

Unlocking Effects Of Psychological Mechanisms Enhancing Innovative Work Behavior

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Abstract

Being innovative is manifestation of the interaction between individual perceptions and an external universe, and the psychological underpinnings which shape it are extremely intricate. It is fundamentally a personal choice, a function of the underlying psychological processes and has increasingly gained acceptance as an important aspect for fair understanding of ways to help in sustaining employees with their innovative approach. This review explores the psychology of why individuals choose to behave innovatively, despite the challenges involved. It also examines the mechanism through which the psychological processes buffer the negative impact of innovative work behavior. This paper integrates a wide-ranging preceding literature on psychological perspective of innovative behavior in terms of motivation (intrinsic motivation, creative self-efficacy) and affect (moods and emotions) in one schema. It throws light on discrepancies in the literature besides providing future prospects of research.

Introduction

Innovative work behavior, as old as mankind, is inimitable human trait which has transformed the world and is a key driver of growth in today's dynamic global landscape. Aligned with Theory of Individual Creative Action by Ford, 1996 individuals choose to behave innovatively despite the challenges involved or select the safer option of taking habitual route. Opting to behave innovatively and sustaining this drive is essentially a function of the underlying psychological processes. Psychological underpinnings have increasingly gained acceptance as an important aspect for sustaining innovative work behavior (henceforth referred as IWB) of employees. While decomposing options into its components, individuals analyze possible alternatives, respective outcomes, likelihood of risks involved and preferences before making a choice. Recursive psychological mechanisms motivation, cognition and affect influence instigation, course, and intensity linked behavior directed towards pursuit of chosen goal (Kanfer & Chen, 2016; Vancouver, 2008; Zhou & Shalley, 2011). Innovative behavior encompasses human agency, and better understanding of mechanisms

underlying an employee's decision to innovate will give a better insight of how an individual might consistently engage in innovative performance (Choi et. al, 2011; Newman et. al.; 2014; Yuan & Woodman, 2010; Ramos et al., 2016; González-Romá, & Hernández, 2016). This review took shape as response to the fundamental question: what is the buffering and boosting psychology behind an individual choosing to behave innovatively and sustain this behavior despite the odds? We argue that these psychological mechanisms also trigger subsequent behavior due to which individuals want to invest more in being innovative.

Motivational underpinning as a psychological process has dominated the literature as mechanism for individual innovation (Zhang & Bartol, 2010; Hammond et. al., 2011; Zhou & Shalley, 2008). Affect is recognized as a critical predictor of human behavior, but scholarly attention is contradictory and needs empirical support (Liu & Perrewe, 2005; Kark Smollan, 2006). To comprehend innovative behavior thoroughly, the study of feelings involved is also needed. The predominant part of sentiment is obscured to some extent in management (Brief

& Weiss, 2002), and in creativity literature (Venkatesh, 2000; Choi et al., 2011).

The present approach considers motivational and affective outlook of IWB thus providing a balanced view of psychological processes involved both at the start and end (to help normalize the negative consequence) thereby ushering the next cycle of the innovation process. It is based on the premise that innovative action is influenced not merely by motivation but also by emotive progressions (Brief & Weiss, 2002; Huy, 2002).

Method

This study involves reviewing articles which explore how the above three psychological aspect relate with creativity and/or innovation. The review is as per the Tranfield et al., 2003 guidelines for methodical review in the management arena. Here the Section 1 reflects need identification. The second section entails the actual review comprising of search terms; searching and then selecting them; and finally drawing conclusions.

Review Process Description: data-collection

Comprehensive databases of Scopus, EBSCOhost, Emerald, ScienceDirect, and databases like google scholar were referred to while searching for selecting the papers (Having high h5 index). Search was done using various Boolean combination: “innovative work behavior”, “(IWB)”, “employee innovative behavior”, “individual innovation”, “creativity”, “cognition”, “motivation”, “affect”, “mood” and “psychology”. The article included papers in 20 years span from 1998 to 2021. Articles which were not aligned with our objective were eliminated. Only those articles which were published in peer-reviewed journals with high impact factor were considered (Podsakoff et al., 2005), non-English articles were not considered; research articles which were related and had inferences for IWB; probed the various psychological perspectives in relation with IWB. Few of the journals referred to in the review includes “Academy of Management Journal”, “Academy of Management Review”, “Journal of Organizational Behavior”, “Journal

of Management”, “Journal of Occupational & Organizational Psychology”, “Journal of Applied Psychology”, “Annual Review of Psychology” etc.

Data Extraction Procedure

A 4-step process was selected to include articles that met with inclusion criteria: Identification, Screening, Eligibility and Inclusion. Of the total articles appeared through database searching, the redundant were removed, articles, which were not relevant, were rejected, and finally those remaining articles, which were left after the rigorous filtering, were reviewed. Post the elimination, 320 articles from reputable journals were included.

Motivational Approach to Innovative Work Behavior

One of the most prominent focus of study on IWB has been on motivation as the key driver of Innovative behavior (Bledow et al., 2009; De Dreu et al., 2011; Byron & Khazanchi, 2012). ‘**Componential theory of Creativity**’ (Amabile, 1996) recommended intrinsic motivation as a medium through which individual and situational factors facilitate innovative performance. Through motivational mechanisms individual and contextual factors impact course, intensity, focus and tenacity of innovativeness, and this is one of the most influential perspectives while explaining innovative outcomes (Schuhmacher & Kuester, 2012; Hammond et al., 2011; Knol & Linge, 2009). Motivation in essence provides justification of voluntarily seeking an outcome which will maximize intrinsic reward and is delimited by three core psychological mechanisms of arousal (energizing to get over inertia), direction (regulating one’s behavior), intensity (degree of need and persistence to achieve the goal) (Grant & Berry, 2011; Curral & Marques-Quinteiro, 2009). **Self-Determination Theory** by Gagne & Deci, 2005 posits that intrinsic motivation reflects the satisfaction of individual’s basic needs of autonomy, competency and relatedness. As per Grouzet et al., 2004, enhanced state of motivation on completion of cycle of innovation process due to fulfilment of ‘basic need satisfaction’ of autonomy, competence and

relatedness would be likely to prove appealing to the individuals and they will be interested in the same tasks to gratify their psychological needs. This also at times leads employees to seek out original and new experiences which appeases their sense of autonomy which will further stimulate them to be engrossed in their respective job-roles, thereby leading to enhanced motivation (Deci & Ryan, 2012).

Intrinsic interest transmitted as intrinsic motivation sparks employee thinking and efforts, instigating them to explore potentially more innovative possibilities enabling them to solve heuristic issues of creative tasks and then apportioning energy and resources such as time, labor, attention etc. to achieve it (Amabile, 1997; George, 2007; Dewett, 2007; Kanfer et al., 2017). Motivation is central mechanism; paving way for those behavioral patterns which makes individuals happy enhances intrinsic motivation and in turn reinforces them to replicate the same behavior (Lavigne et al., 2009; Devloo et al., 2016, Kanfer & Chen, 2016). Motivation fosters sense of accomplishment which in turn spurs employees to acquire mastery when engaging in demanding activities (Ryan & Deci, 2000). Motivation also functions to enhance the attention such that employees who are highly motivated are keener to focus on being creative (Liu et al., 2016). Intrinsic motivation involves both a sense of autonomy as well as strong inclination or interest towards one's work (Ryan and Deci 2000b; George 2007).

Approach motivation i.e. attaining positive results instead of avoidance motivation (avoiding negative outcomes) is more strongly linked to innovative performance (Mehta & Zhu, 2009; Elliot et al., 2009; Friedman & Forster, 2002). Avoidance motivation encourages individuals' perseverance (Roskes et al., 2012), which has positive influence on innovative initiatives. To be persistent requires extra efforts and plays an important part in keeping the individual involved and engrossed in the given job (Oertig et al., 2013; Baas et al., 2011; Eysenck et al., 2007). Literature provides empirical validation that negative (avoidance approach) rather than positive motivation strongly induces individuals to be creative, though the downside being that the ensuing performance results in depletion of internal resources (De Dreu & Nijstad, 2008).

Intrinsic motivation is the allied interest, enjoyment and satisfaction while doing tasks (Ryan & Deci, 2000) and extrinsic motivation is regulated by peripheral environment such as rewards/compensation etc. Both types of motivation are linked with innovation (George & Zhou, 2002; Taggar 2002), intrinsically motivated individuals will have a stronger influence towards sustaining innovative behavior and is likely to produce more creative output than extrinsically motivated work (Devloo et al., 2015). McClelland's (1985) study segmented intrinsic motivation into three categories: achievement need, need for power and affiliation need. Achievement need translates into a desire to excel and achieve success and feelings of personal accomplishment. Power need translates into strong inclination to control and influence others. Such people are keen to attain reputation and have a tendency to pursue their own individualistic aspirations (Hon and Rensvold 2006). The need for affiliation reflects a social desire to connect with others, are usually quite helpful in their relationships.

Innovation literature has thus far examined not only direct effect of motivation on innovative behavior but the indirect effect through the dispositional factors has been the research topic for several studies. Most studies have investigated the role of motivation as antecedent or mediator and what has been lacking is motivation as a consequence of innovative disposition as well as dynamics of motivation and IWB at various stage of the innovative cycle (Devloo et al., 2016). Also the non-recursive effect of intrinsic motivation and creative outcomes lacks clarity and calls for further research (Sousa & Coelho et al., 2011). The next section reviews consider both intrinsic as well as extrinsic motivations as well as the contextual factors in which motivation is the primary psychological process leading to innovation.

Intrinsic Motivation- Hsiao et al., 2017 successfully proved the significant positive effect that intrinsic motivation has on service innovation. Study by Hon & Leung, 2011 highlights that intrinsic motivation is central to promoting employee's innovation capability in service-based firms. Intrinsic motivation has received strong empirical support as antecedent

of individual creativity (Amabile et al., 2005; Hennessey & Amabile, 2010; Shin & Zhou, 2003; Zhang & Bartol, 2010; De Stobbeleir et al., 2011; Rego et al., 2012). Zhang & Bartol, 2010 highlighted the mediating role of intrinsic motivation employee innovativeness and empowering leadership. Motivation, both intrinsic and extrinsic, moderate between Big Five Factor model and innovative performance such that the innovative behavior would be stronger when degree of motivation would be higher. Prabhu et al., 2008 highlighted that intrinsic motivation is a trait with a positive relation to creativity. Intrinsic motivation spurs inclination to experiment, be cognitively flexible and also promotes flexible, divergent thinking and enables individuals to sustain their innovative behavior (George, 2007; Grant & Berry, 2011). Dewett, 2007 explicated that intrinsic motivation influences creative performance by ;marked increase in willingness to take risks.

Extrinsic Motivation- Incentives and rewards is not considered to be effective enablers of innovative intents. Over-justification effect (Lepper et al., 1973): rewards motivate task performance for the sake of the reward instead of innate interest in the task is referred as one of the premises to explain the detrimental effect of rewards. Some researchers argue that rewards have negative influence on perceived self-determination (Deci & Ryan, 1985), and sometimes fixation on reward inhibits exploring better ways to complete the task (Amabile, 1996). A competing but contrary perspective is the fact that rewards make the goal that much more attractive provoking individuals to better the ways to perform the assignment in a better fashion and achieve the goal. This is aligned with work engagement theories which posit that this dedication and energy leads to piquing interest (González-Romá et al., 2006). There are studies which very strongly recommend the positive relation between extrinsic rewards driven motivated employees and innovative performance. As per investigation by Eisenberger & Aselage 2009, extrinsically motivated individuals seek accomplishment in work, opt for challenging and complex assignments, and find meaning and satisfaction in work. There is yet another stream of theories such as **Goal Phase Theory** and **Resource Allocation Theory** which focus on the reward

features to understand the relation rewards, motivation and performance (Gollwitzer, 2012).

Byron & Khazanchi, 2012 suggested that rewards increase creativity if it is perceived that rewards are subject to creative activities and rewards work better as instigators of innovativeness in cases of higher autonomy. Some of the meta-analysis posit that external rewards system is a driver of superior performance including innovative actions (Garbers & Konrad, 2014; Cerasoli et al., 2014). Sung & Choi, 2009 provided link between Big 5 model and rewards, positing that due strong extrinsic motivation had a positive influence on the relation between openness and creativity. Extrinsic motivation has an effective pull on those who are driven by incentive, for being innovative in their respective job (Chen et al., 2010). Training interventions meant for stimulating the innovative potential often interacts with rewards to enhance innovative initiative resulting in new product outcome (Burroughs et al., 2011). Employees high on creative self-efficacy exhibit innovative performance when offered extrinsic rewards (Malik et al., 2015). Extrinsic rewards has a positive influence on the intrinsic motivation of employees with locus of control which is internal, resulting in enhancement of their creative performance (Malik et al., 2015). Baer et al., 2003 posits that extrinsic rewards is positively associated with IWB for those with adaptive cognitive style working on non-complex jobs. Both extrinsic and intrinsic motivation are influenced by intangible rewards for being innovative (Yoon et al., 2015).

Prosocial motivation- It is a motivational dimension which amplifies link between intrinsic motivation and IWB (Grant & Berry, 2011; Li & Bai, 2015). Intrinsic motivation fuels internal satisfaction while doing the tasks, extrinsic motivation is function of engagement with tasks for external incentive, but prosocial motivation inspires innovativeness when its results are useful to mankind (Bolino & Grant, 2016; Forgeard & Mecklenburg, 2013). Prosocial motivation is born out of a keen wish to help others (Grant, 2007) and is positively related to innovative achievement has three dimensions: ‘self-regulation’, ‘goal directedness’, and ‘temporal focus’ (Grant, 2008). Prosocial motivation suggests that individual and situational precursors may have

impact on prosocial motivation and successively innovative intent (Bolino & Grant, 2016; Grant & Berg, 2011). This is supported by various studies, one of which posit that individuals high on emotional intelligence exhibit higher levels of generosity which stimulates vigour for innovative disposition (Carmeli et al., 2014).

Supervisors- Innovative behavior's social aspect reflects in employees' willingness to act innovatively is a function of their perception of area of influence (Janssen, 2004). So if an employee perceives being innovative will be perceived positively or will add value, it will motivate the innovative intent (Yuan & Woodman, 2010). Supervisor support enhances employee's innovative attempt (Anderson et al., 2014; Rosing et al., 2011) through intrinsic motivation. Though recent advances refute this simplistic view suggest that the relation is more complex and needs further examination. Chen et al., 2016 suggest that mediated by intrinsic motivation, supervisors have less influence in promoting innovative behavior of subordinates with low self-efficacy or high internal locus of control. Janssen, 2000 highlighted that employees' IWB and perceived influence in the workplace is moderated by supervisor supportiveness. Employee innovative behavior is also enhanced by feedback from supervisors which has an effect of counterbalancing possible dysfunctional effects from skill variety and time pressure (Noefer et al., 2009). The relation, curvilinear inverse U-shaped between idea generation and implementation is moderated by perceived supervisor support (Škerlavaj et al., 2014). Within supportive supervisory context, both positive and negative moods lead to employees being more creative following complimentary mechanisms (George & Zhou, 2007). Zhang et al., 2014 researched the relation of abusive supervision on innovative behavior mediated by intrinsic motivation.

Leadership- Extensive research on leadership is conclusive on the essentiality of leaders in promoting innovative behavior at individual level (Hemlin, 2006; Denti & Hemlin, 2012; Tierney, 2008). From the leadership standpoint, the motivating feature of leaders' empowering styles and behaviors has been the mainstay of research. Leaders can project a vision of future which excites the followers, duly supported by empowering of the followers is an inspiring force. Transformational leaders inspire positive

participation of employees in the complex phenomena of transforming the organization (Menon, 2001). Transformational leaders succeed in raising logical curiosity of employees spurring them to think of novel takes with high self-reinforcement (Wang et al., 2014). Prior research (Kark et al., 2003; Kirkman et al., 2009), have theorized transformational leadership as a group-level phenomenon. If the leaders are encouraging and informational, employees' motivation would likely be on the higher side and he would be more inclined to be innovative. If the leader is controlling, employees' motivation would tend to be low, and this would in turn reflect in a lower level of motivation. Research by Yidong & Xinxin, 2013 validated that perception of ethical leadership and employees' innovative behavior is mediated by intrinsic motivation. Study by Gumusluoglu & Ilsev, corroborated that transformational leadership influences employees' innovative streak through psychological empowerment; self- presentation (Rank et al., 2009); organizational autonomy and organizational support (Jung et al., 2008); psychological empowerment (Pieterse et al., 2010); team intrinsic motivation (Wang et al., 2016); organizational innovation (Jung et al., 2003). Rego et al., 2011 provided proof of authentic leadership predicting employees' innovativeness, directly as well as mediated by employees' psychological capital (Rego et al., 2011). Wang & Cheng, 2010 examine the correlation between benevolent leadership and innovative behavior moderated by role identity and job autonomy.

Leader Member Exchange- LMX received a lot of attention in recent decades as an enabler of individual innovative behavior (Hammond et al., 2011). The fundamental premise of LMX theory is the relation between leader and a follower in course of social exchanges (Henderson et al., 2009). LMX leads to emotional bond between supervisor and the employee which further motivates the employee to be more innovative (Dhar, 2016). Employees benefit from a high quality LMX by the way of leader patronage, greater access to required resources and information, leeway to do job with a greater degree of autonomy and focus on non-routine tasks (Thomas & Lankau, 2009). Strong positive relation between LMX and innovative behavior has been supported widely by various research (Wang et al., 2015; Sanders et al.,

2010). Study by Kim & Woo, 2017 highlight the positive influence of LMX on both innovative performance and job engagement. Higher the job autonomy stronger is the relation between LMX and service innovative behavior (Garg & Dhar, 2017). LMX has been found to have positive influence on innovative efforts moderated by job autonomy (Volmer et al., 2012); energy (Atwater & Carmeli, 2009); psychological empowerment and felt obligation as mediators (Pan et al., 2012; Schermuly et al., 2013). One of the research indicate higher correlation of LMX with creativity than LMX and innovative behavior (Carnevale et al., 2017) and this differential effect of LMX needs further research.

Supportive co-workers- The fact that co-workers enhance employees' innovative motivation is vouched by multiple studies (Chiaburu & Harrison, 2008; Chen & Klimoski, 2003; George, 2007; Zhou, 2003; Madjar, et al., 2002). Support by co-workers is instrumental in stimulating innovative (Hon, 2011). As per the study by Zhou & George, 2001 positive support from co-workers resulted in channeling of dissatisfaction into innovative efforts by committed employees. Some of the studies conclude that the innovativeness of coworkers enrich creativity within the team by extending platform for learning of new work related processes and encourage innovative attempts (Shalley & Perry-Smith, 2001; Zhou, 2003).

Psychological Empowerment- In motivation context, empowerment is broadly classified into three ways: leadership, structural, and psychological (Sun et al., 2012; Leach et al., 2003; Menon, 2001). When people feel empowered at work, it reflects an environment conducive of cultivating personal relations, making them better equipped to deal with organizational interactions and expectations (Alge et al., 2006). Empowered employees are likely to be less encumbered by constraints, and positive outcomes are expected to occur (Spreitzer, 2008). Psychological empowerment helps in increasing intrinsic task motivation, influencing employee attitudes and performance (Hill et al., 2014). Psychologically empowered employees are better suited to take up challenging assignments because they find it to be more meaningful (Bysted, 2013). They are also disposed to anticipate problems and act self-reliantly in the face of risk or uncertainty and

have a higher probability of displaying higher intent for being innovative (Spreitzer, 2008). Such employees also tend to be persistent and resourceful in the face of obstacles to work goal accomplishment (Spreitzer, 2008). Empirical research have conclusively proved a strong link between empowerment and innovative performance (Singh & Sarkar, 2012). Zhang & Bartol, 2010 indicate that psychological empowerment impacts creativity directly through creative process engagement and also indirectly through intrinsic motivation. This study elucidates the link between psychological empowerment and intrinsic motivation. Quñones & De Witte (2013), explained psychological empowerment as personal resources in terms of the JD-R model. This study corroborates that personal resource (psychological empowerment) is a mediator between key job resources and work engagement. Laschinger et al., 2009 proposed mediator role of work engagement plays through which empowerment affects being effective in work especially in light of experience and generational differences in nurses. Knol & Linge (2009) confirmed that both types of empowerment (structural and psychological) lead to innovative behavior mediated by psychological empowerment.

Growth Need Strength- The construct from job design literature (Hackman & Oldham, 1976), is a measure of an individual's need to grow and develop within the job-sphere. Such individuals prefer to acquire new knowledge, have higher drive, and endeavor to be more effective in their work arena. Growth need strength is an important factor for the intent of being innovative (Shalley et al., 2009). It is positively related to openness to experience which strongly influences innovative behavior (De Jong et al., 2001). Growth need strength is unique construct in its contribution employee innovativeness which is distinct from and beyond personality, motivation and intellectual inclination by interacting with supportive job context and job complexity (Shalley et al., 2009).

Harmonious Passion- It is emotional process in which self-directed internalization of tasks harmonizes with self-identity thus steeping individual autonomy alignment and helping in balancing the engagement in job with that of happiness and sense of freedom (Liu et al., 2011). The two central characteristics,

integration of task with self-identity; self-enjoyment making the activity enjoyable and produces a sense of freedom choice to pursue the task at hand (Vallerand et al., 2003; Vallerand & Miquelon, 2007). Harmonious passion has been conceived as causal motivational outlet which is allied to the extent of autonomy in one's enthusiasm (Vallerand et al., 2006). Research supports the inference that innovative achievement is maximized by individuals' passion towards the task (Amabile & Fisher, 2009). Studies testify that harmonious passion rouses positive affect (Philippe et al., 2010). Employees experiencing fair degree of autonomy and are on top of their work processes and outcomes experience increased innovative inclinations (Amabile & Mueller, 2007).

Job Attitudes- High pressure jobs lead to stress and the ensuing psychological effort to dispel its negative effect results in employees expending more energy to be competent and concentrate on the tasks. Work engagement theories provide some clarity to the role of buffering resource in not only absorption in the work but also to be intrinsically motivated offsetting the stress of job demands (Gonzalez-Roma et al., 2006; Eisenberger et al., 2005; Sonnetag, 2003). As per **Role Theory** employee's perceptions of expected behavior is guided by expectations held both by the individual and by other people which guide employee behaviors (Tubre and Collins 2000; Wang & Cheng, 2010). As supported and highlighted by quite a few studies (e.g. Chang & Liu, 2008; Yuan & Woodman, 2010; George, 2007; Shalley, 2008; Unsworth et al., 2005) innovative behavior is also incited by the demands made by job which plays the role of prompt for employee innovative behavior. Inevitably, those jobs which are complex and challenging enhances propensity to be innovative, and employees tend to apply discretion and choose effective solutions to address the issues at hand (Unsworth et al., 2005). More is the complexity of job at hand, higher tend to be the motivation as individuals find more meaningfulness and also the excitement that comes with it (Shalley et al., 2004; Wang et al., 2014). Complexity of the work created a context favorable to creativity (Tierney & Farmer, 2004; Shalley et al., 2009). Furthermore Shalley & Zhou, 2008, Unsworth and Clegg (2010) and Ohly and Fritz (2010) showed that high work demands were positively related to innovation. To deal with performance

pressure employees try to exploit diversity of abilities, at time acquiring specialized skills as well (Eisenberger & Aselage, 2009).

Affect driven approach to Innovative Work Behavior

Substantial literature have proven link between affect and work behavior like with job satisfaction (Fisher & Noble, 2004; Judge & Ilies, 2004), negotiation (Barry et al., 2004), decision making (Au et al., 2003, Kuvaas & Kaufmann, 2004), proactivity (Fritz & Sonnetag, 2009; Bindl et al., 2012), work performance (Beal et al., 2005) and innovative behavior (Amabile et al., 2005). Affective states can be influenced and have been consistently linked to creativity (Bledow et al., 2013; Amabile et al., 2005; Brief & Weiss, 2002; Barsade & Gibson, 2007). Affect alludes to psychological states such as emotions and moods which influences cognition and action intent (Brief & Weiss, 2002; Elfenbein, 2007; Totterdell & Niven, 2012). Moods, last longer but not event specific (e.g., depression, cheerfulness), and emotions (e.g., anger, sorrow, joy) are duration wise shorter and focused on certain happening/situation or event (Baron & Tang, 2011). Amabile et al., 2005 highlighted that elation between employee's affective conditions with creative performance within organizational set up. Amabile et al. (2005) proposed the **Organizational affect-creativity cycle**. The authors theorized the affect-creativity relation is linear such that enhancing positive affect, results in increased creative inclination in the job context. The theory also provided evidence of four different patterns of influence that affect has on innovativeness- anecdotal; consequential; indirectly as well as simultaneously while in the process of innovative performance.

Affect refers both to dispositional inclinations for subjective feelings as well as event-generated inclinations which are temporary shifts in feelings due to specific events. Due to its continuity, innovative behavior is more likely to be aligned with stable dispositions. Thus, we focus on stable, dispositional affect in the present research. '**Affective events theory (AET)**' by Weiss & Cropanzano, 1996 is the seminal explanation of the connection between emotions and workplace behaviors. Core of AET is that human beings are emotional and that their behavior is guided by emotion. First of all,

affect shapes perception of external cues, thereby influencing cognition. Affect is dynamic, and the external environment cues it continuously, thereby influencing the affect to change accordingly as well (Bledow et al., 2013). Secondly, as per Broaden-and-build theory (Fredrickson, 2001, 2004) articulates that positive emotions lift people up, beef them with resilience, makes them creative and power them to optimal well-being. Empirical studies have upheld the views (Hakanen et al., 2008). Isen (2000, 2001) proposed that positive affect results in increase in a person's ability to organize ideas in multiple ways, thus positive affect enables cognitive processing, making it more efficient and thorough. Thirdly, '**Affect Infusion Model**' (Forgas & George, 2001) denotes that mood are able significantly influence information processing strategies to solve complex problems (Ashkanasy & Ashton-James, 2005).

The affective components of IWB are just recently being investigated, especially in the view that our knowledge as to the mechanisms through which the various affective states relate with individual's innovative performance and also interplay of affect and innovative behavior over time (Amabile et al., 2005). There is a vast body of research which focuses on mechanisms by which affect exerts its influence on innovative thinking, there is hardly any research on the reciprocity of innovative performance and affect (Rank & Frese, 2008). Apart from a handful of studies (e.g. Fong, 2006), there is a noticeable lack of research describing relation between affective ambivalence with IWB (Rank & Frese, 2008; Amabile et al., 2005).

Devloo et al., 2015 demonstrated that affective states and innovative behavior influence each other reciprocally. Sustaining optimum enthusiasm throughout an innovation process depends on the degree to which IWB stimulates motivation and positivity (Shalley et al., 2009). A large body of research work affirms that affective states influence both cognitive patterns as well as behavioral aspects (Forgas & George, 2001; Binnewies & Wörnlein, 2011; George & Zhou, 2002). Thus affect both functions as antecedent as well as consequence of IWB.

Affect as antecedent: Innovative behavior is particularly susceptible to both the disruptive and enhancing effects of emotions. Several studies identified that affect as an enabler of

IWB (Amabile et al., 2005; Madjar et al., 2002). Extant literature suggests that when employees enjoy positive experiences, they are likely to display better behavioral outcomes, such as innovative behaviors (Fredrickson, 2001). Research indicates that emotional valence is closely aligned with action penchant and has significant implications for individuals' motivation and behavior (Frijda, 1986; Isen, 2000). George & Zhou, 2001 investigated conditions, where job-dissatisfaction will increase the innovative behavior. Van Kleef et al., 2010 used emotions as social information model to explore contexts in which anger facilitates or hinders innovative response.

Affect as outcome: Innovative behavior is likely to have benefits as well as costs as outcomes. The demands of innovation differ from that of routine performance, as it entails initiative, risks, demands and coping up with high uncertainty (Janssen, 2003) and contextually, innovativeness can potentially be a resource or a demand at work, giving either a positive or a negative outcome (Anderson, & Gasteiger, 2007). Being innovative results in increase in workload, ambiguity, conflict and resistance etc. (Janssen, et al., 2004) due to which, there are affect-driven consequences of engaging in IWB (Anderson et al., 2014; Hennessey & Amabile, 2010; Zhou and Hoever, 2014). Devloo et al., (2016) examined interaction between IWB and perceived success to explain circumstances in which individual's innovative behavior is likely to lead them to experience enhanced positivity.

Earlier research examining the affective underpinnings of IWB categorized affect, mood, and emotion into two dimensions: positive and negative.

Positive Affect: Positive affect leads individuals to focus on positive outcomes like work engagement, which enhances their confidence to be able to perform the corresponding task, promoting greater effort towards task completion. It helps individuals engage with challenges (Oettingen et al., 2005). Isen & Reeve, 2005 suggested that positive affect increases intrinsic motivation and cognitive connections, leads to defocused attention and increases cognitive flexibility which effectively leads to a positive impact on IWB. In broaden and built theory, Fredrickson (2001) proposed that positive affect increases

scope of attention and cognition, which intensifies the innovative inclination. Positive emotion is an important element of innovation that stimulates a deeper engagement with the innovation process (Park et al., 2014). Positive psychological affect improves the chances of success of innovative initiative by enabling employees to develop cognitive processes to deal with setbacks, take calculated risks, and juggle experimenting with the routine work-load (Carmeli & Spreitzer, 2009; Cohen-Meitar et al., 2009).

Negative Affect: Some of the recent studies also suggest that innovative behavior of individuals is associated with negative affect (George & Zhou, 2002; Verhaeghen et al., 2005; Carlsson, 2002; Gasper, 2003; Kaufmann & Vosburg, 1997; Madjar & Oldham, 2002). Davis, 2009 posits that negative mood boosts innovative disposition on untimed tasks. Also there are studies which conclude that innovative behavior is a meaningful response to negative affect arising from high work stress (King et al., 2007). George & Zhou, 2001 hypothesized conditions under which negative affect in terms of job dissatisfaction lead to innovativeness. George & Zhou, 2007 explored when negative mood will stimulate innovative inclination with mood as input model theorizing that under some conditions, negative affect may support creativity and positive affect would tend to impede it.

Dual Tuning Affect: This model postulates IWB to be function of persistence as well as cognitive flexibility, and that dispositional constructs impact innovative behavior by their influence on persistence or flexibility, or both. Contemporary studies have started focusing on joint effect of positive and negative emotion on innovative behavior (George, 2011; Nijstad et al., 2010; De Dreu et al., 2008; Fong, 2006; George & Zhou, 2007; James et al., 2004). Studies indicate that positive mood states enhances creativity by augmenting flexibility, and activating negative moods enhances perseverance leading to increase in IWB (De Dreu et al., 2008). Positive mood helps with cognition required for generating ideas, though sense of well-being is likely to have a diminishing effect on efforts to solve complex issues, while negative moods has antagonistic effects on ease and flexibility which could hamper innovative ideation (Davis, 2009).

Positive moods are likely to enhance creative performance for tasks with a short and definite duration, whereas negative mood benefits untimed tasks (Davis, 2009). Bledow et al., 2013 explored the interaction of positive and negative affect on individual innovative behavior.

Research by Baas et al. (2008) substantiates that while positivity in affect enhances innovative potential, in conjunction with high levels of activation and in all probability, positive affect not combined with high levels of activation would inhibit intent to be innovative.

Moods: Moods are mild but long lasting psychological functions with high likelihood to influence IWB (Mumford, 2003; Brief & Weiss, 2002, Watson, 2000). Moods are typically depicted as 'positive' or 'negative'; 'activated' or 'deactivated'. As evidenced by De Dreu et al., 2008, activating moods like joy, anger, happy, upbeat, satisfied etc. stimulates more innovative performance than do deactivating moods like fear, sadness, disappointment, discouragement, anger, frustration etc. Research on the role of mood in innovative performance proposes contradictory evidence split between as some literature provides support to notion that negative moods foster creativity (Forgas, 2007; Gasper, 2003) while others vouch for positive moods as triggers for innovative response (Grawitch et al., 2003; Lyubomirsky et al., 2005). Kaufmann, 2003 compared negative and positive moods for potency in triggering innovative response.

Emotions: The relationship between emotion and IWB is both fascinating and puzzling areas of study (James et al., 2004; Rank et. al, 2004). Emotions are intense and transitory positive or negative affective discrete reactions which progresses to cognitive & behavioral outcomes when we are physiologically aroused (Brief & Weiss, 2002, Izard, 2007; Pirolo-Merlo et al., 2002). IWB seems to be charged up by affect wherein complex cognitive processes are shaped by, co- occur with, and shape emotional experience (Amabile et. al., 2005). Love (Yang & Hang, 2015); anger (Baas et al. (2011). Positivity enhances employees' expectations of success as well as the decision-making capability by recalling positive past emotional experiences which acts as a trigger promoting continued engagement in the action (Baumeister et al., 2007). The emotion-innovative behavior link has been systematically researched (Baas et

al., 2008; Forgas & George, 2001) yet remains inconclusive. Although positive emotion as a precursor of IWB dominates literature, yet recent reviews demonstrate constructive effects of negative emotion for cognition, judgments, motivation, and social behavior (Yang & Hung, 2015; Forgas, 2013; Akinola & Mendes, 2008; Gasper, 2003). Kiefer's (2002) investigation revealed wide variety of experienced positive emotions (including joy, hope, satisfaction, surprise, pride and relief) which reflects the persistence facet and negative emotions (such as frustration, anger, fear, disappointment and restlessness), reveals avoidance facet. Leung et al., 2014 offered new insights into emotion-innovative outcome link by specifying that emotions that benefit creativity may not be the same for all individuals, trait-consistent emotions foster attainment of innovative outcomes. The authors confirmed that emotional congruence rather than positive or negative emotions stimulated innovative behavior.

Conclusion

Being innovative is manifestation of the interaction between individual perceptions and an external universe, and the psychological underpinnings which shape it are extremely intricate. This review attempts to present the potential of highly complex psychological mechanisms for leveraging the spark of innovative inclination. Understanding the psychological states is required for fair understanding of reason why the same dynamics facilitate some individual employees to continue and sustain with their innovative approach and inhibit it some others. Innovative behavior is fundamentally a personal choice and understanding the psychology involved in innovative performance will help rein in the immense power of Pygmalion effect and for designing interventions to foster innovativeness. Sustaining innovative behavior is possible in the eventuality of an individual being able to overcome the negative psychological consequences which depletes energy and intent to be innovative. Despite the substantial body of research on employee's innovative behavior burgeoning over the past four decades, dynamics of psychological processes contributing to continuity of innovative behavior amongst individuals is rife with paradoxes owing to its complexity. An elusive concept, IWB has been approached from viewpoint of multiple

discipline, including from the standpoint of psychology, it embraces multitude perspective e.g. developmental scientists, social psychologists, cognitive psychologists etc and while the different paradigms have yielded information on different facets of innovative behavior but the knowledge is as yet fragmented and quite lacking in congruency. In-depth knowledge of the psychological mechanisms is likely to help in synthesis of theories providing clarity to what is essentially a fuzzy concept, address the reason which drives individuals to choose being innovative, especially in view that innovative behavior is recursive and reproductive. This would in turn provide a way of unleashing inherent innovative capacity and leverage a potent psychological force for driving and sustaining the innovative inclination of employees.

This study started with reviewing the two psychological aspects which either sets the motion of inciting IWB inclination or plays up at the end of one cycle to stimulate the start of another wave of innovative outlook. Extant literature pursues the psychological processes as presumably independent mechanisms, but the review substantiates that the mechanisms are closely interlinked and influence each other. This integration of different psychological processes will help in increasing the likelihood of individuals engaging in repetitive innovative behavior despite having experienced the negative side of innovative behavior. Individuals need to have coping mechanisms in place to be able to deal with the after-effects and will help make the deviation (i.e. innovative behavior) a habit. This review would be of help by providing clarity and help researchers get a holistic inference about the behavioral aspects of individuals which predispose them to be innovative, bettering our cognizance to control and direct the inherent processes involved in being innovative.

Future Direction

Innovation processes are cyclical in nature with alternating sequences of innovation initiation, implementation and adaptation and the drive to be innovative is discontinuous, and fluctuating and dynamic. Existing research depicts innovative to be a linear input-output process whereas it has idea generation and idea implementation stage, which may not necessarily linear and progressive. This

perspective of innovative work behavior is rarely taken into consideration while trying to decipher the psychological processes. We urge researchers to align interaction of psychological states with the dynamic perspective of innovativeness for better comprehension. Outcomes of innovative behavior has psychological consequence, which exerts a strong influence on the succeeding innovative efforts. We recommend that psychological processes influencing outcomes of innovative process needs to be researched further. We further suggest that reciprocity of psychological processes as outcome of innovative behavior and vice-versa hasn't received much attention and is a promising area of research. Manifestation of psychological mechanisms has a duality more often than not, as a mutually complimentary pair of mechanisms (e.g. divergent-convergent thought processes; conscious-unconscious cognitive mechanisms; positive-negative motivational and affective states etc.) and we call for more researches on the shifting in between the complimentary helices for more nuanced understanding of innovative behavior and individual difference variables. Human cognition has its origin rooted in neurobiological processes as ideas are generated in brains. We believe that for a deeper understanding of the cognitive capacity we need to learn more about the neurocognitive functionalities (e.g. memory, remote associations, and defocused attention etc.). We also endorse Simonton's (2019; 2012) view of 'mad-genius controversy' that creativity and various kind of mental disorders are irrevocably linked and neurocognitive mechanisms holds the key to this black box. Positive psychology goes beyond sense of well-being and happiness and is embedded deeply as psychological resource sustaining individual's inclination to be innovative. There is evident progress in research on positive psychology enhancing innovative behavior. Future research could investigate constructs such as 'passion', spirituality, gratitude, happiness, emotional quotient in conjunction with creativity and IWB.

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