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The role of a new strength-based intervention on organisation-based self-esteem and work engagement

Three-wave
intervention
study

A three-wave intervention study

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Abstract

Purpose – This study aims to investigate the relationship between organisation-based self-esteem (OBSE) and work engagement during a new strength-based intervention over nine months.

Design/methodology/approach – A sample of 82 workers composed of 70 sales consultants and 12 area-managers working in an Italian pharmaceutical company received a one-day training based on the FAMILY approach, three times for nine months, with a three-month lag between each workshop. Self-reported measures of OBSE and work engagement were collected before and after each workshop.

Findings – Results showed that final levels of both OBSE and work engagement were significantly higher compared to baseline. Moreover, results from a multiple mediation analysis showed that the direct and indirect relationships between OBSE and work engagement changed at different time points, which may have been related to the different contents of the workshops.

Originality/value – This study provides initial evidence suggesting that organisations could leverage on medium-term interventions to provide employees active guidance on how to use their strengths at work, likely to boost higher employees' positive perceptions of themselves as organisational members and work engagement.

Keywords Work engagement, Positive psychology, Organization-based self-esteem, Strengths intervention, Strengths use

Paper type Research paper

Introduction

Organisations are increasingly promoting employee health and well-being (Tonkin, Malinen, Näswall, and Kuntz, 2018). This trend is due to evidence showing that happy workers are more productive and cope better with the high demands of the work environment than their dissatisfied counterparts (Zelenski *et al.*, 2008; Lyubomirsky *et al.*, 2005; Pfeffer, 2018). A promising approach to promote well-being is the focus on individual strengths at work (Bakker and van Woerkom, 2018; Quinlan *et al.*, 2012; Peterson *et al.*,



2010). However, research on strengths use in organisational contexts is still in its early stages (Bakker and van Woerkom, 2018; Buckingham, 2007), and enabling strengths use might represent an overlooked strategy to boost employee well-being. Indeed, organisations may implement strengths interventions, i.e. training processes aiming at the identification, development, and use of the participants' strengths (Quinlan *et al.*, 2012) to boost the benefits of employees' strengths use. Importantly, such an approach to employees' empowerment has been found to consistently enhance general well-being while being relatively easy to implement and moderately costly (Quinlan *et al.*, 2012).

While strengths interventions may represent a valuable resource to sustain employees' engagement and well-being, there are still considerable gaps in the empirical research on strengths interventions (Bakker and van Woerkom, 2018). First, most of the existing studies on strengths interventions involved samples of children, adolescents, or students rather than adults (Quinlan *et al.*, 2012). Second, most of the studies focus on the use of strengths in daily life, while little research has been conducted in work contexts (Meyers *et al.*, 2013). Third, existing studies have mainly focussed on general instead of work-related well-being and have not explored the mechanisms through which strengths interventions influence well-being (Quinlan *et al.*, 2012).

In this contribution, we aim at addressing these gaps by presenting results from a field, quasi-experimental study that involved 82 employees who took part in a strengths intervention initiative lasting over nine months. In doing so, we contribute to the literature on strengths interventions and employees' resources and well-being in several ways. First, by investigating the effects of a strengths intervention on employees' organisation-based self-esteem (OBSE), we aimed at further deepening the knowledge on how workplace interventions supporting employees' effective use of their strengths build their personal resources. Second, by investigating the relationship between OBSE and employees' engagement during the intervention period, we shed light on the role of strengths interventions to support well-being in working contexts. In doing so, we contribute to disentangling the psychological mechanisms through which strengths interventions exert their effects on employees' well-being. Third, by addressing the relationship between employees' OBSE and work engagement at three time points over nine months, we provide evidence on the role of such a personal resource originating in the working context to sustain work engagement over time.

Sustaining employees' strengths use to unleash personal resources in the workplace

Individual strengths have been defined as:

[...] ways of behaving, thinking or feeling that an individual has a natural capacity for, enjoys doing, and which allow the individual to achieve optimal functioning while they pursue valued outcomes (Quinlan *et al.*, 2012, p. 3).

By using individual strengths, employees feel energised and inspired, able to cope with stressful situations and less prone to experience strain and exhaustion (Bakker and van Woerkom, 2018; Bakker and Demerouti, 2007). That is, individual strengths use is not only beneficial in that it drives high performance, but also because it is intrinsically motivating, enjoyable, engaging, satisfying and energising (Peterson and Park, 2006; Linley and Harrington, 2006; Peterson and Seligman, 2004). However, despite such positive outcomes, today's organisations often overlook the potential of organising work around employee strengths (Peterson and Park, 2006), or of channelling strengths use in an efficient way (Biswas-Diener *et al.*, 2011). Also, most employees and leaders cannot readily identify their

own strong points (Kaplan and Kaiser, 2010; Buckingham and Clifton, 2001), and report to not use their strengths very often when at work (Buckingham, 2007).

To raise awareness for the value of individual strengths and to stimulate an efficient strengths use, organisations can make use of strengths interventions, which have been defined as:

[. . .] a process designed to identify and develop strengths in an individual or group. Interventions encourage the individual to develop and use their strengths, whatever they may be. Their goal is to promote well-being or other desirable outcomes through this process” (Quinlan *et al.*, 2012, p. 4).

By using their strengths, employees feel true to themselves and their values (Ghielen *et al.*, 2018), which conveys a sense of leading a meaningful and significant life, eventually fostering engagement in activities (Schaufeli and Salanova, 2010). Moreover, when employees apply their strengths, they get the chance to work on or with their strong points (Peterson and Seligman, 2004). By doing so, they are likely to develop positive self-evaluations regarding their adequacy as organisational members, because they feel they can successfully master work tasks by employing their assets, which may reflect in high OBSE.

OBSE is defined as the degree to which an individual believes him/herself to be capable, significant, and worthy as an organisational member (Pierce, Gardner, Cummings, and Dunham, 1989). Elaboration of the construct casts OBSE as a self-evaluation of one's personal adequacy (competency) as an organisational member. It reflects the self-perceived value that individuals have of themselves as valuable, competent, and capable within their employing organisations (Pierce and Gardner, 2004). Employees with high OBSE have the belief that “*I count around here*” and have a sense of having satisfied their needs through their organisational roles (Korman, 1970). Previous studies showed the role of OBSE to buffer the negative effect of job insecurity on work engagement (De Paola and Charkhabi, 2016). Moreover, evidence shows that, among different personal resources considered such as optimism and self-efficacy, OBSE is the best predictor of work engagement (Bakker and Demerouti, 2008). However, while such findings are key to understand the role of OBSE to enhance well-being and reduce stress, less is known on the role of strengths interventions to sustain OBSE.

Building on the definition of OBSE reported above, we argue that interventions supporting employees' strengths use nurture employees' OBSE in that employees who get the chance and learn to work by applying their strong points will feel more competent and valuable to their organisations.

H1. Participants' level of OBSE after the intervention will be higher compared to their level of OBSE before the intervention.

Employees' strengths and work-related well-being

Employing strengths is an energising process that renews vigour and counteracts exhaustion (Ghielen *et al.*, 2018; Peterson and Seligman, 2004; Schaufeli *et al.*, 2002). Indeed, actively putting one's strengths to work can trigger flow experiences (Csikszentmihalyi, 1990) and employees who apply their strengths may feel good about themselves and invigorated (Peterson and Seligman, 2004). Accordingly, strengths interventions have been proposed as an effective means to influence and sustain employees' engagement (Bakker *et al.*, 2018; Schaufeli and Salanova, 2010).

Work engagement represents a conceptually related aspect of work-related well-being that can be influenced through targeted workplace interventions (van Wingerden *et al.*, 2016; Schaufeli, 2014; Schaufeli and Salanova, 2010; Le Blanc and Schaufeli, 2008). Specifically,

work engagement has been defined as a positive, fulfilling, work-related state of mind that is characterised by vigour, dedication, and absorption (Schaufeli *et al.*, 2002). Employees with high levels of work engagement put much effort and energy in their work, take pride and find inspiration in the work activities they pursue, and immerse themselves fully in their tasks (Schaufeli *et al.*, 2002). However, while literature already showed that when companies give their employees the opportunity to use and develop their talents and strengths, this results in more engaged employees at work (Demerouti and Cropanzano, 2010; Schaufeli *et al.*, 2006; Xanthopoulou *et al.*, 2008), only limited research has been conducted to investigate the role of strengths interventions to sustain work-related well-being (Meyers and van Woerkom, 2016). In one of the few studies conducted on the topic, findings showed a positive association between the applicability of one's strengths at work and engagement (Harzer and Ruch, 2013). Based on these findings, we expect that participants taking part in an intervention designed to empower employees' strengths at work will result in an improvement of their work engagement:

H2. Participants' level of work engagement after the intervention will be higher compared to their level of work engagement before the intervention.

As previously argued, it is likely that employees participating in a tailored intervention aiming at supporting strengths' use in the workplace may experience a high sense of control and perceptions of mastery (Bakker and van Woerkom, 2018), which will reflect in high OBSE. In turn, such perceptions are likely to help them dealing with the demands of the work environment, resulting in more frequent experiences of work engagement. Previous findings already showed the positive effects of OBSE on work engagement (Bakker and Demerouti, 2008; Xanthopoulou *et al.*, 2008), but less is known about whether nurturing employees' OBSE through strengths interventions results in stable, significant relationships between OBSE and work engagement that replicate over a medium time frame. Such a gap deserves closer attention in that understanding whether and how the pattern of the mechanism linking OBSE and work engagement remains stable or changes over time is key to provide evidence-based guidelines to scholars and practitioners interested in the design of interventions to improve employees' personal resources and well-being. Overall, based on previous literature attesting a positive association between OBSE and work engagement, we expect that:

H3. OBSE and work engagement will be positively related at every time point.

Moreover, consistent with *H2*, participants involved in a strengths intervention will feel more engaged and energised, i.e. will report higher work engagement compared to baseline. In turn, we argue, such a positive state will be linked to higher OBSE because it will provide employees with the energy to master work tasks by making use of their strengths, a process that will be supported by means of the strengths intervention.

H4. Participants' OBSE will be positively related to participants' work engagement, which in turn will be positively related to participants' OBSE. Such a relationship will be recursive throughout the intervention.

Method

Participants and procedure

Participants were 82 employees working in an Italian pharmaceutical company in North Italy. Among these, 70 were sales consultants and 12 were area-managers. In all, 80 per cent

of participants were women and ages ranged from 24 to 57 years ($M = 32.38$; $SD = 7.70$). Most of the participants had a master's (37 per cent) or a bachelor's degree (32 per cent).

In this study, the intervention was designed for a duration of about nine months and consisted in a one-day, eight-hour workshop delivered to participants every three months, in groups of up to twenty participants led by trained research assistants and a facilitator. The first questionnaire, which included a scale to measure OBSE and socio-demographic information, was filled in one and a half month before the first workshop. Participants were again asked to fill in the same questionnaire before the second and the third workshops. At the end of each workshop participants reported data referred to their work engagement, exception made for the last questionnaire, which was filled in one and a half month after the last workshop. [Figure 1](#) provides a graphical representation of the time points of data collection, the contents of the workshops and participants' assignments between one workshop and the following.

The research staff provided participants with the questionnaires and explained the anonymous nature of data collection. Anonymity was guaranteed through an identification code formed by the initial three letters of a significant person and objects of the respondent's life, which together constituted a nine-letter code used to match the questionnaires.

Our intervention aimed to develop and channel employees' strengths by inspiring participants on how to positively reframe emotional situations, supporting them in the identification of possible challenging work situations and structuring reflection and meaning-making processes to support their awareness of work identity beliefs. Specifically, the structure of the strengths intervention was based on the six stages of the FAMILY approach (i.e. framing, attitudes, meaningfulness, identity, leading-self, and yoked together; [Costantini et al., 2017](#); [Costantini and Sartori, 2018](#)), which integrates the VIA (Values in Action; [Peterson and Seligman, 2004](#)) and the PERMA model ([Seligman, 2010](#)).

In the first workshop, participants were introduced to the overall structure of the intervention and focussed on the first two dimensions of the FAMILY approach, i.e. framing and attitudes. Specifically, framing (F) referred to helping participants focussing on the positive rather than on the negative aspects of work by using their strengths. This stage started with participants creating their own list of their personal strengths. Then, after reflecting over past work experiences, they were supported in reframing their work-related negative experiences by reframing the meanings attributed to them and leveraging on how their strengths could have been suitable to differently facing them. Attitudes (A) referred to the second step of the FAMILY approach and constituted the second focus of the first workshop. Participants were supported in the process of adopting a positive perspective when facing challenging work tasks and guided in doing so by leveraging on their self-identified strengths. At the end of the workshop, participants were asked to take note of their work experiences during the time lag between the first and the second workshop, to be shared in the next session, on how applying their strengths at work resulted in a favourable situation.



Figure 1.
Graphical
representation of the
study design

In the second workshop, participants focussed on the dimensions of meaningfulness (M) and identity (I). First, participants were guided to explore their perceptions referred to the meaning attributed to their work and on how such perceptions were (or not) aligned with the mission of their organisation. Second, the session focussed on the dimension of identity and participants were facilitated in reflecting over their aspirations within the organisational context and on how such aspirations matched and were concretely translated in the work environment by means of every-day tasks. At the end, participants were given an assignment consisting of reflecting and listing, during the three months before the next workshop, the working tasks that, in their opinion, allowed their optimal strengths use.

Finally, the last workshop focussed on the dimensions of leading-self (L) and yoked together (Y). In the first part, participants were guided in the self-selection of behavioural goals to be carried out during their work activities in order to face stressful and negative events by making use of personal strengths. In doing so, participants confronted with their colleagues, who provided feedback and suggestion on the feasibility of the proposed goals. Each participant identified a “buddy”, who was in charge of providing social and emotional support to allow goal achievement.

A booklet was provided to each participant, which was designed to target the contents of the workshops, including:

- an outline of the overall intervention;
- a section providing the definition of all of the FAMILY dimensions and key-points of each workshop;
- an assignment and planning sheet, designed to provide tangible space where to list strengths and set goals referred to the assignments between each workshop; and
- blank pages for personal/reflection notes, to be used during the months between one workshop and the following.

Measures

All measures were administered in Italian. Scales that were not available in Italian were translated, using the back-translation method (Behling and Law, 2000).

Organisation-based self-esteem

Ten items from the OBSE scale (Pierce *et al.*, 1989) measured OBSE. Sample items are “I am important around here” and “I make a difference around here”. The scoring was performed using a seven-point rating scale ranged from 1 (strongly disagree) to 7 (strongly agree).

Work engagement

Work engagement was measured with five items of the Utrecht Work Engagement Scale (UWES-9; Schaufeli *et al.*, 2006). A sample item is “At work, I feel bursting with energy”. Answers were given on a seven-point rating scale from 1 (never) to 7 (always/every day).

Data analyses

Repeated measures ANOVAs were conducted to test *H1* and *H2*. *H3* was tested by inspecting correlations among the study variables at different time points. Finally, to test *H4*, we used the PROCESS macro (Hayes, 2013) and conducted a bootstrapping-based analysis.

Results

Measurement model and descriptive statistics

To test the factorial validity of our measures, we conducted confirmatory factor analysis using Amos 23.0. To report our findings, we followed established recommendations (Hu and Bentler, 1999; Schumacker and Lomax, 2004). The hypothesised two-factor model supported the discriminant validity of our measures at every time point (i.e. at Time 1, $\chi^2_{(86)} = 145.18, p < 0.01$, CFI = 0.94, TLI = 0.92, RMSEA = 0.08; at Time 2, $\chi^2_{(86)} = 142.16, p < 0.01$, CFI = 0.93, TLI = 0.90, RMSEA = 0.08; at Time 3, $\chi^2_{(83)} = 104.15, p < 0.01$, CFI = 0.98, TLI = 0.97, RMSEA = 0.05). Descriptive statistics of the research variables including mean, standard deviations, correlations among the variables and reliability coefficients (Cronbach's α) are reported in Table I. As can be seen, the correlations were all in the expected direction and provided support for H3.

Hypotheses testing

Repeated measures ANOVA were conducted to determine whether the levels of work engagement and OBSE significantly differ between time points. For what concerns work engagement, Mauchly's Test of sphericity indicated that the assumption of sphericity was violated, $\chi^2(2) = 9.161, p = 0.01$. Repeated measures ANOVA with a Huynh-Feldt correction determined that the mean of work engagement significantly differed between time points ($F(1.794, 105.833) = 4.502, p = 0.02$). Post hoc tests using the Bonferroni correction revealed that the intervention elicited a slight increment in work engagement from Time 1 to Time 2, which was not statistically significant ($p = 0.12$). However, work engagement at Time 3 increased and was significantly different to Time 1 ($p = 0.036$). Regarding OBSE, Mauchly's Test of sphericity indicated that the assumption of sphericity was not violated, $\chi^2(2) = 0.08, p = 0.96$. Repeated measures ANOVA assuming sphericity determined that the mean of OBSE significantly differed between time points ($F(2, 108) = 7.514, p = 0.001$). Post hoc tests using the Bonferroni correction revealed that the intervention elicited a slight increment in OBSE from Time 1 to Time 2, which was not statistically significant ($p = 0.07$). However, OBSE at Time 3 significantly increased compared to Time 1 ($p = 0.001$). Based on these findings, H1 and H2 are confirmed. That is, the levels of OBSE and of work engagement after the intervention were significantly higher compared to participants' level of the same constructs before the intervention.

H4 stated that participants' OBSE would have been positively related to participants' work engagement, which in turn would have been positively related to participants' OBSE.

	M	SD	1	2	3	4	5	6
<i>Time 1</i>								
1. Work engagement	6.17	0.60	(0.85)					
2. OBSE	4.38	0.48	0.262*	(0.89)				
<i>Time 2</i>								
3. Work engagement	6.24	0.61	0.480**	0.161	(0.86)			
4. OBSE	4.43	0.49	0.289*	0.528**	0.570**	(0.92)		
<i>Time 3</i>								
5. Work engagement	6.31	0.54	0.473**	0.339**	0.653**	0.502**	(0.82)	
6. OBSE	4.54	0.48	0.400**	0.587**	0.335**	0.622**	0.457**	(0.92)

Notes: $N = 54$. * $p < 0.05$ (two-tailed); ** $p < 0.01$ (two-tailed); OBSE = organisational based self-esteem

Table I.
Means, standard deviations (SD) and intercorrelations among the study variables. Cronbach's α are reported in parenthesis on the diagonal

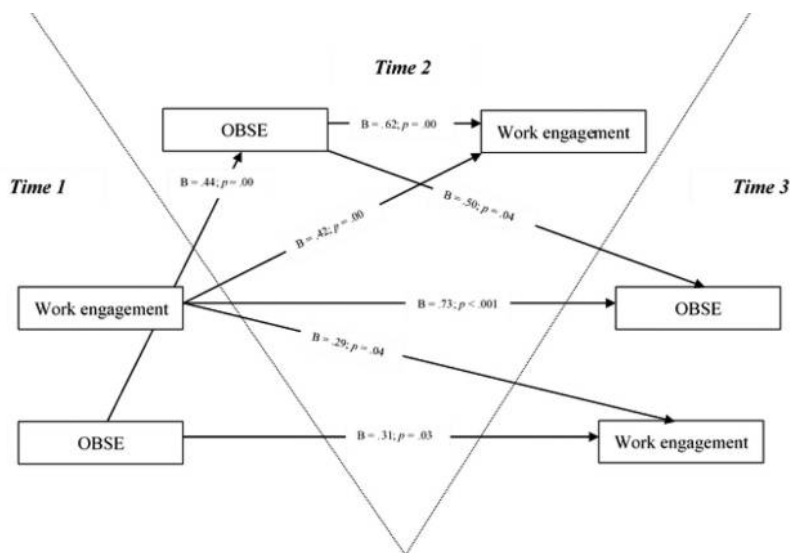
Moreover, it assumed that such a relationship would have been recursive throughout the duration of the intervention. To test this Hypothesis, we used bootstrapping following the PROCESS procedure recommended by Hayes (2013). Specifically, we run a mediation analysis with four mediators. Results are reported in Table II and displayed in Figures 2 and 3. As can be seen in Figure 2, $H4$ was not confirmed since the indirect effect of OBSE at Time 1 on work engagement at Time 3 was not significant. However, results showed that OBSE at Time 1 was significantly related to OBSE and work engagement at Time 2, which in turn were significantly related to work engagement at Time 3. Moreover, OBSE at Time 1 was significantly related to OBSE at Time 2, which in turn was positively related to work engagement at both Time 2 and 3.

Models	B	SE	t	p	LLCI	ULCI
<i>Outcome: WE T1</i>						
Predictor						
OBSE T1	0.333	0.168	1.976	0.054	-0.005	0.670
R^2	0.077			0.054		
<i>Outcome: OBSE T2</i>						
Predictors						
WE T1	0.037	0.094	0.396	0.694	-0.151	0.226
OBSE T1	0.444	0.108	4.124	0.001	0.228	0.660
R^2	0.287			0.001		
<i>Outcome: WE T2</i>						
Predictors						
WE T1	0.421	0.129	3.255	0.002	0.161	0.681
OBSE T2	0.623	0.155	4.006	0.001	0.311	0.935
OBSE T1	-0.268	0.141	-1.905	0.063	-0.550	0.015
R^2	0.496			0.001		
<i>Outcome: OBSE T3</i>						
Predictors						
WE T1	0.201	0.116	1.738	0.089	-0.031	0.433
OBSE T2	0.375	0.200	1.870	0.067	-0.028	0.777
WE T2	-0.204	0.180	-1.136	0.261	-0.565	0.157
OBSE T1	0.301	0.140	2.158	0.036	0.021	0.580
R^2	0.417			0.001		
<i>Outcome: WE T3</i>						
Predictors						
WE T1	0.109	0.148	0.740	0.463	-0.188	0.407
OBSE T2	-0.019	0.194	-0.099	0.921	-0.409	0.370
WE T2	0.514	0.236	2.181	0.034	0.040	0.987
OBSE T3	0.084	0.197	0.427	0.672	-0.313	0.481
OBSE T1	0.156	0.176	0.892	0.377	-0.195	0.506
R^2	0.454			0.001		
<i>Outcome: WE T3</i>						
Predictor						
OBSE T1	0.306	0.140	2.184	0.034	0.025	0.588
R^2	0.100			0.034		

Table II. Bootstrapping results from PROCESS procedure, Model 6-4 mediators ($N = 54$)

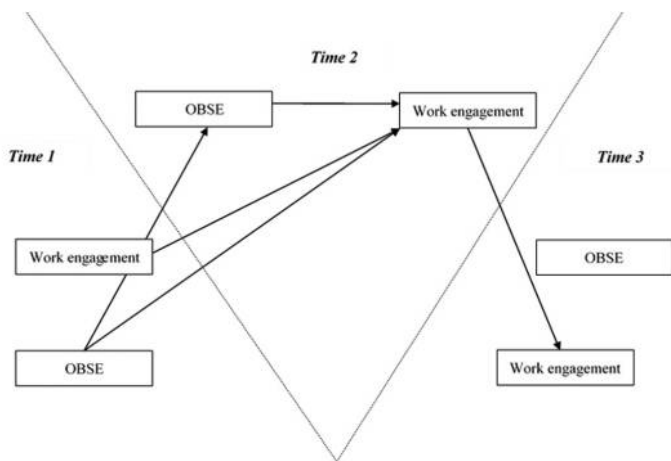
Notes: B = Unstandardized coefficients from the final step of the models; R^2 = Explanation rate; OBSE = Organizational based self- esteem; WE = Work engagement; T1 = Time 1; T2 = Time 2; T3 = Time 3

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intervention
study



Notes: $N = 54$; Unstandardized regression coefficients are reported. Only significant direct relationships are reported

Figure 2.
Graphical
representation of the
significant
relationships found



Notes: $N = 54$; OBSE = Organizational based self-esteem. Indirect effect of X on Y n.1 = OBSE time 1 \rightarrow Work engagement (WE) time 1 \rightarrow WE time 2 \rightarrow WE time 3; Indirect effect of X on Y n.2 = OBSE time 1 \rightarrow OBSE time 2 \rightarrow WE time 2 \rightarrow WE time 3; Indirect effect of X on Y n.3 = OBSE time 1 \rightarrow WE time 2 \rightarrow WE time 3

Figure 3.
Graphical
representation of the
significant indirect
relationships found

Discussion

This contribution presented a quasi-experimental field study on the role of a strengths intervention to support employees' effective use of their strengths at work and well-being. Moreover, by collecting data before and after three workshops over nine months, we were able to examine the relationships between OBSE and work engagement across multiple time points, over a medium time frame. Findings showed that participants' level of both OBSE and work engagement were higher at the end of the intervention period, i.e. after nine months from the first time point, compared to baseline. These results suggest that interventions designed to improve employees' effective use and awareness of their strengths can be effective to sustain work engagement in the medium term when multiple workshops and assignments are provided between one workshop and the other.

Results also showed that the pattern of relationships between OBSE and work engagement changed across time. Such changes may be linked to the different contents of the workshops and the different assignments during the intervention period (Figure 1). The first workshop focussed on cognitive (re)framing and attitudes. OBSE measured before such a workshop was not significantly related to work engagement measured after it, while it was significantly linked to OBSE measured before the second workshop. This may suggest that the contents of the first workshop (i.e. reflecting over past work experiences and reframing work-related negative experiences leveraging on personal strengths) and assignments (i.e. how applying strengths at work resulted in favourable situations) may have contributed to fuel OBSE after three months rather than boost work engagement immediately at the end of the workshop. Differently, after the second workshop, focussed on meaningfulness and identity, (i.e. on exploring the links between personal and organisational meanings related to work and on how personal aspirations were translated to the work environment), work engagement resulted to be significantly related to OBSE measured before the third workshop. That is, the second workshop may have helped participants linking the value of their organisational affiliation to express their aspirations, leading to work engagement. Finally, in the last workshop, participants were guided in the self-selection of behavioural goals to be carried out during work to face stressful and adverse events by making use of their strengths. In addition, they identified a co-worker in charge of providing support for the achievement of their goals. While results showed that OBSE measured before the third workshop was unrelated to work engagement one and a half month after it, this session could have contributed to building the link between work engagement measured after the second workshop and the third one (see Figure 2 on the indirect relationships found).

Overall, in line with previous literature (Xanthopoulou *et al.*, 2008), results showed that, at the end of the intervention period, participants' initial levels of OBSE was a significant predictor of work engagement. This confirms that employees who feel valued and appreciated in their working contexts feel energetic, dedicated and inspired in their work. Against this background, this study additionally contributes to previous knowledge by showing how the mechanisms underlying the link between a personal resource, i.e. OBSE and work engagement, change over several months and during positive organisational initiative. In doing so, our findings enrich the literature on the role of positive interventions to reinforce individual strengths and boost work engagement, contributing to filling an important research gap in strengths literature (Bakker and van Woerkom, 2018). Indeed, to the best of our knowledge, this is one of the few intervention studies adopting a nine-month time lag between the first and the last time point. Organisational practitioners may rely on these findings to design interventions for improving effective strengths use and well-being at work focussing on different aspects of employees' development and empowerment. Indeed, in our study OBSE seemed related to work engagement based on the different

contents of the workshops, suggesting that they may have conveyed different value messages transmitted from the organisation to the employees.

Study limitations and future research

Our study has several limitations that deserve attention for future research. First, in the current study we could not involve employees in a control group and we were not able to assess the effects of the intervention in the long run. Thus, it is unclear whether the changes in our variables were caused by the intervention programme or were because of other reasons, such as a natural course. Future research could try to replicate our findings using a controlled study design, i.e. comprehending a control group, and assessing the effects of the intervention in the long term. A second limitation is that all participants worked for the same pharmaceutical organisation. Socially desirable behaviour and group pressure are possible risks when participants work in the same team. Participants from different organisations may be less influenced by other participants and may feel more comfortable showing their vulnerability because of the anonymity (van Wingerden *et al.*, 2017a). Future research could try to replicate this intervention study involving participants from different working contexts. Third, all the scales we used were self-reports. Future studies could combine objective assessments and self-report scales to better understand the effects of our intervention on employees and organisational outcomes. Lastly, we only used quantitative research methods. Future research may also use qualitative approaches to shed light on participants' experiences and reveal how the intervention is useful to them (van Wingerden *et al.*, 2017b).

Conclusion

This study provides initial evidence-based support for scholars and practitioners interested in promoting employees' well-being by empowering their effective strengths use. Our results suggest that empowering and supporting employees' strengths use may foster work engagement, which is critical to sustain job performance and creativity (Christian *et al.*, 2011; Kim *et al.*, 2013).

Organisations could leverage on medium-term interventions to provide employees with active guidance on how to use their strengths at work, likely to boost higher employees' positive perceptions of themselves as organisational members and work engagement.

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