European Journal of Training and Development

Well-being and innovativeness: motivational trigger points for mutual enhancement

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Received 20 November 2014
Revised 27 May 2015
Accepted 27 May 2015

Abstract

Purpose – This paper focuses on employees' motivation to participate in innovation at the workplace. The best arguments to persuade employees to renew their work were searched. According to the expectancy theory (Vroom, 1964), a plausible link must be perceived for a motivational state to arise. The paper investigated the perceptions that employees, team-leaders and directors have about the relationships between innovativeness and well-being.

Design/methodology/approach – The data consisted of thematic interviews with 14 persons from knowledge- and labour-intensive organisations in the public service sector. Data included material from directors, team-leaders and front-line workers. The theoretical model of Huhtala and Parzefall (2007) was applied to analyse perceptions about links between well-being and innovativeness.

Findings – Results indicated that all eight possible links between well-being and innovativeness were perceived as plausible. The most common views were that high innovativeness connects to high well-being and vice versa. Additionally, low well-being was seen to decrease innovativeness. All organisational levels of knowledge- and labour-intensive organisations shared these views. More specifically, the interviewees shared the view that participating in innovation activities gives the employee opportunities to influence one's work, which in turn leads to well-being. Another commonly shared perception was that if employees were encouraged and praised for their efforts, innovativeness would increase. These provide plausible arguments for leaders to persuade employees to participate.

Practical implications – Practical advice about effective arguments for motivating employees is given: tell them that innovativeness is desired for, time and space is allocated for innovations, the amount of change will be managed, and the innovation activities present an opportunity to have voice.

Originality/value – This paper shows potential motivational trigger points for enhancing the interaction between well-being and innovation.

Keywords Well-being, Employees, Motivation, Innovativeness, Public service development

Paper type Research paper

Introduction

Continuous improvement of services, products and processes is essential for organisations. Developing and renewing are no longer seen as purely the responsibility

The data collection phase has been funded by Finnish Funding Agency for Innovations Tekes.

European Journal of Training and Development
Vol. 39 No. 5, 2015
pp. 393-408

2046-9012
DOI 10.1108/EJTD-11-2014-0078

of managers or research and development departments, but rather all employees need to participate in innovation activities (Anderson *et al.*, 2014). This paper investigates how to persuade employees to participate in innovation activities and renew their work – especially in the public sector, where monetary or other tangible rewards are not available. According to the expectancy theory (Vroom, 1964), for a motivational state to arise, an actor must perceive a plausible link between his action and a valuable outcome. This paper investigates how perceptions of relationships between well-being and innovativeness could serve as plausible links to valuable outcomes in motivation to participate in innovation activities or improve well-being.

Well-being connects to innovativeness in many ways. For example, positive affect enhances creativity in organisations (Amabile *et al.*, 2005) and work engagement predicts personal initiative, which further predicts innovativeness (Hakanen *et al.*, 2008). Likewise, opportunities to influence work increase idea generation and realisation (Bysted and Jespersen, 2014). Then again, low well-being, such as dissatisfaction, relates to high creativity, as dissatisfied employees actively try to improve conditions and find better ways of doing things (Zhou and George, 2001). Additionally, employees' feelings of stress deteriorate innovative climates (Länsisalmi and Kivimäki, 1999).

Complex relationships from innovativeness to well-being also exist; innovative work behaviour has been found to cause anxiety and burnout (Janssen, 2004), but active and initiative-taking behaviour has also been found to lead to higher work engagement (Hakanen *et al.*, 2008).

The evidence renders the connections between well-being and innovativeness complex and the employees' perceptions of them may be even vaguer. Still, it is the perceptions that count (Vroom, 1964) when communicating the benefits of participating in innovation activities to employees. Therefore, arguments that are widely accepted as plausible ought to be used.

People at different organisational levels may have different perceptions about the relationships between well-being and innovativeness. Communication between organisational levels may break down if employees and directors perceive different motivational factors to innovate and, therefore, use different arguments when discussing, for instance, new job descriptions or compensation plans. Views about factors affecting well-being vary among groups. For example, industrial workers may emphasise their physical workload, while employees in transportation are strained by shift work; employees in human services find feedback as increasing well-being, whereas industrial workers perceive job control as especially rewarding (Demerouti and Bakker, 2011).

In addition, outcomes may vary among groups. For instance, a known antecedent of well-being, high decision authority at work, increases the risk of health problems (e.g. mental problems or cardiovascular diseases) in some groups, but decreases the risk in others (Joensuu, 2014). Different groups may therefore have different perceptions about the relationship between innovativeness and well-being.

Several researchers have proposed that well-being and innovativeness may have a two-way, or cyclical, relationship (e.g. Huhtala and Parzefall, 2007; Amabile *et al.*, 2005; Hakanen *et al.*, 2008; Bakker and Demerouti, 2014). Well-being leads to innovativeness and innovativeness back to well-being. This suggests that if we were able to ignite a cycle at some point, it would eventually feed itself. A potential place to start the cycle would be where the motivation is strongest: that is, where the connection between

well-being and innovation is perceived most clearly. In this paper, such a starting point to a cycle of positive well-being and innovativeness is labelled as a motivational trigger *point for mutual enhancement*.

The study investigated perceptions of the links between well-being and innovativeness in two public service organisations, one in a labour-intensive and the other in a knowledge-intensive service. The study further investigated these perceptions on three occupational levels: directors, team-leaders and front-line workers. This paper first introduces the role of perceptions on motivation via the expectancy theory (Vroom, 1964). Then, the theoretical model of well-being and innovativeness (Huhtala and Parzefall, 2007) that was utilised in the analyses is described. Then the cases, data, analyses and findings and, finally, the limitations and practical conclusions are presented.

Well-Being and innovativeness

Warr (1999, p. 393) defined job-specific well-being as "peoples' feelings about themselves in relation to their work". This paper focuses on work-related well-being, a state affected by work (as opposed to individual dispositions or general aspects of life).

West and Farr (1990, p. 9) defined innovation as:

> […] the intentional introduction and application within a role, group or organisation of ideas, processes, products or procedures, new to the relevant unit of adoption, designed to significantly benefit the individual, the group, the organisation or wider society.

This definition referred to the activity of creating something new, not to the outcome (e.g. a new product). A related concept is innovative behaviour, which refers to "complex behavior consisting of activities pertaining to both generation/introduction of new ideas and realisation or implementation of new ideas" (Yuan and Woodman, 2010). This paper uses the concept of *innovativeness* (instead of innovation) to highlight the active process of development and renewal as our focus of interest not only in separate work processes aiming at innovations, but also as aspects that are possible in everyday work.

Expectancy theory: the link between perception and motivation

To motivate employees to innovate, we need to know how the potential innovators *perceive* the relationship between innovativeness and well-being. This paper proposes that perceptions about the connections between innovativeness and well-being offer valid arguments to communicate, and frame potential entry points to the virtuous cycle, as actors are motivated when they see a clear link between their actions and the desired outcomes (Vroom, 1964).

Expectancy theory (Vroom, 1964) is "one of the most popular theories of work motivation" (George and Jones, 2005, p. 185). Vroom (1964, p. 14) states that motivated behaviour is a result of perceptions of valence and expectancy. To ignite motivation, the possible outcome ought to be perceived as valuable. *Valence* refers to the perceived attractiveness of the outcome. The perceived, not the objective, value of the outcome is essential (Vroom, 1964). As a result, people may expect positive performance outcomes (e.g. increased productivity), or socio-political image gains (e.g. prestige) from innovative behaviour (Yuan and Woodman, 2010). To be motivated, a person also must believe that particular performance will lead to the valued reward. *Expectancy* is a "momentary belief concerning the likelihood that a particular act will be followed by a particular outcome" (Vroom, 1964, p. 17), or a perceived connection between two entities.

Expectations of positive outcomes from innovation enhance individual innovative behaviour (Yuan and Woodman, 2010).

This suggests that if we found out how innovativeness and well-being are seen to relate, we would know a potential point to highlight when motivating employees and attempting to start a virtuous cycle of well-being and innovativeness. According to the expectancy theory, "behavior is affected by […] the degree to which [the actor] believes those outcomes to be possible" (Vroom, 1964, p. 20). The actor must view the action and the outcome as both connected and plausible. If an employee does not perceive a link between innovativeness and well-being, it is futile to, for example, encourage him to innovate by promising increased well-being as a reward of these activities. Similarly, if managers do not perceive increased well-being improving innovativeness, they may well resist from improving the working conditions, even if the employees would expect it as a precondition of innovativeness. We should therefore locate the strong perceived associations between innovativeness and well-being, preferably the ones that are shared by all organisational levels.

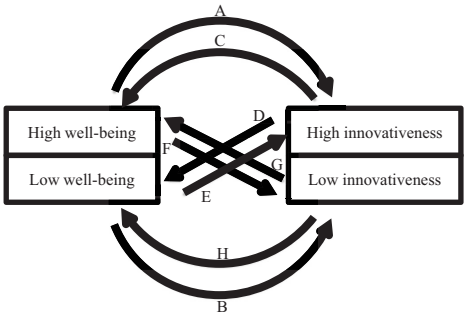
Possible links between well-being and innovativeness

To research the perceived links, a theoretical model by Huhtala and Parzefall (2007), based on the Job Demands-Resources (JD-R) model (Bakker and Demerouti, 2007, 2014) is applied. Huhtala and Parzefall (2007) suggested that well-being and innovativeness form mutually enhancing cycles or two-way relationships. There may be a virtuous cycle, in which well-being and innovativeness enhance each other, or a vicious cycle, in which well-being and innovation inhibit each other.

Huhtala and Parzefall (2007) suggested that innovation activities may be *perceived* as either demands (i.e. aspects of work that require effort from the employee, such as time pressure or emotional strain) or as resources (i.e. aspects of work that help the employee achieve goals, minimise the effects of job demands or stimulate personal growth, such as social support and job control) (Demerouti and Cropanzano, 2010, p. 153). Demands decrease well-being, and low well-being decreases performance (i.e. innovativeness), whereas resources enhance well-being, further enhancing performance (Bakker and Demerouti, 2007, 2014). Huhtala and Parzefall (2007) particularly pointed out that perception is what counts in the cyclical process.

The cycles are not necessarily purely virtuous or vicious, mixed models may also exist. Anderson *et al.* (2004) proposed several cycles, e.g. one in which distress leads to increased innovativeness, which in turn results in lower well-being. Increasing innovation activities may lead to increased role ambiguity and higher workload, but job dissatisfaction may also ignite new innovations or processes.

From well-being to innovativeness (links ABEF). Well-being connects to innovativeness at several points (Figure 1, Table I). The JD-R model (Bakker and Demerouti, 2007, 2014) states that when employees feel engaged and experience high well-being, their job performance – in this case, innovativeness – improves (link A in Figure 1 and Table I). For instance, cognitive job resources, such as opportunities to have a break from a difficult task, are positively associated with creativity (De Jonge *et al.*, 2012), and job satisfaction predicts the amount of introduced changes at the workplace (Shipton *et al.*, 2006). On the other hand, decreased well-being leads to employees who are too exhausted to be productive – in this case, innovative (link B). For



Source: Further developed from the model of Huhtala and Parzefall (2007)

Figure 1.
The possible links between well-being and innovativeness

Link	Line	Descriptions and examples
W+I+	A	High well-being enhances innovativeness, e.g. "We have an open atmosphere which allows new ideas and development"
W−I−	B	Low well-being decreases innovativeness, e.g. "If I feel stressed, I don't have the energy to renew my work"
I+W+	C	Innovativeness leads to higher well-being, e.g. "Our supervisor's praises felt nice after our successful project"
I+W−	D	Innovativeness leads to low well-being, e.g. "I get nervous, if I'm forced to participate developmental activities"
W−I+	E	Low well-being leads to high innovativeness, e.g. "We felt overloaded so we figured out how to deliver the service faster"
W+I−	F	High well-being leads to low innovativeness, e.g. "My job is easy and simple, I see no reason to change it"
I−W+	G	Low innovativeness leads to high well-being, e.g. "I like having a clear structure, routines and precise instructions how to do my job"
I−W−	H	Low innovativeness leads to low well-being, "If we wouldn't renew our work, it would be dead-boring"

Notes: W = well-being; I = innovativeness; + = high; − = low

Table I.
Possible links between low and high well-being and low and high innovativeness

instance, stressful working conditions have a negative impact on the innovative climate of the workplace (Länsisalmi and Kivimäki, 1999).

Then again, many demands and low well-being may result in high innovativeness, as the undesirable circumstances force employees to invent something new and better (link E). For instance, job dissatisfaction has been found to relate to high creativity when an employee feels as though he or she must stay at the current job (Zhou and George, 2001). Some factors, such as team conflicts (Hüttermann and Boerner, 2011) or time pressure (Seeck, 2008), may either foster (E) or inhibit (B) innovation, depending on the circumstances. High well-being could also lead to a self-satisfied state in which the employee does not see the need to innovate (F).

From innovativeness to well-being (links CDGH). Innovativeness itself may be perceived as a resource, leading to higher well-being (link C) (Huhtala and Parzefall,

2007). For instance, initiative-taking behaviour leads to higher work engagement later on (Hakanen *et al.*, 2008), and a positive climate for innovation alleviates work pressures (King *et al.*, 2007). High innovativeness may also be perceived as a demand, leading to low well-being (D). For instance, innovative work behaviour may cause anxiety, burnout (Janssen, 2004) and conflict with co-workers (Janssen, 2003).

Additionally, low innovativeness may be seen as enhancing well-being, as employees can then focus on daily routines without having to do "extra-curricular" activities (G). Low innovativeness may also be a cause of low well-being, if it means old-fashioned tools or processes that hinder work (H). Innovation has been predominantly studied as a dependent variable, predicted by various independent determinants (Anderson *et al.*, 2014). Therefore, little research has concerned the consequences of (especially low) innovativeness on well-being.

Summary

Three key issues for the empirical study can be summarised based on literature. First, the *perceptions* people have about the links between well-being and innovativeness are essential. Do people expect one thing to lead to another? If they do, the perceptions present potential entry points to the cycle.

Second, people at different organisational levels and in different occupations may see different resources as having an impact on well-being (Demerouti and Bakker, 2011; Hakanen and Roodt, 2010). Hence, it is necessary to evaluate, whether the organisational level or job type affects the perceptions of links between well-being and innovativeness, if they are to be used in motivational communication.

Third, to produce concise and useful knowledge, we need to investigate, what *kinds of perceptions* people have. The most common kinds are more probable to serve as effective arguments for motivational communication.

Data and methods

Organisational context

The two cases in this study, "Office" and "Service centre", are units of large (several hundred employees) public service organisations in Finland. Public sector organisations are affected by major changes, including rationalisation, improving customer service and increasing the flexibility of personnel (Clarke, 2004). Constant changes require autonomy, responsibility, flexibility and cost-cutting efforts from managers in particular (Clarke, 2004), but increasingly from front-line employees as well.

Most of the approximately 60 employees at Office have an academic education (ISCED, 2011, pp. 4-7). The daily work is cognitively demanding, involving complicated analyses, decision-making, customer relationships and teamwork. Renewing the work processes is an essential part of the job descriptions in the office; everyone is supposed to participate. Employee innovativeness shows as proposing new ideas to work processes, suggesting new ways to structure teams, or suggesting new services or other ways to help the customers. Directors support and participate in the renewal projects, but the employees have much authority and autonomy to make developmental decisions.

Service centre has over 200 employees. The directors have higher-level education, while the team-leaders and employees mostly have a basic level of education (ISCED, 2011, pp. 2-3). The daily work involves face-to-face customer service: courier services,

helping the visitors at a reception desk and guiding them around the facilities. The managers encourage the employees to renew the processes, but participation depends on the individual activity of the employees. The innovations and renewals are mostly small, incremental improvements to customer service, but may also involve larger entities such as a service booking system.

Data collection

In 2011, 90-minute semi-structured interviews with open questions in both study organisations were conducted. The themes of the interviews included developmental activities and processes at the organisation (e.g. "Describe the process when you changed something at work"), views about antecedents of innovation (e.g. "What enhances developmental activity at work?"), management and leadership processes (e.g. "How do the managers participate the developmental activities?") and work-related well-being (e.g. "What affects your well-being?"). The same themes were applied to all interviews. The interviews were recorded and fully transcribed with the interviewees' written consent.

All organisational levels (managers/directors, team-leaders and front-line employees) were represented in the data. At the office, two directors (including the highest director), two team-leaders (of six to eight) and two employees were interviewed. At the service centre, 3 directors (including the highest director), 2 team-leaders (of 8-9) and 3 employees were interviewed, 14 persons in all. All interviews but one were conducted for one interviewee at a time. The interviewees were selected together with the contact persons at the study organisations. The interviewees included enthusiastic developers as well as more critical ones. One contacted person refused to be interviewed.

Analyses

All interviews were searched for mentions of well-being and innovativeness together or in the same context. All mentions of activity regarding developments, changes, renewals or improvements at the workplace were coded as signs of innovativeness, either as being present or missing. All mentions of innovation activities (e.g. idea promotion, piloting and realisation) were included, and the mentions of the innovation outcomes and the results of developmental activities (e.g. new services) were excluded.

All mentions of job demands (e.g. work load, time pressure and physical environment), job resources (e.g. feedback, rewards, job control, participation and supervisor support) and general well-being at work (e.g. being stressed, depressed, burnout, enthusiastic, happy and engaged) were coded as signs of well-being – either low or high, depending on the context. Job demands and resources are usually considered as factors that affect the feelings of well-being (e.g. Demerouti and Cropanzano, 2010), not as feelings *per se*. Here, however, all mentions of resources demands were accepted if their connection to emotion could be interpreted. For instance, workload (a typical job demand) was coded as a sign of low well-being if the participant implied having *too much* work. The participants were not expected to share stories that consisted solely of feelings; the expressions of feelings were "textured" with practical attributions, such as explanations of the demands.

The first author conducted the first coding and found 99 quotations referring to a connection between well-being and innovation. To evaluate which of the eight

theoretical links (A-H) was being referred to, all quotations were independently analysed by the first two authors according to three dimensions:

(1) the perceived relationship between well-being and innovativeness (well-being affecting innovativeness or vice versa);

(2) the level (high/low) of the perceived cause; and

(3) the perceived impact (increase/decrease) of the cause on the perceived outcome.

Of the 99 quotations, the two authors agreed on the coding of 92 quotations. Six quotations of 92 were omitted, as they did not describe active involvement in development. The second author suggested multiple interpretations to some quotations (e.g. the connection operated in both directions). In discussions, 11 of these were accepted, and 10 rejected because they described being an object of change rather than an active innovator. Finally, an agreement on classifications of the remaining 97 interpretations was reached.

The first two authors then coded the participants' descriptions of the connection for 97 interpretations. They first described the mechanisms rather freely, discussed and agreed on the descriptions and then the first author grouped similar explanations together. The descriptions were kept in their original form, without scientific labels. The original wordings offer practitioners tools to communicate these motivational points convincingly. The analysis followed the process described by Miles and Huberman (1994) from data collection and coding to create descriptive presentations of the data within and across groups of interviewees defined by organisational level and job type.

Results

The perceptions about the connections between well-being and innovativeness were studied, and evidence of all eight possible links was found (Figure 2). Most often, the interviewees reported perceptions about the links that were proposed by the JD-R model

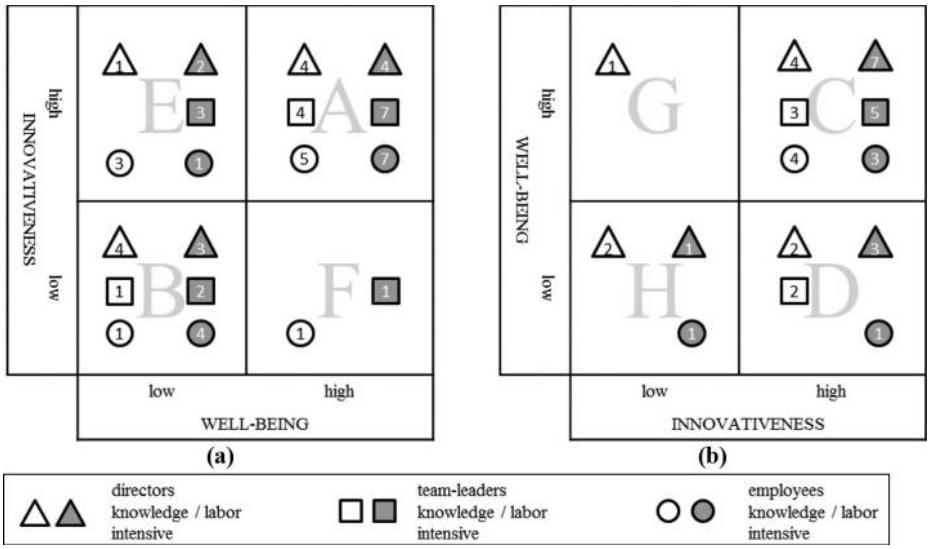


Figure 2.
Perceptions about well-being influencing innovativeness (a) and innovativeness influencing well-being (b), division by organisation and organisational level. The numbers indicate the frequencies of quotations

(Bakker and Demerouti, 2007, 2014) and the original model of Huhtala and Parzefall (2007). The perceptions of ordinary people seem to agree with these theoretical models.

From well-being to innovativeness (links ABEF)

Interviewees from each organisational level (directors, team leaders and employees) in both knowledge-intensive and labour-intensive organisations shared the views that high well-being at work leads to high innovativeness (link A) and low well-being leads to low innovativeness (B). The perception that low well-being may increase innovativeness (E) was also found in almost all groups of interviewees. The perception that high well-being leads to low innovativeness (F) was rare.

From innovativeness to well-being (links CDGH)

Interviewees also shared the view that high innovativeness leads to high well-being (C). The view that high innovativeness could lead to low well-being (D), as innovativeness can be experienced as a demand (Huhtala and Parzefall, 2007), was present in both organisations and all levels, but less frequently than the other theoretically based links A, B and C. The perception that low innovativeness could lead to high well-being (G) was also detected, but rarely.

None of the participants described a complete cycle, well-being affecting innovativeness and back, in a single quotation. Informants described only single links, the parts of a cycle. But two factors were described both as a cause and as a result: the feeling of influence and encouragement and praise from a superior were described both as antecedents of innovativeness and as outcomes of innovativeness.

Motivational points to trigger the virtuous cycle

Plausible arguments to motivate individuals to innovation activities were searched. The perceptions of the links were categorised using the original wordings of the informants. Below are four possible motivational points to trigger the virtuous cycle.

Positive attitude towards renewal and change should be clearly communicated. The interviewees explained the path, leading from high well-being to innovativeness mostly as a "development-friendly culture" at the workplace (Table II). They described the culture consisting of, for example, "encouragement to innovate", "an open atmosphere for new suggestions" and "the permission to take time for developmental activities". This was in line with previous finding that working environments enhance innovativeness when they were perceived as interpersonally non-threatening and providing participative safety (Anderson and West, 1998).

The total amount of work should be framed as decent to allow space for experiments. Informants described a heavy workload and exhaustion with other work duties as mechanisms, through which low well-being leads to low innovativeness.

The amount of change should be framed as manageable. Informants perceived that too much development taking place simultaneously decreases well-being. Very few views supported the idea that development itself is negative. Implementing too many simultaneous or tedious changes, however, causes strain. This view was supported by the finding that only one interviewee (a director) suggested that stable work would make life easy and comfortable for the employees.

Innovation activities should be presented as an opportunity to influence one's own work. The informants perceived the path from high innovativeness to high well-being as going mostly through the experience of influence at work – having the opportunity to

The description of the link	Quotes d(K)	d(L)	tl(K)	tl(L)	e(K)	e(L)
High well-being leads to high innovativeness (A) (31)	**5**	**5**	**3**	**7**	**4**	**7**
Active encouragement and praise for development (7)		1	1	1	1	3
Freedom and power to develop and experiment (6)	1	2			2	1
Open atmosphere for new ideas (4)		1		2		1
Time is invested in development (4)				3		1
Work feels meaningful (3)	1	1			1	
Participation to development feels voluntary (2)				1		1
Competence of the substance helps to develop (2)	2					
Enthusiasm about the work motivates to develop (2)			2			
No external time control (1)	1					
High well-being leads to low innovativeness (F) (2)				**1**		**1**
Routines blind from the problems (1)				1		
Detailed instructions make life easy (1)						1
Low well-being leads to high innovativeness (E) (10)	**1**	**2**		**3**	**3**	**1**
Problems in process force to innovate (3)		1		2		
Deadlines pressure to innovate (2)				1		1
Employer demands input and innovativeness (2)	1	1				
Fear of losing face (old methods) (1)					1	
Lack of competency forces to trial & error (1)					1	
Lack of money forces to innovate (1)					1	
Low well-being leads to low innovativeness (B) (15)	**2**	**5**	**1**	**2**	**1**	**4**
Workload, no time to innovate (6)	1	2			1	2
Exhaustion, depression, no energy (4)		2	1	1		
No autonomy, much external control (2)	1					1
Time pressure to develop does not help (2)				1		1
Atmosphere, non-encouraging culture (1)		1				

Table II.
Descriptions of the links from well-being to innovativeness

Notes: d = director; tl = team-leader; e = employee; K = knowledge intensive work; L = labour-intensive work; symbols A, F, E, B refer to Figure 1; bold data signifies the direction form high to high, high to low etc

make a real difference (Table III). Interestingly enough, the perceived influential power was that which seemed to act as a stronger stimulus than the perceived usefulness of the innovation *per se* or the indirect benefits of development (e.g. job variation). Sometimes, low well-being can have positive outcomes: problems in the current work processes and pressures from management were seen as triggers to improve one's work.

Discussion

Arguments concerning the interconnectedness between well-being and innovativeness that would be most plausible for motivating employees to participate in innovation activities were searched. Members of two public sector organisations perceived all eight theoretical links between well-being and innovativeness. Our findings especially support three of the four links presented by Huhtala and Parzefall (2007): high well-being was perceived to increase innovativeness (link A), low well-being to decrease (B) innovativeness and high innovativeness was perceived to increase well-being (C).

The description of the link	Quotes d(K)	d(L)	tl(K)	tl(L)	e(K)	e(L)
High innovativeness leads to high well-being (C) (26)	**4**	**9**	**3**	**5**	**2**	**3**
Development gives influence on work (15)	2	5	2	4		2
Work becomes easier after development (4)		2	1	1		
Learning new via development motivates (2)					2	
Development brings variation to work (2)	1	1				
Participating in development creates enthusiasm at work (2)	1	1				
Development leads to praises and motivation (1)						1
High innovativeness leads to low well-being (D) (8)	**2**	**3**	**2**			**1**
Too much development exhausts (5)	1	2	2			
Development feels as a demand (2)	1					1
Development creates anxiety for some people (1)		1				
Low innovativeness leads to high well-being (G) (1)		**1**				
Old routines make life easy (1)		1				
Low innovativeness leads to low well-being (H) (4)	**2**	**1**				**1**
Lack of variance is boring (2)	1	1				
Having no voice/power feels bad (2)	1					1

Notes: d = director; tl = team-leader; e = employee; K = knowledge intensive work; L = labour-intensive work; symbols C, D, G, H refer to Figure 1; bold data signifies the row of total scores (sums of the category)

Table III. Descriptions of the links from innovativeness to well-being

Their model also proposed that people may perceive high levels of developmental activities as a demand (D), thus reducing well-being at work. This perception was present in the data, but less than the view of innovativeness as a resource.

The link between low well-being and high innovativeness (link E), was found in almost all interviewed groups: team-leaders in the knowledge-intensive organisation were the only group of interviewees who did not mention this link. This link is an addition to the Huhtala and Parzefall (2007) model and the JD-R model (Bakker and Demerouti, 2007, 2014) in the sense that negative circumstances, i.e. demands, may produce positive outcomes. This does not imply that demands should be intentionally induced, as the perception of low well-being leading to low innovativeness is more prevalent, but that in circumstances of low well-being, renewal could be presented as a feasible way out of the current situation.

The theoretical model (Huhtala and Parzefall, 2007) proposed that well-being and innovativeness may form self-enhancing cycles. A cycle can develop if a positive two-way feedback exists. Our paper gives preliminary support for the theoretical cycles, as it shows that the necessary links in the theoretical cycles are perceived as plausible. For instance, people may be motivated to innovate, as they see it leading to improved well-being, and they may be motivated to enhance each other's well-being because they see that it may lead to higher innovativeness. This two-way motivational relationship may lead to a self-enhancing cycle.

Although separate quotations described similar factors (power and praise) as both causes and outcomes, none of the informants described a full cycle of well-being affecting innovativeness and vice-versa. This could be because the interview questions

were focused on the simple connections between the two. Also, complete cycles may be long-term phenomena, making them more difficult to perceive. Most likely, the cycles are not clear and simple, but rather complex and systemic. For instance, the same activity may be perceived as increasing well-being by some employees but as decreasing well-being by others (Huhtala and Parzefall, 2007). Our study proposes how to communicate these issues when supporting of forming of virtuous cycles. Future research should look for evidence of whether these cycles actually take place, and how strong the two-way positive feedbacks are.

This paper also investigated how participants describe the links between well-being and innovation. Regarding the consequences of innovativeness on well-being, people most often mentioned the opportunity to influence one's own work. Regarding the effect that well-being has on innovativeness, people often mentioned active encouragement and praise as the mechanism behind this link. It seems that very few differences existed among organisational levels or the types of organisation in their views about the main relations of well-being and innovativeness. As different organisational levels share these perceptions, the perceived value of improving one to achieve the other should be clear and, therefore, easily communicated.

An interesting finding was that directors in particular mentioned the impact of low innovativeness on well-being (high and low). Perhaps their, more than others', work responsibilities involve thinking about the lack of renewal. Similarly, directors perceived innovativeness as a demand, a factor that decreases well-being. The requirements for development may be most challenging for managers, as rapid change increases the pressures on them in particular (Clarke, 2004). The other two groups, employees and team-leaders, may still see innovativeness as something extra and low innovativeness being the normal state. This may be particularly true in the public sector (Bysted and Jespersen, 2014). Possibly the front-line employees still do not perceive their opportunities to innovate; according to the current findings, these should be pointed out to them.

Limitations

Some limitations diminish the generalisability of current findings to everyday practices. First, this is only a small step in assessing the cyclical relationship between well-being and innovativeness. This paper shows that a reciprocal motivational relationship between well-being and innovativeness is plausible, and locates the potential trigger points for a cycle. More research, e.g. longitudinal quantitative studies, is needed.

Second, two organisation types and three organisational levels were included, but surely other moderating factors exist that could affect the perceptions about the links. For example, managerial style, national culture or group processes may affect whether the links are seen as positive or negative (Janssen *et al.*, 2004). In all, this paper focused on innovativeness as a result of generic job characteristics, leaving individual or organisational variables with less attention.

Additionally, a presumption that innovativeness is always something to pursue, something valuable and desired, was entertained. Nevertheless, there has been criticism about the innovation imperative, the obligation to be innovative (Jordan, 2014).

Practical and academic implications

Renewal of working processes, products and services involves letting go of old routines and learning new ones. For practitioners, our results give arguments and terminology to use in training and communication when motivating employees to exert effort and engage in innovation activities.

The view that innovativeness leads to increased well-being and the view that existing well-being enhances innovativeness are both plausible. Therefore, employees may accept the demands to innovate more willingly, if they first see that efforts are made to improve well-being at work. But a perceived prospect of increased well-being can also be used as an argument to persuade employees to innovate. The expectancy theory (Vroom, 1964) states that factors which actors perceive as valuable, are motivating. Our findings show what kinds of issues employees actually do and do not find valuable and motivating, for example, none of the informants suggested that employees ought to be paid more for renewing their work. The motivational trigger points found in this study are factors that people find meaningful and important *per se*, for their own value. These kinds of factors arouse internal motivation as they satisfy basic human needs (Deci and Ryan, 2000).

According to De Leede and Looise (2005) human resources (HR) function (including activities such as selection, training, job design, appraisal and rewarding) can support innovativeness in the organisation on two levels: it can help the organisation as a whole to become an innovative organisation, and it can support the stages of specific innovation processes. When innovativeness is a strategic target of the organisation, it has to penetrate also all the HR practices: for example, persons with a positive attitude towards change should be recruited and rewarded to indicate that renewal is desired for; job descriptions and work load should be designed to include enough time and chances for renewal; the amount of change should be focused and restricted to the essential issues. And most importantly, these practices should be communicated clearly and consistently as people find them motivating.

Applied specifically to human resources development (HRD), when employees and managers take part in innovativeness training (such as how to manage innovation and R&D processes), they ought to be trained these motivational points as well: to express and spread a positive attitude towards renewals and change both in their discourse as well as in their actions; to restrict and focus the amount of change at a time; to actively allocate resources and time for renewal of work and processes; and to highlight and promote the opportunities to influence one's work. This is to support both the innovativeness of the organisation and the stages of specific innovation processes.

Overall, this paper gives structure to conversations between employees and leaders: these are the themes to discuss to get valuable information about employees' motivational triggers. The data show that a single factor may be perceived to be linked to different outcomes (e.g. innovativeness may lead to anxiety or enthusiasm, and time pressure may result as low or high innovativeness, see Tables II and III) and different antecedents may lead to same outcome (e.g. voluntary participation and demands to innovate may both be connected to high innovativeness). Therefore, it is crucial for the leaders to find out how their employees perceive these issues and then to adapt their communication to be as motivating as possible for their own personnel.

Academically, this gives future research more scope to search for empirical evidence of the complete cycles between well-being and innovativeness. In addition to previous

models, this paper presents new routes for the cycles to operate. If the stakeholders perceptions are viewed together, a complicated structure how these two phenomena may be linked and affect each other emerges. This paper gives structure to observe and study the complex cycles longitudinally. This paper also gives structure to future surveys aimed to search for evidence of these links, for example, when evaluating the impact of a project targeted to improve well-being or innovativeness. Future research should search for empirical evidence that the points found in this paper are the most effective places to start the desired cycles between innovativeness and well-being at work.

References

Amabile, T.M., Barsade, S.G., Mueller, J.S. and Staw, B.M. (2005), "Affect and creativity at work", *Administrative Science Quarterly*, Vol. 50 No. 3, pp. 367-403.

Anderson, N., De Dreu, C.K.W. and Nijstad, B.A. (2004), "The routinization of innovation research: a constructively critical review of the state-of-the-science", *Journal of Organizational Behavior*, Vol. 25 No. 2, pp. 147-173.

Anderson, N., Potocnik, K. and Zhou, J. (2014), "Innovation and creativity in organizations: a state-of-the-science review and prospective commentary", *Journal of Management*, Vol. 40 No. 5, pp. 1297-1333.

Anderson, N. and West, M.A. (1998), "Measuring climate for work group innovation: development and validation of the team climate inventory", *Journal of Organizational Behavior*, Vol. 19 No. 3, pp. 235-258.

Bakker, A.B. and Demerouti, E. (2007), "The job demands-resources model: state of the art", *Journal of Managerial Psychology*, Vol. 22 No. 3, pp. 309-328.

Bakker, A. and Demerouti, E. (2014), "Job demands-resources theory", in Chen, P.Y. and Cooper, C.L. (Eds), *Work and Well-Being: A Complete Reference Guide*, Vol. 3, John Wiley and Sons, Chichester, pp. 37-64.

Bysted, R. and Jespersen, K.R. (2014), "Exploring managerial mechanisms that influence innovative work behavior. Comparing private and public employees", *Public Management Review*, Vol. 16 No. 2, pp. 217-241.

Clarke, J. (2004), "Dissolving the public realm? The logic and limits of neoliberalism", *Journal of Social Policy*, Vol. 33 No. 1, pp. 27-48.

De Jonge, J., Spoor, E., Sonnentag, S., Dormann, C. and van den Tooren, M. (2012), "Take a break?! Off-job recovery, job demands, and job resources as predictors of health, active learning, and creativity", *European Journal of Work and Organizational Psychology*, Vol. 21 No. 3, pp. 321-348.

De Leede, J. and Looise, J.K. (2005), "Innovation and HRM: towards an integrated framework", *Creativity and Innovation Management*, Vol. 14 No. 2, pp. 108-117.

Deci, E.L. and Ryan, R.M. (2000), "The 'what' and 'why' of goal pursuits: human needs and the self-determination of behaviour", *Psychological Inquiry*, Vol. 11 No. 4, pp. 227-268.

Demerouti, E. and Bakker, A.B. (2011), "The job demands-resources model: challenges for future research", *Journal of Industrial Psychology*, Vol. 37 No. 2.

Demerouti, E. and Cropanzano, R. (2010), "From thought to action: employee work engagement and job performance", in Bakker, A. and Leiter, M. (Eds), *Work Engagement: A Handbook of Essential Theory and Research*, Psychology Press, Hove, pp. 147-163.

George, J. and Jones, G. (2005), *Understanding and Managing Organizational Behavior*, Pearson Prentice Hall, NJ.

Hakanen, J., Perhoniemi, R. and Toppinen-Tanner, S. (2008), "Positive gain spirals at work: from resources to work engagement, personal initiative and work-unit innovativeness", *Journal of Vocational Behavior*, Vol. 73 No. 1, pp. 78-91.

Hakanen, J. and Roodt, G. (2010), "Using the job demands-resources model to predict engagement: analysing a conceptual model", in Bakker, A. and Leiter, M. (Eds), *Work Engagement: A Handbook of Essential Theory and Research*, Psychology Press, Hove, pp. 85-101.

Huhtala, H. and Parzefall, M. (2007), "A review of employee well-being and innovativeness: an opportunity for a mutual benefit", *Creativity and Innovation Management*, Vol. 16 No. 3, pp. 299-306.

Hüttermann, H. and Boerner, S. (2011), "Fostering innovation in functionally diverse teams: the two faces of transformational leadership", *European Journal of Work and Organizational Psychology*, Vol. 20 No. 6, pp. 833-854.

ISCED (2011), *Operational Manual Guidelines for Classifying National Education Programmes and Related Qualifications*, ISCED.

Janssen, O. (2003), "Innovative behavior and job involvement at the price of conflict and less satisfactory relations with co-workers", *Journal of Organizational and Occupational Psychology*, Vol. 73 No. 3, pp. 347-364.

Janssen, O. (2004), "How fairness perceptions make innovative behavior more or less stressful", *Journal of Organizational Behavior*, Vol. 25 No. 2, pp. 201-215.

Janssen, O., Van de Vliert, E. and West, M. (2004), "The bright and dark sides of individual and group innovation: a special issue introduction", *Journal of Organizational Behavior*, Vol. 25 No. 2, pp. 129-145.

Joensuu, M. (2014), "Job control as a predictor of mental and cardiovascular health: a prospective multicohort study", Doctoral Thesis, University of Helsinki, available at: http://urn.fi/URN:ISBN:978-952-261-496-4

Jordan, S. (2014), "The Innovation Imperative. An analysis of the ethics of the imperative to innovation in public sector service delivery", *Public Management Review*, Vol. 16 No. 1, pp. 67-89.

King, E., de Chermont, K., West, M., Dawson, J. and Hebl, M. (2007), "How innovation can alleviate negative consequences of demanding work contexts: the influence of climate for innovation on organizational outcomes", *Journal of Occupational and Organizational Psychology*, Vol. 80 No. 4, pp. 631-645.

Länsisalmi, H. and Kivimäki, M. (1999), "Factors associated with innovative climate: what is the role of stress?", *Stress Medicine*, Vol. 15 No. 4, pp. 203-213.

Miles, M.B. and Huberman, A.M. (1994), *Qualitative Data Analysis*, SAGE, Thousand Oaks, CA.

Seeck, H. (2008), *Johtamisopit Suomessa. Taylorismista Innovaatioteorioihin (Management Models in Finland – From Taylorism to Innovation Theories*), Helsinki University Press, Helsinki.

Shipton, H., West, M., Parkes, C., Dawson, J. and Patterson, M. (2006), "When promoting positive feelings pays: aggregate job satisfaction, work design features, and innovation in manufacturing organizations", *European Journal of Work and Organizational Psychology*, Vol. 15 No. 4, pp. 404-430.

Vroom, V.H. (1964), *Work and Motivation*, Wiley, New York, NY.

Warr, P. (1999), "Well-being and the workplace", in Kahneman, D., Diener, E. and Schwarz, N. (Eds), *Well-Being: The Foundations of Hedonic Psychology*, Russel Sage Foundation, New York, NY, pp. 392-412.

West, M.A. and Farr, J.L. (1990), "Innovation at work", in West, M.A. and Farr, J.L. (Eds), *Innovation and Creativity at Work*, Wiley, Chicester, pp. 3-13.

Yuan, F. and Woodman, R. (2010), "Innovative behavior in the workplace: the role of performance and image outcome expectations", *Academy of Management Journal*, Vol. 53 No. 2, pp. 323-342.

Zhou, J. and George, J. (2001), "When job dissatisfaction leads to creativity: encouraging the expression of voice", *The Academy of Management Journal*, Vol. 44 No. 4, pp. 682-696.

Further reading

Bakker, A.B., Demerouti, E. and Verbeke, W. (2004), "Using the job demands-resources model to predict burnout and performance", *Human Resource Management*, Vol. 43 No. 1, pp. 83-104.

West, M. (2000), "Creativity and innovation at work", in Vartiainen, M., Avallone, F. and Anderson, N. (Eds), *Innovative Theories, Tools, and Practices in Work and Organizational Psychology*, Hogrefe and Huber Publishers, Göttingen, pp. 1-14.

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