy of gains advocated by the COR theory [76]. Thus, if individuals perceive that there is some external condition or contextual resource (e.g., effective leader) they will tend to save their own resources to have when there is a real need to invest them [40].

Furthermore, the protective-protective model[77] may also help to explain the interaction effect between conscientiousness and perceived leadership effectiveness. Accordingly, the model proposes two hypotheses to explain how two protective factors (i.e., conscientiousness and perceived leadership effectiveness) work together to predict well-being: (1) the enhancing interaction hypothesis and (2) the antagonistic interaction hypothesis[77,78]. The enhancing interaction hypothesis suggests that the effect of one protective factor (e.g., conscientiousness) on its outcomes (e.g., self-leadership and well-being) may be increased by another protective factor (e.g., perceived leadership effectiveness). On the opposite, the antagonistic interaction hypothesis argues that the effect of one protective factor (e.g., conscientiousness) on its outcomes (e.g., self-leadership and well-being) may be decreased by another protective factor (e.g., perceived leadership effectiveness). As such, conscientiousness may be more closely associated with self-leadership and, in turn, with well-being when the individual perceives the leader as ineffective. To sum up, a leadership perceived as effective may enable the individual to save resources that may be needed in more volatile times of loss of resources.

Overall, these results show that conscientiousness seems to be crucial for the development of behavior-focused self-leadership, which, in turn, positively influences the individual's well-being. However, this relationship seems to depend on contextual resources – perceived leader effectiveness – and, in the presence of leaders perceived as effective, individuals tend to avoid spending their own cognitive resources - behavior-focused self-leadership - even if they conscious persons. This points to some overlap between contextual and personal resources, as individuals, when perceiving a leader as a supporter and regulator, avoid spending their resources on behaviors needed to improve well-being.

5.2. Practical implications

This study highlights the importance of individual cognitive (i.e., self-leadership and conscientiousness) and contextual resources (i.e., perceived leadership effectiveness) for well-being. Managers can draw from the results indications for training on self-leadership, as this seems to be beneficial for well-being. Hence, from a conservation of resource perspective [40]; creating training programs that aim to develop self-leadership (e.g., goal setting, self-observation, or self-constructive dialogues) will benefit employees by supporting them to develop their own resources and, as consequence, well-being (e.g., [45,79].

5.3. Limitations and future directions

The first limitation is related to the sample, as it is small and is a non-probabilistic convenience sample. Further, we used self-report measures, which may have led to the common method bias. However, we took some additional measures, such as the confirmatory factor analyses; accordingly, the results demonstrate that the common method bias does not seem to be an issue for this study.

Future studies should replicate the study, with a larger sample size, and collect daily data. It would also be interesting to analyze this model with teams and collect multi-source data (individuals and leaders).

6. Conclusion

Overall, this study shows that conscientiousness predicts well-being because it increases the ability of the individual to be a self-leader. When individuals self-organize, self-observe, and self-monitor themselves they create conditions to feel happier. Notwithstanding, the indirect relationship between conscientiousness and well-being through behavior-focused self-leadership is conditional on contextual factors, such as perceived leader effectiveness. When the leader is perceived as effective, self-leadership behaviors are attenuated as a way to spare resources, because the individual perceives that the leader's follow-up is sufficient for well-being. Hence, perceived leadership effectiveness interacts with conscientiousness as a strategy of resource conservation both for self-leadership and well-being.

Author contribution statement

Ana Junça-Silva: Conceived and designed the experiments; Analyzed and interpreted the data; Contributed reagents, materials, analysis tools or data; Wrote the paper.

Andreia Camas: Performed the experiments.

Data availability statement

Data will be made available on request.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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