# The Effectiveness of Positive Psychology Interventions in the Workplace: A Theory-Driven Evaluation Approach



Scott I. Donaldson, Joo Young Lee and Stewart I. Donaldson

Abstract Positive Work and Organizations (PWO) continues to permeate organizations that desire to improve employee positive functioning. One aspect of PWO includes positive psychology interventions (PPIs) at work, which uses the theory and scholarship of positive work and organizations to design interventions aimed at improving employee work outcomes. A recent systematic review and meta-analysis by Donaldson, Lee, and Donaldson (under review) found a link between PPIs at work and improving desirable and reducing undesirable work outcomes. The purpose of this chapter was to synthesize the empirical evidence demonstrating the effectiveness of PPIs at work, using a theory-driven evaluation (TDE) approach. TDE refers to the systematic use of substantive knowledge (i.e., social science theory, stakeholder theory, or some combination of both) about the intervention under consideration to improve, produce knowledge, or determine its merit, value, and worth (Donaldson, in Program theory-driven evaluation science: Strategies and applications. Psychology Press, New York, 2007). This systematic review will provide valuable information for practitioners deciding to use PPI's in their organizations.

**Keywords** Positive psychology · Interventions · Theory-driven evaluation · Multi-national

#### 1 Introduction

Positive Work and Organizations (PWO) has galvanized the workplace in several continents, spawned university programs, and inspired professional disciplines since its inception nearly two decades ago. Donaldson and Ko (2010) were the first to reveal an emerging body of PWO literature and scholarship published in the US, Europe, and other parts of the world, demonstrating its upward growth in the new millennium.

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Positive psychology interventions (PPIs) at work have also developed extensively in the past 20 years, along with research demonstrating a link to work outcomes. A recent meta-analysis by Donaldson, Lee, and Donaldson (under review) found that positive psychology theory (whether interventions used PsyCap, job crafting, strengths theory, etc.) had a unique impact on work outcomes.

There currently exists an opportunity to map the terrain of positive psychology interventions (PPIs) at work, especially as corporate leaders and human resource managers continue to invest in employee well-being (Agarwal, Bersin, Lahiri, Schwartz, & Volini, 2018). One approach toward understanding the impact PPIs are having on employee optimal functioning is theory-driven evaluation science (TDE). TDE is an evaluative strategy designed to systematically use substantive knowledge (i.e., social science theory, stakeholder theory, or some combination of both) about the intervention under consideration to improve, produce knowledge, or determine its merit, value, and worth (Donaldson, 2007). The purpose of using a TDE approach is not just to understand if PPIs work in the organizational setting, but also why they work. TDE provides valuable information on how positive psychology theory is expected to improve employee outcomes compared to how it actually improves employee outcomes. It also incorporates intervention characteristics in the evaluation process (e.g., intervention delivery method, target audience, intervention protocols) to help determine important moderators that facilitate or hinder intervention effectiveness. The application of TDE to PPIs at work will glean insight on which positive psychology theories work, why, and under what conditions they can best improve employee positive optimal functioning. Thus, there are two goals of this chapter: (1) evaluate theories of change used in PPIs at work and (2) evaluate the implementation of PPIs at work.

# 1.1 Background of Positive Work and Organizations

The founding pioneers of positive psychology, Seligman and Csikszentmihalyi (2000), developed three pillars of positive psychology: positive subjective experience (e.g., well-being, contentment, flow, pleasure, and hope), positive character traits (e.g., grit, wisdom, resilience, and creativity), and positive institutions (i.e., organizations, communities, and societies that promote citizenship and civic responsibility). Along with the positive psychology movement, Warren, Donaldson, and Luthans (2017) proposed an umbrella term called positive work and organizational (PWO), which encourages cross-pollination of research among positive organizational psychology (POP), positive organizational behavior (POB), and positive organizational scholarship (POS). The need for a unifying framework is in response to the impact the positive orientation has had beyond its original boundaries (e.g., applied organizational psychology, organizational behavior, and management). For example, POP, POS, and POB are now influencing technology, hospitality and management, law, and financial planning, due to the growing popularity positive psychology is receiving in the workplace (Warren et al., 2017). The goal of PWO is to encourage

dialogue across subfields and serve as a clearinghouse for best practices in positive psychology theory building and practice.

Luthans (2002) established positive organizational behavior (POB) and introduced PsyCap as a human psychological capacity that consists of hope, optimism, resilience, and self-efficacy. Similarly, Cameron, Dutton, and Quinn (2003), who developed positive organizational scholarship (POS), were the first to study organizational virtuousness, positive deviance, and appreciation cultures. Finally, Donaldson and Ko (2010) defined POP as "the scientific study of positive subjective experiences and traits in the workplace and positive organizations, and its application to improve the effectiveness and quality of life in organizations" that encompasses POB and POS, closely addressing Seligman and Csikszentmihalyi's (2000) claim for the organizational context (p. 6). The key distinction between positive organizational research and traditional organizational research relates to the perspective that views employees as assets to be developed, rather than problems that need to be fixed (Cooperrider & Whitney, 2005).

# 1.2 Positive Psychology Interventions in the Workplace

Positive psychology interventions (PPIs) in the workplace refer to any intentional activity or method in organizations that utilizes the three pillars of positive psychology (Meyers, van Woerkom, & Bakker, 2013). They include interventions that use positive subjective experiences as part of the intervention method and not just a by-product or consequence of a particular intervention, interventions that aim to identify, develop, or broaden human character strengths, and interventions that identify, develop, or broaden organizations or organizational subgroups.

In this chapter, we build on the work of Meyers et al. (2013) and broaden the definition to include interventions that explicitly utilize the theory and scholarship of positive work and organizations to generate processes (e.g., resources, activities, & outputs) aimed at improving work outcomes. We refer to Donaldson et al.'s (under review) study sample (N=22) for this chapter because we aim to expand their research using an evaluation lens. We focus on five types of interventions that most frequently appeared in the positive psychology intervention literature (Donaldson, et al., under review). They include: (1) psychological capital interventions, (2) employee job crafting interventions, (3) employee strengths interventions, (4) employee gratitude interventions, and (5) employee well-being interventions.

## 1.2.1 PsyCap Interventions

Luthans, Avolio, Avey, and Norman (2007) developed psychological capital (Psy-Cap) as a higher order construct that represents four positive subjective experiences at work: hope (redirecting paths to work goals), resilience (ability to bounce back at work), self-efficacy (confidence in one's ability to succeed at work), and optimism

(positive attributions about the future of work). PsyCap is a "state-like" construct that is optimal for human resource practices because it is flexible and open to development. Research on PsyCap interventions has found a link to improved job performance, work engagement, and organizational citizenship behaviors (Avey, Luthans, & Youssef, 2010). For example, Zhang et al. (2014) tested a PsyCap intervention with five Chinese companies based on Luthans et al. (2006) micro-intervention model. This intervention consisted of four online training sessions, targeting each of the four components of PsyCap. Participants were also encouraged to create specific, measurable, achievable, relevant, and time bound (SMART) goals. The intervention group had significantly higher job performance compared to a control group at posttest, supporting the relationship between PsyCap and job performance.

# 1.2.2 Employee Job Crafting Interventions

Job crafting refers to proactive behaviors that engage employees in the redesign of their work (Wrzesniewski & Dutton, 2001). Research has suggested that job crafters (a) create an optimal fit between work demands and personal strengths and (b) experience personal growth, well-being, and work engagement (Bakker, Rodriquez-Munoz, & Sanz-Vergel, 2016; Demerouti & Bakker, 2014). The jobs-demands resources (JD-R) theory provides a model for employees to alter job demands and personal resources. Intervention studies with JD-R model showed mixed results. For instance, Van de Huevel, Demerouti, and Peeters (2015) reported that an intervention with the JD-R model significantly increased leader-member exchange and significantly decreased negative affective well-being. However, the JD-R model is likely to have a longitudinal positive impact in organizations. For example, whereas Van Wingerden, Derks, and Bakker (2017b) reported that a job crafting intervention did not improve work engagement in the study with six weeks, Van Wingerden, Derks, and Bakker's (2017a) found that a job crafting intervention that used JD-R model as the theory of change improved work engagement up to one year after the intervention was administered (Table 1).

#### 1.2.3 Employee Strengths Interventions

Individual character 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, Swain, & Vella-Brodrick, 2012, p. 1146). Existing questionnaires and inventories, such as Values in Action (VIA) and Realise 2, help employees identify their strengths at work (Peterson & Seligman, 2004). Harzer and Ruch (2012) had participants learn about their four highest character strengths, think about ways they could use these strengths in the workplace, and develop if-then-plans to implement them in practice (see Table 2). Prior research has shown that strengths interventions are an effective tool for improving transformational leadership, calling at work, and

Table 1 Theori	Table 1         Theories of Change (TOC)	)C)					
References	PP theory	Change model	Explicit TOC (Y/N)	Implicit TOC	Expected work outcomes	Actual work outcomes	Supporting literature
Chan (2010)	Gratitude	Count-your blessings model	z	Gratitude has a causal influence on well-being, and an effective strategy to enhance well-being is to lead people to count their blessings or to reflect on those aspects of their lives for which they are grateful	Increase in subjective well-being consistent with gratitude interventions used in the Chinese population	Significant decrease in emotional exhaustion and depersonalization—aspects of Maslach's burnout inventory	Chan (2009), Froh et al. (2008), Lyubomirsky et al. (2005), Seligman et al. (2005, 2006), Watkins et al. (2003)
Harty et al. (2016)	Gratitude	Count-your blessings model	z	Grateful outlook creates more positive and optimistic appraisals of one's life, higher levels of positive affect and more pro-social motivation	Psychological capital can play an important role in performance, satisfaction and devotion to work, resulting in less absence from work due to illness and a reduction in cynicism, deviant behavior, stress-related symptoms and resignations	Significant increase in job satisfaction	Emmons and McCullough (2003), Seligman et al. (2005)
Grant and Gino (2010)	Gratitude	Gratitude expressions	z	Gratitude expressions can increase helpers' prosocial behaviors by increasing their agenetic feelings of self-efficacy and their communal feelings of social worth	Prosocial behavior will increase based on the number of voluntary calls that each fundraiser made during the week before and the week after the intervention	Significant increase in prosocial behavior	McCullough et al. (2001)

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Kaplan et al. (2013)	Gratitude	Sustainable Happiness Model	z	Volitional actions can influence well-being, that is, people can intentionally facilitate cognitions and behaviors to increase their own happiness and well-being	Research suggests that effect sizes associated with these types of interventions are larger for the components of subjective well-being (including affect) than for other psychological outcomes such as eudaimonic well-being or depression	Significant increase in Positive affective well-being and negative affective well-being well-being	Bolier et al. (2013), Lyubomirsky et al. (2005)
Winslow et al. (2017)	Gratitude	Sustainable Happiness Model	¥	Gratitude counteracts the "negativity bias" by shifting employee' focus from negative events to positive ones	Job related positive and negative affective well-being (PAWB and NAWB) and job stress will improve	Null findings for positive affective well-being and negative affective well-being. Null findings for job satisfaction and job stress	Baumeister et al. (2001), Lyubomirsky et al. (2005)
Van Wingerden et al. (2016)	Job Crafting	JD-R Model	>-	JD-R theory postulates that job resources gain their motivational potential when employees are confronted with highly challenging job demands	JD-R model suggests that work engagement and performance can be fostered through interventions by targeting at the most important job demands and (job and personal) resources	Significant increase in work engagement and in-role performance	Bakker (2011), Bakker and Demerouti (2014)

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References	PP theory	Change model	Explicit TOC (Y/N)	Implicit TOC	Expected work outcomes	Actual work outcomes	Supporting literature
Demerouti et al. (2017)	Job Crafting	JD-R Model	z	Through proactive behaviours like job crafting, individuals are likely to become more open to the undergoing changes and adapt more successfully to these changes	Job crafting can improve employee well-being, job characteristics and job performance in changing settings	Significant increases in positive affect well-being, openness to change, and adaptive performance	Gordon et al. (2013), Kramer et al. (2004), Van Den Heuvel et al. (2015)
Van Wingerden et al.(2017b)	Job Crafting	JD-R Model	Y	The JD-R model provides a clear description of the way demands, resources, psychological states, and outcomes are associated. Additionally, personal resources can be helpful in dealing with the job demands and may contribute to improved performance	The JD-R model suggests that work engagement and performance can be fostered through interventions that stimulate participants to optimize their job demands and (job and personal) resources	Significant increase in work engagement and in-role performance	Bakker (2011), Bakker and Demerouti (2008, 2014), Bakker et al. (2012), Demerouti et al. (2001)

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Van den Heuvel et al. (2015)	Job Crafting	JD-R Model	z	The content of the job crafting intervention is based on the role of job crafting in the JD-R model	Personal resources help to deal with adversity, goal attainment, and adaptivity	Significant increase in leader-member exchange and significant decrease in negative affective well-being. Null findings for positive affective well-being well-being	Bakker et al. (2014), Van den Heuvel et al. (2014, 2010), Xanthopoulou et al. (2009)
Van Wingerden et al.(2017a)	Job Crafting	JD-R Model	¥	The JD-R model provides a clear description of the way demands, resources, psychological states, and outcomes are associated. Additionally, personal resources can be helpful in dealing with the job demands and may contribute to improved performance	The JD-R model suggests that work engagement and performance can be fostered through interventions that stimulate participants to optimize their job demands and (job and personal) resource	Null findings for work engagement but significant increase in in-role performance	Bakker (2011), Bakker and Demerouti (2008, 2014), Bakker et al. (2012), Demerouti et al. (2001)
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Williams and Waters (2016), Williams et al. (2017)	PsyCap	IO-OI Model	>	The IO-OI model is a dual approach process model that proposes that work happiness is influenced by factors 'inside' the employee and factors outside' of the employee. Factors inside the employee are those that influence an eare those that influence an employee's experience of work and that cannot be separated from the individual, such as attitudes, values, beliefs, emotions, and behaviors	Seeing more virtues in others elevates organization members to behave more virtuously. The elevation proposition explains how the processes of selective exposure and confirmation bias may contribute to increasing the capacity for virtuousness at the collective level, thus building organizational social resources leading to increased work happiness	Null findings for organizational virtuousness	Fisher and Boyle (1997), Luthans Williams et al. (2015), Williams et al. (2016), Unpublished; Youseff and Luthans (2011)
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References	PP theory	Change model	Explicit TOC (Y/N)	Implicit TOC	Expected work outcomes	Actual work outcomes	Supporting literature
Yuan (2015)	PsyCap	PsyCap Microintervention model & Conservation of Resource (COR) Theory	z	According to the COR theory, people seek to obtain, retain, and protect resources; and stress occurs when there is a net loss of resources, the threat of loss, or a lack of resource gain following the investment. At the same time, resource gains could buffer the negative effects of resource loss and create more opportunity for further gains. PsyCap on the other hand, just like human and social capital, can be considered as another resource that is developable and accumulative	There is evidence of PsyCap among the Chinese population. PsyCap was positively associated with employer-rated performance	Significant increase in work engagement	Hofboll (2002), Luthans (2004, 2008), Luthans et al. (2008)

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References	PP theory	Change model	Explicit TOC (Y/N)	Implicit TOC	Expected work outcomes	Actual work outcomes	Supporting literature
Zhang et al. (2014)	PsyCap	PsyCap Microinterven- tion model	Y	The principles of PsyCap will improve organizational competitiveness	PsyCap directly influences job engagement, job satisfaction, job performance, organizational commitment, counterproductive work behavior, and organizational citizenship behavior	Significant increase in job performance	Avey et al. (2010), Luthans et al. (2006, 2007)
Williams (2010)	Strengths Theory	Clifton Strengths Finder	z	Principles can be used to govern the development of strengths, including knowing one's strengths, valuing one's strengths, assuming personal responsibility for developing the strengths, and practicing the strengths	The intended positive effect on employee engagement is to help create a fulfilling work environment where employees (a) are not afraid of appraisals, (b) look forward to receiving performance feedback, and (c) are clear about how their strengths help them contribute to the organization	Null findings on performance appraisals	Clifton and Anderson (2006), Gable and Haidt (2005), Kowalski (2008), Lindbom (2007)

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References	PP theory	Change model	Explicit TOC (Y/N)	Implicit TOC	Expected work outcomes	Actual work outcomes	Supporting literature
Harzer and Ruch (2015)	Strengths Theory	VIA Framework	z	The application of individual signature strengths is related to positive experiences in life, like life satisfaction, well-being, and meaning in life as well as to positive experiences at work, like job satisfaction, pleasure at work, meaning at work, and job performance	Individuals with a calling perceive their work as being meaningful, due to helping other people or the broader society (directly or indirectly).  Individuals with a calling regard their work to be their purpose in life rather than a means for financial rewards or career advancement	Significant increase in calling	e.g., Dik and Duffy (2009), Elangovan et al. (2010), Harzer and Ruch (2013, 2014); Littman-Ovadia and Steger (2010), Wood et al. (2011), Wood et al. (2011), Wrzesniewski et al. (1997)
Mackie (2014)	Strengths Theory	Manualization Framework	z	Manualization offers the opportunity to be specific and consistent about what is meant by strengths development by requiring the coachee to rate themselves on four criteria	Executive coaching that explicitly targets leadership development must by necessity, use reliable and valid measures of leadership behavior that gather data from a wide range of stakeholders to assess the impact of the coaching intervention	Significant increase in other-rater feedback on transformational	Biswas-Diener et al. (2011), Bowles et al. (2007) Kauffman (2006), Seligman (2007)

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References	PP theory	Change model	Explicit TOC Implicit TOC (Y/N)	Implicit TOC	Expected work outcomes	Actual work outcomes	Supporting literature
Meyers and Van Woerkom (2017)	Strengths Theory	Positive- activity model	z	Engaging in positive activities, such as employing one's strengths, makes people feel good about themselves in the short term, which contributes to their longer term well-being	Results of prior research have supported an association between identifying and working on one's strengths and positive affect, self-efficacy as a component of PsyCap, and satisfaction with life	Significant increase in work engagement and significant decrease in burnout	Douglass and Duffy (2015), Lyubomirsky and Layous (2013), van Woerkom and Meyers (2015), Wood et al. (2011), Zwart et al. (2015)
Page and Vella-Brodrick (2013)	Strengths Theory	Character Strengths and Virtues Framework	z	Individuals who use their strengths at work are more likely to be engaged and happy in their jobs. This in turn predicts other valued organizational outcomes, including business unit performance, turnover and productivity	Strengths can lead to increases in well-being, including lowered stress, greater self-esteem and improved vitality and positive affect, as has been shown in longitudinal research	Null findings on work related well-being	Harter et al. (2002), Wood et al. (2011)

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(2017)	Well-Being	PERMA	z	PERMA proposes that wellbeing consists of five components: positive emotions (experiencing positive emotions such as happiness, hope, and joy), engagement (being highly absorbed and interested in life activities; experiencing flow and focused attention; and using one's strengths), relationships (feeling valued by others and having close, mutually satisfying relationships), meaning (having a sense of purpose derived from something viewed as larger than the self), and accomplishment (striving for achievement; feelings of mastery)	PERMA improves organizational outcomes of higher workplace well-being levels including lower absenteeism, higher job satisfaction, less turnover intention, better organizational citizenship behavior, and higher customer satisfaction	Significant increase in employee well-being	Boehm and Lyubomirsky (2008), Bowling et al. (2010), Diener and Seligman (2004), Layous et al. (2014b), Lyubomirsky et al. (2005a), Wright (2010), Pelled and Xin (1999)
Laschinger et al. (2012)	Positive Relationships	CREW Program	z	CREW was designed to promote positive interpersonal working relationships among healthcare workers	Numerous anecdotal reports of uncivil behavior in nursing settings and empirical studies indicate that high levels of supervisor and coworker incivility can have detrimental effects, such as lower productivity and organizational commitment	Significant increases in empowerment, trust in management, and significant decreases in supervisor incivility	Lewis and Malecha (2011), Osatuke et al. (2009), Smith et al. (2010)

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References	PP theory	Change model	Change model Explicit TOC Implicit TOC (Y/N)	Implicit TOC	Expected work outcomes	Actual work outcomes	Supporting literature
Fiery (2016)	Self-Compassion	JD-R-Model & Self- Compassion	<b>&gt;</b>	The Job Demands-Resources (JD-R) framework is considered the dominant model of work stress in the literature today, and is increasingly used to explain how and why individuals may differ in their well-being in the face of similar job demands and resources	Self-compassion is predictively and longitudinally associated with decreased stress and anxiety; it negatively predicts emotional exhaustion and positively predicts job satisfaction in preliminary cross-sectional studies among clergy and first-year pediatric residents	Significant increase in work-related psychological flexibility	Bakker and Demerouti (2014), Barnard and Curry (2012), Neff et al. (2007), Olson et al. (2015)

the performance appraisal process (Harzer & Ruch, 2012; Mackie, 2014; Williams, 2010).

#### 1.2.4 Employee Gratitude Interventions

Gratitude interventions at work are designed to help employees notice and appreciate the positive aspects of work life (Wood, Froh, & Geraghty, 2010). For example, Chan (2010) and Harty, Gustafsson, Bjorkdahl, and Moller (2016) tested gratitude interventions that asked employees to record three good things that they are grateful for related to their job. These interventions used the count-your-blessings model, which assumes a grateful outlook will create positive and optimistic appraisals, improving well-being at work (Lyubomirsky, Sheldon, & Schkade, 2005). Employees that were in the gratitude condition had higher job satisfaction and self-efficacy compared to a control group after a 10-week intervention program.

#### 1.2.5 Employee Well-Being Interventions

The last two types of positive psychology interventions included in our review are employee well-being, including positive relationships and self-compassion interventions, which utilize Seligman's Theory of Well-Being known as PERMA (positive emotion, engagement, relationships, meaning, and accomplishment; Seligman, 2011). These interventions have been shown to not only improve well-being in the workplace, but also lower absenteeism, higher job satisfaction, less turnover intent, and organizational commitment (Laschinger et al., 2012). For example, the CREW (positive relationship) intervention is organized around five activities: promote respectful interactions among staff on unit, develop skills in conflict management, teambuilding on unit, share successes within and outside of units, and eliminate negative communication associated with poor resources system (Laschinger et al., 2012). The results from a hospital setting with nurses revealed significant increases in empowerment in the intervention group compared to the control group, which has also been linked to improved organizational commitment, job satisfaction, and mental and physical health (Laschinger, Finegan, Shamian, & Wilk, 2004; Laschinger, Finnegan, & Wilk, 2009).

# 2 Theory-Driven Evaluation

Scholars, practitioners, and human resource managers will likely want to know why and under what conditions PPIs at work are the most efficacious. TDE was chosen as a framework to evaluate the selected interventions because it is a tool through which we can understand both outcomes and mechanisms that foster intervention success or failure. Rogers (2000) defines TDE as "an explicit theory or model of

Table 2 Action model	odel					
References	P.P. theory	Intervention exercises	Intervention protocols	Intervention implementers	Implementing organization	Target group
Chan (2010)	Gratitude	Weekly log of three good things recorded using a count-your- blessings form	Naikan- meditation-like questions through an online questionnaire	Online	Chinese University of Hong Kong	Chinese school teachers
Harty et al. (2016) Gratitude	Gratitude	Observing and documenting things they are appreciative for on five occasions	Five step protocol with lectures and instructional activities	Two researchers	Non- governmental organization	Physiotherapists, occupational therapists, nurses, assistant nurses, etc.
Grant and Gino (2010)	Gratitude	A director of annual giving visited the organization to thank the fundraisers for their work. She explained to the fundraisers, "I am very grateful for your hard work. We sincerely appreciate your contributions to the university"	In-person conversation	Director of annual giving	Public university	Fundraisers at a university
Kaplan et al. (2013)	Gratitude	Log at least three times per week things that they are grateful for related to their job	Gratitude prompt	Online	Two large public universities	Staff members (e.g., administrative assistant, program coordinator, financial aid)

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References	P.P. theory	Intervention exercises	Intervention protocols	Intervention implementers	Implementing organization	Target group
Winslow et al (2017)	Gratitude	At least twice weekly, participants were asked to think about and record two things in their job or work for which they are grateful (examples included supportive work relationships, sacrifices or contributions that others have made for you, advantages or opportunities at work, and thankfulness for the opportunity to have your job in general)	Gratitude prompt	Online	Large social service agency	Agency Directors
Van Wingerden et al. (2016)	Job Crafting	Participants acknowledged, shared and discussed their thoughts and feelings about their career with each other. They looked back on things they sexperienced at work, shared the things they like in their recent job and discussed their future ambitions. Second, the participants practiced giving and receiving feedback including gracefully receiving compliments. Third, they practiced refusing requests. Fourth, participants made an overview of their job tasks and their personal strengths, motivation, and possible risk factors at work	Michigan Job Crafting Exercise	Trained facilitators	Healthcare organization	Healthcare professionals (treat hearing impairments)
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		Intervention protocols	Intervention implementers	Implementing organization	Target group
	This intervention consisted of a one-day training that focuses on achieving individual changes at two different levels: (1) cognitions, and (2) behavior (Zwaan, Van Burik, & Janssen, 2005). To achieve the first goal, employees are encouraged to reflect on their work situation and to recognize their work tasks and aspects of their job that they would like to change. The second goal is achieved through familiarization with the theory on job crafting and the JD-R model	Michigan Job Crafting Exercise	Trained facilitators	Municipality	Social services municipality
van wingerden (100 Cratting et al. (2017) (2)	The participants made an overview of their job tasks and sorted them into three categories: tasks they spent a lot of time at, tasks they had to do often, and tasks they had to do sometimes. They also designated whether they did the task individually or with others. The participants wrote the outcomes on small, medium, and large notes and stuck them on a piece of brown paper. After this, they labeled the tasks in terms of urgency and importance. Then the participants made an overview of their personal strengths, motivations, and possible risk factors in their work and matched these to their tasks. At the end of the first training session, they made a personal carfining plan	Michigan Job Crafting Exercise	Trained facilitators	Primary schools for special education	Teachers

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References	P.P. theory	Intervention exercises	Intervention protocols	Intervention implementers	Implementing organization	Target group
Van den Heuvel et al. (2015)	Job Crafting	The training day included background theory on the JD-R model (Bakker & Demerouti, 2007) and job crafting (Wrzesniewski & Dutton, 2001). Participants mapped their tasks, demands, and resources on a poster. Reflection on the poster helped them to identify situations at work they would like to craft. Personal crafting stories were shared and analysed in the group. Following this, a plan with specific job crafting goals, such as how to seek resources, how to reduce demands, and how to seek challenges, was drawn up by each participant	Michigan Job Crafting Exercise	Trained facilitators	Police district	Police officers
Van Wingerden, Bakker, et al. (2017) (1)	Job Crafting	The job crafting intervention consists of exercises and goal setting aimed at increasing social job resources, increasing challen-ging job demands, increasing structural job resources, and decreasing hindering job demands	Michigan Job Crafting Exercise	Trained facilitators	Primary schools for special education	Teachers
Williams et al. (2017)	PsyCap	Participants are taught how to dispute negative thinking patterns with more optimistic perspectives, to foster optimism and hope; participants learn about the ABC Model of cognitive behavioral therapy (Ellis, 1957) and how to identify deeply held beliefs that may be driving unhelpful thought patterns and behaviors to build resilience; and at the end of each topic, participants identify how they could use the skill or knowledge taught in their personal and professional lives to build efficacy	PsyCap research and materials from UPENN's Positive Psychology Center	Trained facilitators	Large independent school	Teaching and non-teaching roles

References	P.P. theory	Intervention exercises	Intervention protocols	Intervention implementers	Implementing organization	Target group
Williams and Waters (2016)	PsyCap	Participants are taught how to dispute negative thinking patterns with more optimistic perspectives, to foster optimism and hope; participants learn about the ABC Model of cognitive behavioral therapy (Ellis, 1957) and how to identify deeply held beliefs that may be driving unhelpful thought patterns and behaviors to build resilience; and at the end of each topic, participants identify how they could use the skill or knowledge taught in their personal and professional lives to build efficacy	PsyCap research and materials from UPENN's Positive Psychology Center	Trained facilitators	Large independent school	Teaching and non-teaching roles
Yuan (2015)	PsyCap	Four training sessions each targeting an aspect of PsyCap: (1) hope using SMART goals, (2) self-efficacy using expressive writing, (3) optimism taught using the ABCDE model, (4) reslience using risk management and resource leverage practice skills	Happy@Work training materials	Online	Chinese University of Hong Kong	Random employees of organizations in China
Zhang et al. (2014)	PsyCap	Then they were provided with the structured reading material, and informed that they had 30 min to read the material independently and silently	Structured reading materials	Trained facilitator	Beijing Normal University	Employees of five random companies in China

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References	P.P. theory	Intervention exercises	Intervention protocols	Intervention implementers	Implementing organization	Target group
Williams (2010)	Strengths Theory	Participants did an online strengths-identification assessment, received feedback on their respective strengths from the facilitator, and received training on how to incorporate a discussion on strengths into the organization's existing performance-appraisal interview	Strengths- identification assessment	Online and facilitator	Non-profit community health organization	Leaders
(2015)	Strengths Theory	Participants were invited to a web-based training platform; there they learned about their four highest character strengths (derived from the rank order of the VIA-IS scales in the pretest) in step I. In step 2 they thought about daily activities and tasks at work, and subsequently, in step 3, collected the ways they currently use their signature strengths in daily activities and tasks at work. Finally, in step 4, they developed if-then-plans about how use the four highest character strengths in new and different ways in daily activities and tasks at work.	Activities outlined by Seligman (2005)	Online	Univesrity of Zurich	Diverse group of German-speaking employees in different jobs
Mackie (2014)	Strengths Theory	Each coachee received six 90-min coaching sessions that followed a format articulated in their coaching manual	Interview protocol, 360-degree feedback, Realise2 inventory	Executive coaches	Multinational non-profit organization	Senior managers

References	P.P. theory	Intervention exercises	Intervention protocols	Intervention implementers	Implementing organization	Target group
Meyers and Van Woerkom (2017)	Strengths Theory	Before the training, participants were asked to complete a preparatory assignment (strengths identification). To this end, they received a stack of strengths cards with 24 strengths applicable in the working context and some blank cards that could be filled in individually. Participants were triggered to search for their own talents. Subsequently, participants took part in a half-day face-to-face training which was given to 40-45 individuals at a time and was facilitated by two professional trainers	Strengths questionnaires, feedback from third parties, and self-reflection exercises	Trained facilitator	Dutch consultancy specialized in training and development	Convenience sample of employees in implementing organization

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Target group	Customer service, HR, marketing and communications	:
Implementing organization	agency agency	
Intervention implementers	Researcher	
Intervention protocols	Training manual	
Intervention exercises	The program consisted of six, I hour, small group-based sessions. Each session was facilitated by the first author according to a set training manual to ensure consistency across groups. Participants focused on their strengths and learnt from their best (to peak) experiences, to increase motivation and facilitative change, as per Appreciative Inquiry (Cooperrider 1986; Cooperrider et al. 2008). Care was taken to optimize well-being and learning outcomes for participants by facilitating sessions in a positive, supportive and affirming environment (Joseph and Linley 2006) and providing opportunities for autonomy and group discussion (Ryan and Deci 2000; Vella 2000). The facilitator recorded adherence to this approach using field notes and ratings (five-point Likert scale where I = poor adherence and 5 = strong adherence), which was completed at the end of each season. Notes and ratings were also taken regarding other elements of delivery, including fidelity and participant attendance. This data formed part of the process evaluation	
P.P. theory	Strengths Theory	
References	Page and Vella-Brodrick (2013)	

 Table 2 (continued)

References	P.P. theory	Intervention exercises	Intervention protocols	Intervention implementers	Implementing organization	Target group
Neumeier et al. (2017)	Well-Being	The PERMA framework of Seligman's wellbeing theory (2011) was applied to select the varied PIs for the programme. For each selected PI, empirical research suggested that the exercise affects at least one of the five wellbeing components proposed by the PERMA framework, covering all five components in their combination. in each) that could be integrated into the daily working routine in different workplace settings (i.e., self-reflective writing exercises and activities that did not require any special material or environment)	Seven PERMA-based exercises	Online	LMU Munich	Self-registered employees (online)
Laschinger et al. (2012)	Positive Relationships	The CREW program organized five activities: promote respectful interactions among staff on unit, develop skills in conflict management, teambuilding on unit, share successes within and outside of units, and eliminate negative communication associated with poor resources system	CREW process manual	Trained facilitator	Hospital	Nurses

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Table 2 (continued)	(p:					
References	P.P. theory	Intervention exercises	Intervention protocols	Intervention implementers	Implementing organization	Target group
Fiery (2016)	Self-Compassion	The first week's meditation, a compassionate body scan, is designed primarily to facilitate mindfulness by asking the listener to get in touch with and "just notice" bodily sensations, and is very similar to the first in a series of guided meditations implemented in the widely accepted and researched Mindfulness-Based Stress Reduction program by Jon Kabat-Zinn (1982). The second week's meditation is grounded in the breath, again incorporating mindfulness, but also self-kindness and common humanity as listeners are asked to breathe in affection and kindness to themselves while breathing out affection and kindness toward others who are suffering. The third week's meditation is a variant of a "loving-kindness" meditation, an ancient Buddhist practice designed to increase goodwill toward the self and others	Three guided self-compassion meditations taught in the Mindful Self-Compassion program	Online	Animal shelter	Random employees at an animal shelter

how the program causes the intended or observed outcomes and an evaluation that is at least partly guided by this model" (p. 5). Similarly, Chen (1990, 2005) suggested the key tenet of TDE is an evaluation guided by a conceptualization or rationale of intervention theory. This includes a set of implicit or explicit assumptions about the intervention under consideration, and what is required to produce desired change. This type of evaluation approach differs from what is called "black box" evaluation, which is only interested in the connection between the intervention and outcomes. Further, TDE encompasses descriptive assumptions (i.e., change model) about the intervention, which detail causal processes expected to happen, and prescriptive assumptions, or steps that need to be taken to produce desired outcomes (Chen, 1990). TDE can improve evaluation design by helping disentangle the relationship between intervention theory and implementation, inform evaluation methods, and understand contextual factors that are relevant to interested stakeholders (Donaldson, 2007). TDE has influenced a broad range of evaluations, including W. K. Kellogg Foundation's (2000) community change initiatives, The Overseas Development Institute (ODI), and The International Initiative for Impact Evaluation (3ie), among many more (Coryn, Noakes, Westine, & Schroter, 2011).

# 2.1 Change Model

The theory of change consists of stakeholders' shared understanding of what is expected to happen between the intervention and outcomes. In our chapter, the interventions consist of positive psychology theories used in PPIs at work and their relationship with work outcomes (e.g., work engagement, performance, etc.). The interventions may also include determinants, or mechanisms upon which the intervention may be developed. Examples include intervention delivery type (e.g., online, in-person, group) and other intervention characteristics, such as length of intervention, setting, industry type, etc. See Fig. 1 for TDE framework.

#### 2.2 Action Model

Whereas the change model is concerned with how the intervention will cause a change in work outcomes, the action model is focused on aspects of intervention implementation. We included Chen's (1990) action model in our evaluation: the implementing organization, intervention protocols, intervention implementers, and target group. Implementing organization refers to the entity that allocates resources, trains, recruits, and coordinates the intervention. Intervention protocols are the materials, deliverables, or activities of an intervention. For example, participant may be given structured reading material or told to perform certain activities, such as mediation exercises. Intervention implementers are the people responsible for delivering the intervention, including trained facilitators, coaches, and researchers. Lastly, the

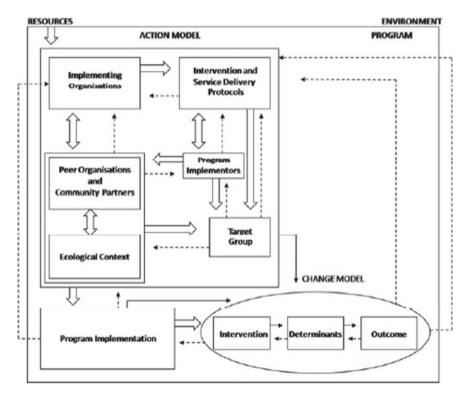


Fig. 1 Change model and action model (Chen, 2012)

target group refers to the types of participants (e.g., demographic characteristics), including their willingness to be committed to and cooperate with intervention protocols.

# 2.3 Search Strategy

Before we use theory-driven evaluation to review PPI's at work it is necessary to outline the search strategy and inclusion criteria. Donaldson et al. (under review) conducted a systematic literature search, and examined the *Oxford Handbook of Positive Organizational Scholarship* to develop an initial list of search terms (Cameron & Spreitzer, 2012). Based on central themes outlined in the volume and prior work from Meyers et al. (2013), they created broad search terms that they believed would capture positive interventions at work. The first search terms consisted of "positive organizational behavior", "positive organizational scholarship." The second search terms included combinations of "intervention," "work\* (workplace)", "organization\* (organizational)", "employee", "manager," "training," and "group inter-

vention." Those search terms were then entered into three electronic databases: PsycINFO, PsycArticles, and ISI Web of Science.

After investigating online databases, they then searched specific constructs (e.g., psychological capital, job crafting, & strengths theory) based on their representation in the POP, POS, and POB literature (Cameron & Spreitzer, 2011). They also examined the *Journal of Happiness Studies* and *European Journal of Work and Organizational Psychology* because they are known to be major outlets for publishing positive interventions at work. Lastly, to combat the threat of publication bias they sent out two announcements to the *Academy of Management* Listserv and the International Positive Psychology Association's, *Positive Work and Organization Newsletter* for any unpublished data on positive interventions at work. We use this literature search to identify relevant papers for our chapter.

#### 2.3.1 Inclusion Criteria

The inclusion criteria included:

Positive psychology intervention is defined using Donaldson and Ko's (2010), and Warren, Donaldson, and Luthans's (2017) review of POP, POS, and POB, and/or explicitly in line within the theoretical tradition of PWO. If the intervention included a mixture of POP, POS, and POB with traditional organizational behavior, it was excluded from the analysis.

Studies were included if they (a) implemented an experimental or quasi-experimental intervention in an organizational setting (e.g., with employees, managers, teachers, nurses, staff members, etc.), (b) and included pre- and post- test measures at, (c) the individual, team, or organizational level (Meyers et al., 2013).

Peer-reviewed journal articles (in English), unpublished articles, working papers, and dissertations published between the years 2000 and 2018 were included in the analysis.

# 2.4 Study Characteristics

Twenty-two intervention studies were included in this review, representing PPIs at work conducted across 10 countries, including Australia, China, United States, and Netherlands to name a few. There were five positive psychology theories represented across the 22 studies: psychological capital, job crafting, gratitude, strengths theory, and well-being. These interventions were also conducted in several types of industries, including education, police, health, and government. The distribution of gender varied across the studies, ranging from 36.8 to 96% of women included in the study. We also captured whether or not the interventions used randomization, the intervention delivery type (e.g., individual, group), length of the intervention, and outcome measures. Table 3 shows all relevant study characteristics.

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Reference	Doc type	Country	Industry	% of female	Design	Pos. theory	Int. Type Int. Style	Int. Style	Length of Int.	Outcome
Chan (2010)	'n	China	Edu	82	NR	Gratitude	0	TE	>1 M	MBI
Demerouti et al. (2017)	J	Greece	Multi	89	NR	Job Crafting	I	TE	<1D	JAWS; OC; AP
Fiery (2016)	D	United States	Service	91	R	Self- compassion	0	TE	1 M	WAAQ; DISC; MBI; UWES
Grant and Gino (2010)	J	United States	Edu	92	R	Gratitude	I	TE	<1D	PBS
Harty et al. (2016)	J	Sweden	NGO	77	NR	Gratitude	G	TE	>1 M	PPWQ
Harzer and Ruch (2016)	J	Germany	Edu	45	R	Strengths Theory	0	TE	1 M	CS
Van den Heuvel et al. (2015)	J	Netherlands	Police	37	NR	Job Crafting	I	TE	1 M	LMX; JAWS
Kaplan et al. (2014)	ſ	I	Edu	87	NR	Gratitude	I	Т	>1 M	GAC; JAWS (PAWB & NAWB)
Laschinger et al. (2012)	ſ	Canada	Health	ſ	NR	Positive Relation- ships + Empower- ment	G	TE	>1 M	CWEQ; WIS; ITWS
Mackie (2014)	J	Australia	NP	54	NR	Strengths	I	TE	>1 M	MLQ

(continued)

Reference	Doc type	Country	Industry	% of female	Design	Pos. theory	Int. Type Int. Style	Int. Style	Length of Int.	Outcome measure
Meyers et al. (2016)	ı	Netherlands	Consulting 72	72	NR	Strengths	I	TE	<1D	UWES; UBS
Neumeier et al. (2017)	ı	I	Multi	29	R	PERMA + Gratitude	0	TE	<1 M	WSWB; GSWB
Page et al. (2013)	ſ	Australia	Gov	73	R	Strengths	Ð	L	>1 M	WWBI
Van Wingerden et al. (2016)	ſ	Netherlands	Health	96	NR	JD-R + PsyCap	I	T	>1 M	UWES; IRP
Van Wingerden, Bakker, et al. (2017) (1)	ī.	Netherlands	Edu	68	NR	Job Crafting + PsyCap	I	TE	>1 M	UWES; IRP
Van Wingerden, Derks, et al. (2017) (2)	-F	Netherlands	Edu	83	NR	Job Crafting	П	H	>1 M	UWES; IRP
Williams and Waters (2016)	-F	Australia	Edu	61	NR	PsyCap	Ü	H	~1 M	OVS; UWES; JAWS; JIG; OCS
Williams (Williams 2010)	Q	United States	Health	NA	NR	Strengths	ı	Т	<1 M	GPA

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Reference	Doc type	Country	Industry	Industry % of female Design Pos. theory	Design		Int. Type	Int. Type Int. Style Length of Int.		Outcome measure
Winslow et al (2017)	ſ	United States Services 92	Services	92	NR	Gratitude	0	TE	1 M	JAWS; JS; ITQ
Yuan (2015)	D	China	-	92	R	PsyCap	0	TE	1 M	UWES; HPQ
Zhang et al. (2014)	J	China	Multi	41	NR	PsyCap	I	L	<1D	СРQ
Zhao (2012)	D	England and NP Wales	NP	73	R	Forgiveness	0	TE	>1 M	OBSE; JIG; FIW; SAE

Note Type of documentation: J Published in a peer reviewed journal; D Dissertation Design: R Randomized allocation; NR Non-randomized allocation

Length of Int.: Int. Intervention; M Month; D Day

Int. Type: I individual; G group, O online

or Work Effectiveness Questionnaire; FIW Forgiveness inventory for workplace; GPA Group performance appraisal; HPQ Work Productivity; IRP In-role performance (William & Anderson, 1991); ITO Intention to quit (Cammann et al., 1983); ITW Interpersonal Trust at Work Scale; JAWS Job-related Affective Measure: AP Adaptive Performance; CPO Contextual Performance Ouestionnaire: CS The Calling Scale (Dobrow & Tosti-Kharas, 2011); CWEO Conditions Well-being; JIG Job in General (Balzer et al., 1997); JS Job satisfaction (Brayfiled & Rothe, 1951); LMX Leader Member Exchange; MBI Maslach Burnout nventory: MLQ Leadership Questionnaire (Bass & Avolio, 1997); NAWB Negative Affective Wellbeing; OBSE Organization based self-esteem; OC Openness to change; OCS Organizational Commitment Scale; OVS Organizational Virtuousness Scale; UBS Utrechtse burnout Scale; UWES Utrecht work engagement scale, 2006; PAWB Positive Affective Wellbeing; PBS Prosocial behavior scale; SAEI State-trait Anger Expression Inventory; WAAQ Work-Related Acceptance and Action Questionnaire (Bond et al., 2013); WIS Workplace Incivility Scale; WWBI The Workplace Well-being Index (Page, 2005) Int. Style: TE Training & Exercise; T Training

# **3** Key Evaluation Questions

To date, there have been systematic reviews and meta-analyses, but no study that uses a TDE framework to evaluate PPIs at work. Thus, this study is the first of its kind to bridge evaluation science and PWO for the purposes of investigating the impact of PPIs in the workplace. We sought out to address two evaluation questions:

Which theories of change are used in PPIs at work? To what extent are theories of change efficacious toward improving desired work outcomes?

How do characteristics of the action model impact the efficacy of PPIs at work? What is the role of intervention implementers, implementing organizations, intervention protocols, and target groups?

# 4 Evaluating PPIs at Work

# 4.1 Theories of Change and Action Models

#### 4.1.1 Employee Gratitude Interventions

Two theory of change models appeared in employee gratitude interventions: the count-your blessings model (e.g., Chan, 2010; Harty et al., 2016) and the sustainable happiness model (e.g., Kaplan et al., 2014; Winslow et al, 2017). None of the papers provided an explicit (i.e., graphical) theory of change between gratitude interventions and their studied work outcomes. However, the implicit theories of change for the count-your-blessings model purported that gratitude has a direct influence on well-being by creating positive appraisals about one's life (Lyubomirsky et al., 2005; Seligman et al., 2006) whereas the sustainable happiness model focused on shifting employee' focus from negative events to positive ones (Baumeister, Bratslavsky, Finkenauer, & Voh, 2001; Lyubomirsky et al., 2005).

In terms of work outcomes, various desired and undesired outcomes were measured, such as job satisfaction and job affectivity. The count-your-blessings model significantly increased job satisfaction (see Harty et al., 2016), whereas the sustainable happiness model showed no effect on job satisfaction (see Winslow et al., 2017). The count-your blessings model also decreased negative affectivity (i.e., emotional exhaustion and depersonalization; Chan, 2010). However, the sustainable happiness model showed mixed results from two different studies: Kaplan et al. (2013) reported that the sustainable happiness model decreased negative affectivity whereas Winslow et al. (2017) reported null results on decreasing both negative affective wellbeing and job stress.

From the action model perspective, there were no differences in the type of delivery methods; that is, both Kaplan (2013) and Winslow et al. (2017) delivered interventions via web-platforms using a gratitude prompt. Both studies used similar exercises,

which consisted of participants recounting up to three things they are grateful for at work. However, the target group and implementing organization of the two studies showed noticeable differences. A majority of Kaplan's (2013) target audience were employees in administrative jobs (92% of the participants) in two large universities in the US whereas Winslow et al.'s (2017) had a wide range of audience types that included client-facing jobs (47% of the participants) and managers (21%). Therefore, Winslow et al.'s (2017) audience was more heterogeneous than Kaplan's (2013). See Table 1 for complete list of theories of change.

#### **4.1.2** Employee Job Crafting Interventions

The JD-R model was chosen unanimously in the employee job crafting interventions. Unlike the gratitude interventions, the majority (60%, n = 3) of job crafting interventions presented a theory of change to support their interventions. The JD-R model provides a clear description of employee personal resources, job demands, and the best way to adapt successfully at work (Bakker, 2011). The theory postulates if employees become aware of their psychological and personal resources they will be better able to perform and meet job demands. Work outcomes included in the theories of change were primarily focused on work engagement, in-role performance, and positive and negative affective well-being at work. However, other work outcomes included openness to change, adaptive performance, and leader-member exchange. Van Wingerden et al.'s (2016, 2017) found a significant increase in work engagement and in-role performance after a job crafting intervention whereas Van Winderden et al. (2017) had null findings for work engagement but significant findings for in-role performance. Demerouti et al. (2017) found that an employee job crafting intervention significantly increased positive affective well-being at work, openness to change, and adaptive performance, while Van den Heuvel et al. (2015) had null findings for positive affective well-being at work, but a significant increase in leader-member exchange and a significant decrease in negative affective well-being at work.

All of the employee job crafting action models were based on the Michigan Job Crafting Exercise, and all used trained facilitators to manage a series of activities, including a critical reflection, feedback session, and action planning workshop (see Table 2 for action models). Moreover, these interventions were conducted in several different types of organizations, including healthcare (n=1), primary schools for special education (n=2), municipality (n=1) and police district (n=1). One key theme in the employee job crafting interventions was educating participants on the background of JD-R theory, and a deliberate focus on creating specific job crafting goals.

#### 4.1.3 PsyCap Interventions

There were three theories of change presented in the PsyCap intervention studies: IO-OI (Inside Out-Outside In) Model, PsyCap Micro-intervention Model, and combination of the PsyCap Micro-intervention Model & the Conservation of Resource (COR) theory. The IO-IO proposes that employee well-being is impacted by psychological factors inside the employee and outside the employee (Williams, Kern, & Waters, 2016). Psychological factors inside the employee are malleable and include attitudes, beliefs, and behaviors. Factors outside the employees are beyond the control of the individual, such as organizational culture. This model proposes that elevating organizational members to see the best in others will propel them to act more virtuously. The PsyCap/COR theory intervention postulated that people try to protect valuable resources at work, especially when there is a threat of loss. However, the negative impact of these losses can be mitigated by PsyCap, which is a developable employee resource. The outcomes included in the PsyCap interventions were organizational virtuousness, work engagement, and job performance. Yuan (2015) and Zhang et al. (2014) reported significant increases in work engagement and job performance, respectively. Williams et al. (2016) found null improvements in organizational virtuousness.

The action models in our PsyCap interventions included targeted activities for each of the sub-components (i.e., hope, resilience, optimism, and self efficacy). For example, Yuan (2015) used SMART goals, expressive writing, ABCDE model, and risk management exercises to teach each component of PsyCap in his intervention. Williams, Kern, and Walters (2017) and Williams et al. (2016) leveraged PsyCap research and materials from University of Pennsylvannia's Positive Psychology Center, and Zhang et al. (2014) used the Happy@Work training and structured reading materials. Trained facilitators administered three of the four PsyCap interventions and one was administered online. Finally, the target groups consisted of employees in random organizations and an independent school (teaching and non-teaching positions).

#### **4.1.4** Employee Strengths Interventions

There were five different theories of change used in the employee strengths interventions: Clifton Strengths Finder, VIA framework, manualization framework, positive-activity model, and Character Strengths and Virtues framework. However, while these studies used different theoretical models, their underlying logic remained similar. That is, developing employee strengths should lead to increased desirable and reduced undesirable work outcomes. For example, the outcomes from the theories of change included performance appraisals, calling at work, other-rater feedback on transformational leadership, work engagement, burnout, and work-related wellbeing. Unlike other positive psychology theories included in our paper, employee strengths interventions reported a diverse set of work outcomes. The intervention that used the Clifton Strengths Finder reported null findings on the performance appraisal

process (Williams, 2010), and the intervention that used Character Strengths and Virtues (CSV) framework found null increases in work related well-being (Page & Vella-Brodrick, 2013). On the other hand, Harzer and Ruch's use of the VIA framework was successful at increasing calling in the workplace, the positive-activity model found significant increases in work engagement and decreases in burnout (Meyers & Van Woerkom, 2017), and the manualization framework found significant increases in other-rater feedback on transformational leadership (Mackie, 2014).

Employee strengths theory intervention action models followed a similar format: a strengths-identification assessment followed by a training session on how to incorporate strengths in the workplace. For example, Harzer and Ruch (2012) used the VIA to educate their participants on their four highest signature strengths. They were then asked to think about their daily work activities, and how their strengths play out in those tasks. The last step challenged employees to use their signature strengths in new and meaningful ways at work. In addition to the VIA, there were other strengths assessments used, such as Realise 2 Inventory and 360-feedback (Mackie, 2014), Seligman's (2011) strengths-identification activities (Harzer & Ruch, 2012, Williams, 2010), and self-reflection exercises (Meyers & Van Woerkom, 2017). Williams (2010) and Hazer and Ruch (2012) used web-based platforms, whereas Mackie (2014) used executive coaches, Meyers and Van Woerkom (2017) used a trained facilitator, and Page and Vella-Brodrick (2013) used a researcher to implement the intervention. The implementing organizations included the university setting (n = 1), non-profit organization (n = 2), training and development consultancy (n = 1), and government agency (n = 1). Finally, the employees that participated in the strengths interventions consisted of leaders, senior managers, HR, and marketing communications employees.

## 4.1.5 Employee Well-Being Interventions

Neumeier et al. (2017) and Laschinger et al. (2012) used aspects of Seligman's PERMA model in their theory of change. PERMA suggests there are five key elements of well-being: positive emotions, engagement, positive relationships, meaning, and accomplishment. Further, PERMA is found to improve organizational outcomes, such as higher workplace well-being levels including lower absenteeism, higher job satisfaction, among many more. The work outcomes included employee well-being, empowerment, trust in management, supervisor incivility, and work-related psychological flexibility. Neumeier et al. (2017) found that an intervention designed using PERMA significantly increased employee well-being, and Laschigner et al. (2012) positive relationships intervention found significant increases in employee empowerment, trust in management, and significant decreases in supervisor incivility. Finally, Fiery (2016) used an intervention that combined self-compassion and the JD-R model. The paper reported that an intervention group had a significant increase in work-related psychological flexibility compared to a control group.

Action models in the employee well-being interventions included activities that targeted aspects of PERMA and guided meditations. For example, Neumeier et al.

(2017) had participants in the intervention group practice gratitude, savor the moment, visualize their best-self, and perform random acts of kindness. The self-compassion intervention included guided meditations taught in the Mindful Self-Compassion Program (Fiery, 2016). Two of the employee well-being interventions were administered online and one used a trained facilitator. The organizational settings included a university (n = 1), hospital (n = 1), and animal shelter (n = 1) with participants ranging from self-registered employees, nurses, and random employees at an animal shelter.

#### 5 Discussion

Positive psychology interventions in the workplace have made tremendous strides in the past two decades. There now exists a robust body of literature, including primary intervention studies, review papers, along with a recent meta-analysis (Avey et al., 2011; Bolier et al., 2013; Donaldson et al., (under review); Gilbert, Foulk, & Bono, 2018; Knight, Patterson, & Dawson, 2017; Rudolph, Katz, Lavingne, & Zacher, 2017; Sin & Lyubomirsky, 2009) linking PPI's with work outcomes, including improved work engagement and well-being. This paper sought out to evaluate the efficacy of PPI's at work using a TDE framework. TDE offers a lens through which we can understand why and under what conditions PPI's are the most effective. The purpose of combining TDE and PPI's at work was to provide practitioners and scholars with information for designing and implementing future interventions in the workplace, as well as a framework to test the efficacy of such interventions. We sought to address two evaluation questions from the intervention studies we reviewed: (1) which theories of change are used in PPIs at work? (2) how does the action model impact intervention efficacy?

Chen (2012) and Donaldson (2007), prominent thought leaders in evaluation theory, conceptualize TDE as a framework to improve the design, implementation, and evaluation of organizational interventions. The key tenets of TDE include a theory of change and action model describing why the intervention should work, along with a plan to foster implementation. These models serve to reveal theoretical casual mechanisms (including social science theory and stakeholder theory) and the relationship between expected and actual intervention outcomes. Our evaluation revealed six types of positive psychology theories and 15 unique theories of change models. The majority of intervention studies did not include an explicit theory of change in their intervention design, but all 22 studies included an implicit theory of change with expected work outcomes. In addition, all papers provided literature to support their research hypotheses. The action models helped contextualize how the theories were implemented in practice, and which intervention characteristics served as important moderators in intervention effectiveness.

Employee gratitude interventions mostly relied on the count-your-blessing model and the sustainable happiness model. Unlike other hands-on interventions (e.g., trainings and workshops) included in our sample, employee gratitude interventions tended

to use simple intervention exercises (e.g., recount three good things) and an online platform. Beside one intervention with null findings, the other gratitude interventions reported significant increases in work outcomes, such as job satisfaction, prosocial behavior, and positive work-related well-being. A meta-analysis by Sitzmann, Kraiger, Stewart, and Wisher (2006) attests to the effectiveness of online interventions above and beyond traditional in-person approaches due to their ease, delivery, and cost. In addition, the implementing organizations and target groups included a variety of employees at different levels, suggesting that employee rank may not influence the efficacy of the interventions. For example, the sustainable happiness model for a university staff had a significant effect whereas the same model for a diverse group that includes sales managers and leaders had a null effect. However, the count-your-blessings model showed significant effects across different participants. Thus, if practitioners are looking for a simple and effective PPI that can improve workplace outcomes, the count-your-blessings model may be worth considering.

The JD-R model undergirded each employee job crafting intervention, which provides a clear connection between job demands, resources, psychological states, and their relationship with work outcomes. Our sample studies that used JD-R model interventions demonstrated improved work engagement and in-role performance. The interventions had similar theories of change and action models, maybe due to the institutional affiliation of the authors. Trained facilitators conveyed job crafting interventions in a group format using the Michigan Job Crafting Exercise. Knight et al. (2017) suggested that group interventions are effective because they engender a climate of social support. Moreover, Donaldson et al. (under review) found types of intervention (i.e., group, on-line, and individual) moderated the relationship between positive psychology interventions and desirable work outcomes (e.g., engagement). The employee job crafting interventions we reviewed engaged participants in a group setting, were detailed activities, and focused on creating actionable goals. Thus, employee job crafting interventions in our sample demonstrated the utility of the JD-R model and importance of effective delivery methods.

Like the employee job crafting interventions, PsyCap interventions were also grounded in a wealth of research. For example, research and materials from University of Pennsylvania's Positive Psychology Center were used in two interventions, and the other two interventions included Luthans et al. (2007) exercises and the Happy@Work training program (see Table 2). Consistent with Donaldson et al.'s (under review) finding that PsyCap interventions were effective at improving desirable and undesirable work outcomes, along with numerous primary studies linking PsyCap to work outcomes, such as job satisfaction and organizational commitment, we suggest PsyCap is a great tool for organizational interventions. The four subcomponents of PsyCap allowed intervention designers and implementers to target activities aimed at improving each construct, which has been demonstrated to influence work outcomes.

The employee strengths interventions in our sample provided five different strengths frameworks applied in organizations. Also, each intervention measured a different work outcome such as calling at work, transformational leadership, and work engagement. The diversity of implementing organizations (e.g., non-profit, uni-

versity, corporate, and government) and implementers (e.g., online, coaches, trained facilitator, researcher) highlighted the dynamic nature of using strengths in the workplace.

Employee well-being interventions were related to significant increases in employee well-being, empowerment, trust in management, and supervisor incivility. The PERMA model served as a guiding framework for intervention exercises, two of which were conducted online, and a third, which used guided self-compassion meditations. Practitioners looking to target Seligman's five aspects of well-being (i.e., PERMA) in organizations can impact work relationships and work-related well-being.

# **6** Practical Implications for Multi-national Contexts

The practical implications of these evaluation findings are useful for scholars and practitioners interested in PPIs at work and frameworks to evaluate their efficacy. A TDE approach was useful for bridging the gap between what is expected to happen and what actually happened in these interventions. It allowed us to evaluate the relationship between theory, measurement, and implementation. For example, when practitioners look to improve work engagement, PsyCap, job crafting, and PERMA may be theories they consider for a change model. As such, practitioners interested in using a specific type of intervention or work outcome can use these findings in their organizations.

We also evaluated multi-national characteristics of PPIs at work that can offer insight to practitioners in the field of positive organizational psychology. First, we observed that some theories were more actively studied in certain countries. For example, the Netherlands was the dominant country that conducted job crafting intervention studies (75%; four papers). No job crafting intervention studies were found in the US. This was interesting because even though the JD-R Model was developed by a group of scholars in the Netherlands (see Bakker, Demerouti, 2006), the US based Michigan Job Crafting Exercise was used to apply the JD-R model. Future research on job crafting interventions in the US and other countries (i.e., Asian countries) may answer this more accurately and provide insight for the effect of job crafting interventions across different countries.

In the US, gratitude interventions at work were studied more than any other positive psychology interventions: three out of five studies in the US were gratitude interventions. Research suggests that other-focused contemplation might be more appropriate for a collectivistic rather than individualistic culture (Boehm, Lyubomirsky, & Sheldon, 2011). Nonetheless, gratitude intervention studies from Asian countries were absent. To better understand the effect of gratitude interventions across nations, we encourage future intervention studies that diversify study samples from single national to multi-national samples to compare the results.

Finally, strengths intervention studies were found from multiple countries that include Australia, Germany, Netherlands, and the US We found no strength inter-

vention studies from Asian countries. It may be the case that instead of emphasizing individual signature strengths, Asian employees may be susceptible to carrying out organizational needs before their own. Future research should better understand the role that culture plays in these types of interventions.

#### 6.1 Future Directions and Limitations

There are several areas of future research that would improve PPIs at work, especially in multi-national work settings. First, future research could compare the effectiveness of PPIs at work to traditional organizational behavior interventions across multinational settings. As aforementioned, we found job crafting intervention papers only from European countries, and the majority of gratitude intervention studies appeared from the US There were no strengths interventions in Asian countries. As a result, without more intervention studies, interpretation of these findings is limited.

It would also be useful to understand approaches used in each country, and intervention characteristics that moderate success or failure. The current study sample did not show a clear distinction between nations in their implementation strategy, which we assume is not reflected in their design of the action model. Considering cultural differences (e.g., collectivism and power distance) may moderate the effect of interventions, and clearer depiction of how researchers operationalize cultural aspects may be needed in the future studies to better understand multi-national characteristics.

Finally, future studies could be dedicated to evaluating measures used in these types of interventions. Donaldson et al. (under review) categorized work outcomes as desirable and undesirable. As such, reviewing the psychometric properties of measures underneath these categories would provide more support for their statistical conclusions. Lastly, this study adhered to a rigorous inclusion criteria set forth by Donaldson et al. (under review), which only included 22 studies. Future scholars and practitioners would benefit from reviewing all types of interventions studies using PPIs at work (i.e., those published, unpublished, etc.) to broaden the knowledge base and inform future research and scholarship. Lastly, while TDE is a great starting point, other evaluation approaches could be considered in future studies to leverage more perspectives, besides the role of theory and implementation.

#### 7 Conclusion

As the 21st century workplace continues to evolve, there is no doubt PWO is in a great position to solve workplace challenges. By synthesizing what is known about PPIs at work and using a TDE framework to evaluate the efficacy of such interventions, we have provided scholars and practitioners a value proposition for using positive psychology in their organizations. We have also shown which positive psychology

theories have been used, and under what conditions they have been the most efficacious. Finally, this study provided a foundation for understanding how PPIs at work are designed, measured, implemented, and evaluated in terms of their efficacy to influence work outcomes. More research is needed to further these aspects of PPIs at work so organizations can create a culture of flourishing and productivity.

\*References marked with an asterisk indicate interventions included in our review. References included in Tables 1–2 available upon request.

## References

- Agarwal, D., Bersin, J., Lahiri, G., Schwartz, J., & Volini, E. (2018). Well-being: A strategy and a responsibility. Retrieved from https://www2.deloitte.com/insights/us/en/focus/human-capitaltrends/2018/employee-well-being-programs.html.
- Avey, J., Luthans, F., & Youssef, C. (2010). The additive value of positive psychological capital in predicting work attitudes and behaviors. *Journal of Management*, 36(2), 430–452.
- Avey, J., Reichard, R., Luthans, F., & Mhatre, K. (2011). Meta-analysis of the impact of positive psychological capital on employee attitudes, behaviors, and performance. *Human Resource Development Quarterly*, 22(2), 127–152.
- Bakker, A. (2011). An evidence-based model of work engagement. *Current Directions in Psychological Science*, 20(4), 265–269.
- Bakker, B. A., Rodriguez-Munoz, A. Sanz, & Vergel, I. A. (2016). Modelling job crafting behaviours: Implications for work engagement. *Human Relations*, 69(1), 169–189. https://doi. org/10.1177/0018726715581690.
- Baumeister, R., Bratslavsky, E., Finkenauer, C., & Vohs, K. (2001). Bad is stronger than good. *Review of General Psychology*, 5(4), 323–370. https://doi.org/10.1037/1089-2680.5.4.323.
- Boehm, J. K., Lyubomirsky, S., & Sheldon, K. M. (2011). A longitudinal experimental study comparing the effectiveness of happiness-enhancing strategies in Anglo Americans and Asian Americans. *Cognition and Emotion*, 25(7), 1263–1272.
- Bolier, L., Haverman, M., Westerhof, G., Riper, H., Smit, F., & Bohlmeijer, E. (2013). Positive psychology interventions: A meta-analysis of randomized controlled studies. *Bmc Public Health*, *13*, 119.
- Cameron, K., Dutton, J., & Quinn, R. (2003). Positive organizational scholarship: Foundations of a new discipline (1st ed.). San Francisco, CA: Berrett-Koehler.
- \*Chan, D. (2010). Gratitude, gratitude intervention and subjective well-being among Chinese school teachers in Hong Kong. *Educational Psychology*, 30(2), 139–153.
- Chen, H. T. (1990). *Theory-driven evaluations*. Thousand Oaks, CA: Sage.
- Chen, H. T. (2005). Practical program evaluation: Assessing and improving planning, implementation, and effectiveness. Thousand Oaks, CA: Sage.
- Chen, H. T. (2012). Theory-driven evaluation: Conceptual framework, application and advancement. *Evaluation von Programmen und Projekten für eine demokratische Kultur*, pp. 17–40.
- Cooperrider, D., & Whitney, D. (2005). *Appreciative inquiry: A positive revolution in change* (1st ed.). San Francisco, CA: Berrett-Koehler.
- Coryn, C., Noakes, L., Westine, C., & Schröter, D. (2011). A systematic review of theory-driven evaluation practice from 1990 to 2009. *American Journal of Evaluation*, 32(2), 199–226.
- Demerouti, E., & Bakker, B. A. (2014). Job crafting. In M. Peeters, J. De Jonge, & T. Taris (Eds.), *An introduction to contemporary work psychology*. Hoboken: Wiley.
- \*Demerouti, E., Xanthopoulou, D., Petrou, P., & Karagkounis, C. (2017). Does job crafting assist dealing with organizational changes due to austerity measures? Two studies among Greek employ-

- ees. European Journal of Work and Organizational Psychology, 26(4), 574-589. https://doi.org/10.1080/1359432x.2017.1325875.
- Donaldson, S. I. (2007). Program theory-driven evaluation science: Strategies and applications. New York: Psychology Press.
- Donaldson, S. I., & Ko, I. (2010). Positive organizational psychology, behavior, and scholarship: A review of the emerging literature and evidence base. *Journal of Positive Psychology*, 5, 177–191.
- Donaldson, S. I., Lee, J. Y., & Donaldson, S. I. (under review). Evaluating theory-driven positive psychology interventions at work: A systematic review and meta-analysis. *Journal of Positive Psychology*.
- \*Fiery, F. M. (2016). Exploring the impacts of self-compassion and psychological flexibility on burnout and engagement among animal shelter staff: A moderator analysis of the jobs-demands resources framework and a randomized controlled field trial of a brief self-guided online intervention (Doctoral dissertation).
- Gilbert, E., Foulk, T., & Bono, J. (2018). Building personal resources through interventions: An integrative review. *Journal of Organizational Behavior*, 39(2), 214–228. https://doi.org/10.1002/job.2198.
- \*Grant M. A., & Gino, F. (2010). A little thanks goes a long way: Explaining why gratitude expressions motivate prosocial behavior. *Journal of Personality and Social Psychology*, 98(6), 946–55. https://doi.org/10.1037/a0017935.
- Harty, B., Gustafsson, J., Björkdahl, A., & Möller, A. (2016). Group intervention: A way to improve working teams' positive psychological capital. *Work*, *53*(2), 387–398.
- \*Harzer, C., & Ruch, W. (2012). When the job is a calling: The role of applying one's signature strengths at work. *Journal of Positive Psychology*, 7(5), 362–371. https://doi.org/10.1080/17439760.2012.702784.
- \*Kaplan, S., Bradley-Geist, J., Ahmad, A., Anderson, A., Hargrove, A., & Lindsey, A. (2014). A test of two positive psychology interventions to increase employee well-being. *Journal of Business and Psychology*, 29(3), 367-380. https://doi.org/10.1007/s10869-013-9319-4.
- Knight, C., Patterson, M., & Dawson, J. (2017). Building work engagement: A systematic review and meta-analysis investigating the effectiveness of work engagement interventions. *Journal of Organizational Behavior*, 38(6), 792–812.
- Laschinger, H. K. S., Finegan, J. E., Shamian, J., & Wilk, P. (2004). A longitudinal analysis of the impact of workplace empowerment on work satisfaction. *Journal of Organizational Behavior*, 25, 527–545.
- Laschinger, H. K. S., Finegan, J. E., & Wilk, P. (2009). Context matters: The impact of unit leadership and empowerment on nurses' organizational commitment. *Journal of Nursing Administration*, 39, 228–235.
- \*Laschinger, H. K. S., Heather, K., Leiter, P. M., Day, A., Gilin-Oore, D., & Mackinnon, P. S. (2012). Building empowering work environments that foster civility and organizational trust: Testing an intervention. *Nursing Research*, 61(5), pp. 316–325.
- Luthans, F. (2002). Positive organizational behavior: Developing and managing psychological strengths. *Academy of Management Executive*, 16, 57–72.
- Luthans, F., Avey, B. J., Avolio, J. B., Norman, M. S., & Combs, M. G. (2006). Psychological capital development: Toward a micro-intervention. *Journal of Organizational Behavior*, 27(3), 387–393.
- Luthans, F., Avolio, B., Avey, J., & Norman, S. (2007). Positive psychological capital: Measurement and relationship with performance and satisfaction. *Personnel Psychology*, 60(3), 541–572.
- Lyubomirsky, S., Sheldon, K., & Schkade, D. (2005). Pursuing happiness: The architecture of sustainable change. *Review of General Psychology*, 9(2), 111–131. https://doi.org/10.1037/1089-2680.9.2.111.
- \*MacKie, D. (2014). The effectiveness of strength-based executive coaching in enhancing full range leadership development: A controlled study. *Consulting Psychology Journal: Practice and Research*, 66(2), 118–137. https://doi.org/10.1037/cpb0000005.

- \*Meyers, M., & Van Woerkom, M. (2017). Effects of a strengths intervention on general and work-related well-being: The mediating role of positive affect. *Journal of Happiness Studies:* An Interdisciplinary Forum on Subjective Well-Being, 18(3), 671–689. https://doi.org/10.1007/s10902-016-9745-x.
- Meyers, M., Van Woerkom, M., & Bakker, A. (2013). The added value of the positive: A literature review of positive psychology interventions in organizations. *European Journal of Work and Organizational Psychology*, 22(5), 618–632.
- \*Neumeier, L., Brook, L., Ditchburn, G., & Sckopke, P. (2017). Delivering your daily dose of well-being to the workplace: A randomized controlled trial of an online well-being programme for employees. *European Journal of Work and Organizational Psychology*, 26(4), 555–573. https://doi.org/10.1080/1359432x.2017.1320281.
- \*Page, K., & Vella-Brodrick, D. (2013). The working for wellness program: RCT of an employee well-Being intervention. *Journal of Happiness Studies: An Interdisciplinary Forum on Subjective Well-Being*, 14(3), 1007–1031. https://doi.org/10.1007/s10902-012-9366-y.
- Peterson, C., & Seligman, M. (2004). *Character strengths and virtues: A handbook and classification*. Washington, DC: American Psychological Association.
- Quinlan, D., Swain, N., & Vella-Brodrick, D. (2012). Character strengths interventions: Building on what we know for improved outcomes. *Journal of Happiness Studies: An Interdisciplinary Forum on Subjective Well-Being*, 13(6), 1145–1163.
- Reichard, R., Avey, J., Lopez, S., & Dollwet, M. (2013). Having the will and finding the way: A review and meta-analysis of hope at work. *The Journal of Positive Psychology*, 8(4), 292–304.
- Rogers, P. J. (2000). Program theory evaluation: Not whether programs work but how they work. In D. L. Stufflebeam, G. F. Madaus, & T. Kellaghan (Eds.), Evaluation models: Viewpoints on educational and human services evaluation (pp. 209–232). Boston, MA: Kluwer.
- Rudolph, C. W., Katz, I. M., Lavigne, K. N., & Zacher, H. (2017). Job crafting: A meta-analysis of relationships with individual differences, job characteristics, and work outcomes. *Journal of Vocational Behavior*, 102, 112–138.
- Seligman, M. E. (2011). Flourishing: A visionary new understanding of happiness and well-being. New York, NY: Free Press.
- Seligman, M. E., & Csikszentmihalyi, M. (2000). Positive psychology: An introduction. *American Psychologist*, 55, 5–14.
- Sin, N., & Lyubomirsky, S. (2009). Enhancing well-being and alleviating depressive symptoms with positive psychology interventions: A practice-friendly meta-analysis. *Journal of Clinical Psychology*, 65(5), 467–487. https://doi.org/10.1002/jclp.20593.
- Sitzmann, T., Kraiger, K., Stewart, D., & Wisher, R. (2006). The comparative effectiveness of web-based and classroom instruction: A meta-analysis. *Personnel Psychology*, 59(3), 623–664.
- \*Van den Heuvel, M., Demerouti, E., & Peeters, M. (2015). The job crafting intervention: Effects on job resources, self-efficacy, and affective well-being. *Journal of Occupational and Organizational Psychology*, 88(3).
- \*Van Wingerden, J., Bakker, A., & Derks, D. (2017a). The longitudinal impact of a job crafting intervention. *European Journal of Work and Organizational Psychology*, 26(1), 107–119. https://doi.org/10.1080/1359432x.2016.1224233.
- \*Van Wingerden, J., Derks, D., & Bakker, B. A. (2017b). The impact of personal resources and job crafting interventions on work engagement and performance. *Human Resource Management*, 56(1), 51–67. https://doi.org/10.1002/hrm.21758.
- Warren, M. A., Donaldson, S. I., & Luthans, F. (2017). Taking positive psychology to the workplace: Positive organizational psychology, positive organizational behavior, and positive organizational scholarship. In M. A. Warren & S. I. Donaldson (Eds.), *Scientific advances in positive psychology*. Westport: Connecticut: Praeger.
- Wood, A., Froh, J., & Geraghty, A. (2010). Gratitude and well-being: A review and theoretical integration. Clinical Psychology Review, 30(7), 890–905.
- \*Williams, K. B. (2010). The influence of a strengths-based intervention on the performance-appraisal process (Doctoral dissertation).

\*Williams, P., Kern, M., & Waters, L. (2016). Exploring selective exposure and confirmation bias as processes underlying employee work happiness: An intervention study. *Frontiers in Psychology*, 7. https://doi.org/10.3389/fpsyg.2016.00878.

- \*Williams, P., Kern, M., & Waters, L. (2017). The role and reprocessing of attitudes in fostering employee work happiness: An intervention study. *Frontiers in Psychology*, 7/8.
- \*Wingerden, J., Bakker, A., & Derks, D. (2016). A test of a job demands-resources intervention. Journal of Managerial Psychology, 31(3), 686–701. https://doi.org/10.1108/jmp-03-2014-0086.
- \*Winslow C. J., Kaplan S. A., Bradley-Geist J. C., Lindsey A. P., Ahmad A. S., Hargrove A. K. (2017). An examination of two positive organizational interventions: For whom do these interventions work? *Journal of Occupational Health Psychology*, 22(2), pp. 129–137. https://doi.org/10.1037/ocp0000035.
- Wrzesniewski, A., & Dutton, J. (2001). Crafting a job: Revisioning employees as active crafters of their work. *The Academy of Management Review*, 26(2), 179.
- \*Yuan, Q. (2015). Evaluating the effectiveness of a psychological capital development program on mental health, engagement, and work performance (Doctoral dissertation).
- \*Zhang, X., Li, Y., Ma, S., Hu, J., & Jiang, L. (2014). A structured reading materials-based intervention program to develop the psychological capital of Chinese employees. *Social Behavior and Personality: An International Journal*, 42(3), 503–515. https://doi.org/10.2224/sbp.2014.42.3.503.
- \*Zhao, K. (2012). The effect of forgiveness intervention versus relaxation training on psychological well-being in the workplace: A pilot study in the United Kingdom (Doctoral dissertation).

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