

# Empowering Leadership in Creativity and Work-Effort: An Elucidation through the Psychological Empowerment and Self-Leadership of the Millennials Generation

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**Abstract:** The purpose of this article is to elucidate the relations of empowering leadership on creativity and work-effort by using psychological empowerment and self-leadership. This elucidation contributes to fill the void in empirical studies by simultaneously examining the dynamics of relations among empowering leadership, creativity, work-effort, psychological empowerment, and self-leadership. The social exchange theory is applied to theoretically explain the psychological mechanisms among the constructs. As millennials are categorized as a creative generation, this study focuses on discussing the factors influencing their creativity and work-effort, with a specific notion of empowerment. This study is based on survey data (n = 113) of millennial generation employees working in digital start-up creative industries in Indonesia. Partial least squares structural equation modeling (PLS-SEM) is used to estimate the model. Results of the study find that empowering leadership influences employee creativity and work-effort either directly or indirectly through psychological empowerment and self-leadership. More specifically, the psychological empowerment of employees partially mediates the influence of empowering leadership on employee creativity and employee work-effort. Employee self-leadership also partially mediates the effect of empowering leadership on psychological empowerment, creativity, and employee work-effort. This study implies the practical and theoretical application of empowering leadership in the creativity context of the millennial generation.

Keywords: empowering leadership, psychological empowerment, self-leadership, work-effort, creativity.

JEL Classification: M50, M54

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#### Introduction

Leadership has a role in creating a work-conducive environment to embrace the dynamic of competitiveness occurring in the disruptive era of business. A leader's effectiveness can be seen through the lens of his/her ability to implement changes, build the organization's capabilities, and improve performance (Amiri et al., 2020). As recently defined, leadership is a process whereby an individual influences a group of individuals to achieve a common goal (Kinicki, 2021). This definition is coherent with how it was defined previously, that leadership is activities which affect the group efforts to achieve goals (Bass and Stogdill, 1990). Leadership involves the ability to influence and motivate people to enable the creation of effectiveness in an organization (Kinicki, 2021). Leadership consists of the power to influence the behavior of followers (Kerr et al., 1974). Moreover, nowadays, leadership is becoming more powerful by delegating power down to subordinates, creating inspiration (Kinicki, 2021). Thus, the pivotal role of a leader involves his/her personal ability supported by managerial activities which create and delegate the power of influencing, motivating, and inspiring followers to achieve the organization's goals.

A leader with good management leadership skills realizes sustainable support from the quality of the human resources. The purpose of the leader is manifested in his/her behavior when leading the human resources (Kinicki, 2021). Embodiments of the leadership behavior include forming a dyadic pattern of a leader and subordinates, so that satisfied employees not only obey the orders given but also expect to have a more profound attachment to the organization.

Responding to the vital role of leaders in today's competitive business environment, an approach to empowering leadership has emerged as one of the models of leadership that are relevant in this dynamic context (Kinicki, 2021; Kim and Beehr, 2019; Liu, 2015). In response, the practitioners (Wirhtman, 2014) and academicians (Martin, Liao, and Campbell, 2013) state that organizations that use empowering leadership initiatives can be superior, when compared to organizations that rely on traditional hierarchical structures. As empowerment literature has been studied for its structural leadership and personal motivational approaches, its relation leads to higher positive productivity (Nastiti et al., 2014; Zhang and Bartol, 2010). Kim and Beehr (2019) state that the empowering leaders make a better contribution to creativity at the individual and organizational levels, as assessed by job crafting and work behavior. As studies in empowering leadership attract a number of considerations (Kinicki, 2021, Kim and Beehr, 2019; Wirthtman, 2014; Martin, Liao, and Champbell, 2013), Sharma and Kirkman (2015) mention that there is a need to add a more empirical examination of empowering leadership in contemporary work, with a special context to millennials' dynamics.

The millennial generation is the majority source of talent in organizations today. In the context of a developing country, Indonesia, the Central Bureau of Statistics (2021) notes that millennials make up 50.7% of the workforce in Indonesia. The millennial workforce is known for their active and creative characteristics. The IDN Research Institute (2020) which conducted a survey on the millennial generation workforce found that millennials value a job which allows them to work with freedom of creativity. Working efforts with creativity is a dominant vibe for millennials' work dynamics. Therefore, research aimed at conducting empirical studies on the work dynamics and creativity of millennials continues to attract the attention of researchers. This study focuses on exploring the antecedents of millennials' work efforts with creativity, especially when related to contextual factors, such as leadership, as well as psychological factors of self-leadership and self-empowerment. A specific notion to discuss the application of empowerment literature for the millennials spotlights this emerging sharing of power dynamics effect on creativity.

Intervention and the practice of empowerment emerge as critical approaches to promote the constructive behavior and attitudes of millennial generation employees based on the social exchange relationships between leaders and employees. Empowering leadership has a positive effect on the output performance of employees, as referred to in the social exchange theory (SET) by Blau (1964). According to Blau (1964), self-evaluation of the relationship in a social exchange occurs through the interaction between two or more parties in a series of activities or goals to be achieved. Although not simultaneous, the exchange that arises will produce a pattern of reciprocal obligations between each party. Cheong et al., (2016) assume that the leader, as the initiator of empowerment, would be more involved with employees, by giving support for their development and autonomy when carrying out the work. Further, the process of the leader's behavior will result in a positive outcome on employee performance. Therefore, it is concluded that if the exchange relationship in the interaction between leaders and millennial generation employees is judged to be satisfactory, the employees will feel obligated to reciprocate in the future by contributing more favorably to the organization. It is the opposite if the exchange relationship between leaders and millennial generation employees experiences less or unsatisfactory relations (Brandes et al., 2004).

Based on the logical thoughts of social exchanges between a leader and subordinate, further studies into empowering the leadership for differentiated individuals are urgently needed. A meta-analysis study by Kim et al., (2018) state that some constructs associated with the outcomes of empowering leadership are still promising and need to be empirically examined. Kim et al., (2018) explain that the types of work attitudes, leadership evaluations, and motivation directed at the constructs of self-leadership, psychological empowerment, creativity, and work effort are predicted to be highly correlated with empowering leadership. Therefore, this study suggests that future research should posit the mediating roles of self-leadership and psychological empowerment in the impact empowering leadership has on outcomes directed at creativity and work-effort. Although potentially examined, the relations to elucidate the impact of empowering leadership to creativity and work-effort by using psychological empowerment and self-leadership remain unclear and limited (Kim et al., 2018).

Empowering leadership has a positive influence on psychological empowerment and employee self-leadership (Kim et al., 2018). However, studies find inconsistent results when the construct of psychological empowerment mediates the effect of empowering leadership on individual creativity. Zhang and Bartol (2010) and Nastiti et al., (2014) reveal the positive influence of empowering leadership on creativity through

psychological empowerment. Meanwhile, Amundsen and Martinsen (2015) show the absence of a mediation role for psychological empowerment in empowering leadership and creativity relations. These inconsistent findings about the role of psychological empowerment, therefore, support further examination to elucidate the relations of empowering leadership to creativity and work-effort.

The purpose of this article is to examine the effect of empowering leadership on creativity and work-effort. The examination of relationship includes psychological empowerment and self-leadership in its elucidation of mediating dynamics. Accordingly, the study develops the research questions as listed: Does empowering leadership effect psychological empowerment and self-leadership? Does self-leadership effect psychological empowerment? Do psychological empowerment and self-leadership affect creativity and work-effort? Does self-leadership mediate the effect of empowering leadership to psychological empowerment? Are the direct effects of empowering leadership on creativity and work-effort mediated by psychological empowerment and self-leadership? The social exchange theory takes responsibility to explain the psychological mechanism of the relationships among constructs. Contextually, this research takes samples from millennial generation employees working in digital start-up companies with new business developing ventures. Thus, this study contributes theoretically to the elucidation of the relationships among empowering leadership, psychological empowerment, self-leadership, creativity, and work-effort, as applied in the contemporary dynamic workplaces of the creative millennial generation.

### Hypothesis Development

Relations among Empowering Leadership, Psychological Empowerment, and Self-Leadership.

The relationships between empowering leadership and psychological empowerment are illustrated from two perspectives in previous studies of the working characteristics (structural) held by Hackman and Oldham (1980) and self-efficacy (motivational) held by Bandura (1977) and Bandura and Cervone (1983). First, there is the structural approach focusing on job design and job characteristics, and the fundamental structural approach which focuses on the actions by empowering leaders to share responsibility and authority with employees in order to generate output performance (Klerk and Stander, 2014), including sharing power and the authority to make policy (Nastiti et al., 2014). Secondly, the motivational approach explains relations based on a psychological perspective that focuses on employee feedback and an emphasis on employee motivation (Conger and Kanungo, 1988). According to Spreitzer (1995), the motivational approach also emphasizes the internal processes of psychological circumstances to improve the self-efficacy of an individual. Psychological empowerment involves individual self-efficacy to handle jobs based on empowered motivational attitudes. Thus, under the dyadic relations of a leader and subordinate in the social exchange theory, the empowering behavior of a leader sharing authority is expected to increase the employees' psychological empowerment, related to attitudes internally motivated by their work activities. When the millennial employee has a leader with sharing autonomy and development support, the leader's trust and behavior to facilitate employee development may attract this creative generation's willingness to be more engaged with their job responsibilities, leading to greater feelings of competence, self-determination, impact, and meaningfulness in their work. Therefore, this research hypothesizes:

H1a: Empowering leadership has a positive effect on psychological empowerment.

The central objective of empowering leadership is to encourage or develop employees' self-leadership behavior (Manz and Neck, 2004). The purpose can enhance self-efficacy beliefs related to the employees' performance (Manz, 1986). The psychological mechanism of empowering leadership on self-leadership is reflected in the employees' perceptions of leaders who support autonomy and development that affect the employees' attitudes and actions to perform. Self-leadership's dimensions of achievement orientation and self-regulation are able to control behavior through specific rules and to think strategically to reach the desired performance (Manz and Neck, 2004). The creative vibe generation will be more committed to their achievement orientation and self-regulation when they perceive they are trusted and empowered by their leaders. The empowering behavior of a leader in sharing information and focus of interest will positively influence the strategic constructive thought patterns of the millennial generation employees, such as the employees being able to visualize the success of the performance, engage in positive conversations, and change any dysfunctional thinking, as defined in self-leadership. Therefore, this research hypothesizes:

**H1b:** Empowering leadership has a positive effect on self-leadership.

Empowering leadership accommodates

employee self-leadership strategies in the context of performance. Self-leadership's dimensions of self-regulation and achievement orientation through employees' cognitive strategies that require autonomy and encouragement of high levels of development will have a positive effect on employees' psychological empowerment. When the employee has the behavior-focused strategies of self-observation, self-goal setting, and self-esteem, his/her behavior will encourage a sense of self-determination and competence in the construct of psychological empowerment. Also, when an employee has a strategy of constructive thought patterns replacing dysfunctional thoughts, he/she turns to visualizing success in a job and building a positive conversation, which will affect the experience of the values or norms of the tasks at work, increasing his/her meaningfulness and competence. When the millennials keep focusing on their thoughts, strategies, and behavior to achieve goals, they will be more involved in their jobs, and thus positively increasing their motivational state of competence and meaningfulness. Therefore, this research hypothesizes:

**H1c:** Self-leadership has a positive effect on psychological empowerment.

# Influence of Psychological Empowerment on Creativity and Work-Effort.

Psychological empowerment is conceptualized as a psychological experience to improve the sense of self-efficacy. Theoretically, psychological empowerment will contribute to the creativity of employees through their intrinsic motivation (Stone et al., 2008). Zhang and Bartol (2010) found that psychological empowerment has a positive effect on creativity. Nevertheless, the perceived

psychological empowerment of employees, as a major factor of motivation, will lead to greater employee self-efficacy directed toward creativity. Contextually, when employees feel that they have the psychological empowerment relevant with their competence, self-determination, significance, and impact, they will be more willing to engage actively and responsively in the process of creating ideas or novelty. Due to this, being driven by intrinsic motivation is an essential factor in the psychological empowerment that occurs in employee behavior and will affect the outcome when behaving creatively. Therefore, this research hypothesizes:

**H2a:** Psychological empowerment has a positive effect on creativity.

Psychological empowerment's effect on work-effort is demonstrated by the employees' working durability and high energy to perform. According to Testa (2001), employees' work-efforts emphasize how hard the employees try to achieve the desired level of performance so that the level of effort increases with expectations of improved performance. Feeling empowered psychologically can improve employee work-efforts. At the beginning of the process, the employee with psychological empowerment will feel competent, motivated, and impactful, so it would be hoped he/she could show more effort, initiative, concentration, and endurance to increase his/her performance (Conger and Kanungo, 1988). In particular, the competence or self-efficacy of employees, as referred to as dimensions of psychological empowerment, will affect their behavior during a high work-effort. Competence or self-efficacy is a factor influencing the skills and abilities needed to perform their activity obligations (Van Direndonck and Dijkstra, 2012). When millennial generation employees are supported by adequate competence, they will increase their work level to its maximum effort. Therefore, this research hypothesizes:

**H2b:** Psychological empowerment has a positive effect on work-effort

### Influence of Self-Leadership on Creativity and Work-Effort

Employee self-leadership is the self-regulation of a complex task for achieving the task efficiently and effectively. Self-leadership is independently controlled by intrinsic motivation (Manz, 1986). In any case, the effects of self-leadership with predictable outcomes are positively related to employee performance, such as commitment, independence, creativity, innovation, trust, a positive attitude, job satisfaction, and self-efficacy (Neck and Houghton, 2006).

Self-leadership's cognitive strategy emerged to goal setting, promoting constructive behavior, and eliminating destructive behavior hypothetically supports to creativity. This study defines creativity as behavior which creates novelty products, services, ideas, and procedures for its usefulness and values (Zhou and George, 2001). Diliello and Houghton (2006) explain that creative individuals are characterized by resilience, curiosity, their interest in challenging tasks, prioritized autonomy, high energy, self-confidence, and positive impression. In particular, the effect of cognitive strategy and specific rules from self-leadership will lead employees' focus to achieving goal performance and eliminating thoughts of damage. Furthermore, it will provide space for employees to retain positive thinking, highly engaged with their jobs, and willing to behave creatively to find problems and novelty solutions. Therefore, the creative behavior can be managed because employees have self-leadership in their curiosity, thoughts, and strategies to reach the desired level of performance, controlled by the individual. Therefore, this research hypothesizes:

**H3a:** Self-leadership has a positive effect on creativity.

The involvement of cognitive strategies and specific rules as dimensions of self-leadership can be particularly helpful and accommodate instrumental and terminal values in employees' work-efforts. Under the instrumental values of work-effort, employees with cognitive strategies and specific rules will emphasize the process for starting and ending a job properly. Furthermore, employees with specific rules of self-leadership, such as setting goals, promoting constructive behavior, eliminating destructive behavior, visualizing success, and building communication will spotlight the expected personal goals to be achieved as their terminal values. Employees with their cognitive strategy and specific rules to visualize success and build a constructive dialogue will emphasize the work as a positive activity for themselves, thus positively influencing their work-effort. Therefore, this research hypothesizes:

**H3b:** Self-leadership has a positive effect on work-effort.

# Self-Leadership as a Mediating Variable in the Influence of Empowering Leadership to Psychological Empowerment

Self-leadership mediates the influence of empowering leadership to psychological empowerment as explained in the contingency model of leadership by Houghton and Yoho (2005). Nevertheless, the leadership role of empowerment that provides support, autonomy, and development for employees will influence the attitude of the employees positively, and be associated with the cognitive strategies and self-regulation of the individual's self-leadership. The attitude to self-regulating ourselves to be a performer is indicated through the motivational attitude of the individual to be meaningful and competent to handle the tasks allocated. Nonetheless, an examination related to the mediation mechanism involving these three constructs' relationships is less widely used. Within the dynamics of the millennial generation, when the employee perceives the autonomy of working from his/her leader, he/ she will receive more developmental support leading to a willingness to be more disciplined in regulating and committing more to his/her achievements. Further, this self-leadership attracts greater involvement in the job, increasing employee competence, impact, and meaningfulness. Therefore, this research hypothesizes:

H4: Self-leadership mediates the positive influence of empowering leadership on psychological empowerment.

Psychological Empowerment as a Mediating Variable in the Influence of Empowering Leadership to Employee Performance Outcomes (Creativity and Work-effort)

Social interactions that occur between leaders and employees in the process of empowerment will produce a positive outcome of creativity. This is based on reciprocal relationships between a leader and a subordinate (Woodman et al., 1993). The reciprocal

relations between a leader and an employee can be reflected through the social exchange theory (Blau, 1964). The social exchange occurring through the leader that provides support, autonomy, and development will affect the intrinsic motivation, self-determination, self-efficacy, and self-esteem of the employee. In turn, it will influence the attitudes and behavior of employees with their obligation to reply in kind by increasing their performance, such as by becoming more creative. A feeling of being empowered psychologically by their leaders will positively enhance their ability to develop new ideas for solving problems and seeking opportunities to be better.

Based on the social exchange theory, we predict that the influence of psychological empowerment will mediate the relation between empowering leadership and employee creativity. The reciprocal relationship between leaders and employees is shown by the process in which a leader increases empowerment, which is perceived psychologically, and further improves creativity. When a leader shares autonomy and developmental support to employees, they feel they are trusted and thus are eager to engage more deeply with their jobs. This engagement increases the feeling of competence and meaningfulness in improving their work. These psychological states activate a willingness to think more thoroughly about problems when working and to behave creatively in finding novelty methods and solutions. Therefore, the hypothesis is as follows:

**H5a:** Psychological empowerment mediates the positive influence of empowering leadership on creativity.

Empowering leadership affects employees by making them feel confident in exerting their power, mind, or body to accomplish a purpose of work (action, initiative, effort)

to achieve the target (Brown and Peterson, 1994). The direct mechanism is explained through the social interaction from the empowering leader, who influences the process of starting and ending a job (competent in the job). Indirectly, the effect of empowering leadership on work-effort through the mediation of psychological empowerment will psychologically affect the attitude of the employees, and then the employees will reply with their maximum effort. As applied, the empowering leader shares autonomy and development support to the employees. Feelings of trust and engagement flourish, leading to higher psychological states of having power in their related jobs. These feelings of meaningfulness, impact, and competence create greater energy to perform, which is characterized by a greater work-effort by the employees. However, the research discussing the influence of psychological empowerment on work-effort is still rarely investigated. Amundsen and Martinsen (2015) state that the influence of psychological empowerment on work-effort is not widely studied, and consider advice from Kim et al., (2018) to further explore the mediating mechanisms. Therefore, the hypothesis is as follows:

**H5b:** Psychological empowerment mediates the positive influence of empowering leadership on work-effort.

# Self-Leadership as a Mediating Variable in the Influence of Empowering Leadership to Employee Performance Outcomes (Creativity and Work-effort)

Empowering leadership will influence performance outcomes (creativity and work-effort) through employee self-leadership as a mediator. Employees' positive attitudes toward their performance occur due to the leader's support for their development and autonomy given in the empowering process. Employees who have high self-leadership with self-regulation and achievement orientation respond to the support of the empowering leader by becoming more active in finding and developing new ideas, solving problems, and discovering opportunities. Indeed, the concept of self-leadership involving intrinsic motivation, as a fundamental value of the activities, leads to higher creativity (Manz, 1986). A leader's support activates strategic constructive thoughts in the millennial generation to be more disciplined in achieving the targeted goals. Employees will be able to visualize success, engage in positive conversations, and change dysfunctional thinking. Thus, the positive vibes of working are maintained and contribute to higher positive behavior outcomes of creativity. Therefore, the hypothesis is:

**H6a:** Self-leadership mediates the positive influence of empowering leadership on creativity.

The psychological mechanisms of social interaction that occur in the work environment of leaders who provide support for the development and autonomy of employees will positively increase the awareness of self-regulation and achievement orientation of the employees toward the goals set. When the interaction is good and satisfactory, it expects that employees will respond by giving their optimal work-effort and have strong confidence in completing the task. The mediation mechanism is supported by the social exchange theory. Blau (1964) explains that employees will evaluate the quality of the relationship of the social interactions that occur in the organization. If the exchange relationship is considered satisfactory, the employees feel obligated to reciprocate in the fuAlif and Nastiti

ture by providing a favorable contribution to the organization. An empowering leader with his/her developmental support increases the employees' strategic constructive thoughts to lead them to achievement. Furthermore, this self-leadership influences the employees' positive vibes in working by highlighting the instrumental and terminal values. With a clear direction to the values, the employees will be committed to contribute greater work-efforts. Therefore, based on the social exchange theory, the relationships of business leadership and employee empowerment can be explained through employee self-leadership. Therefore, the hypothesis is:

**H6b:** Self-leadership mediates the positive influence of empowering leadership on work-effort.

### Research Model

This study proposes a research model in Figure 1 for developing the hypotheses.

### Methods

### Sample and Data Collection

This study used the unit analysis of individuals by observing employees' perceptions of their leaders, with the object of research into millennial generation employees who work in digital start-up businesses in Indonesia. Data were collected using a web-based survey. Purposive sampling was applied with two criteria: being an active worker in a digital start-up business in Indonesia and born in the 1980s to the 2000s to comply with the millennial generation cohort. The study also divided the respondents into two types of employment, following advice from Zhang and Bartol (2010), which were those working in information technology (IT) and those not

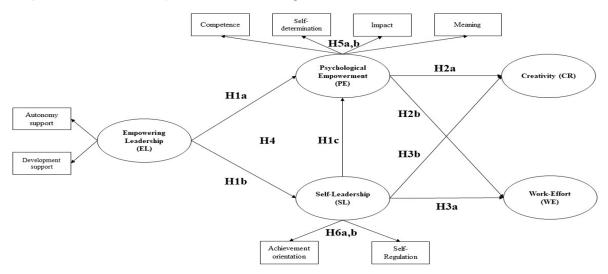


Figure 1. Research Model

working in IT (employees from other functional divisions). Demographic information associated with their age, gender, education, and tenure (Zhang and Bartol, 2010, Zhou and George, 2001) was also considered.

The collected data were considered for social desirability bias issues and methods to control and reduce the effect of any bias. The main reason why the social desirability bias needed to be considered in the study was because: a. The bias that occurred when filling out the questionnaire could reduce the measurement quality (validity and reliability) of the statistical results (Nederhof, 1985). b. Response bias as threat dishonesty of the respondents in providing information "to respond to the good and hide the bad" (Edwards, Diers, and Walker, 1962). c. Bias effect respondents could use "self-deception" as a form of individual self-defense when faced with stressful situations or harm (Paulhus, 1984). Furthermore, there were several methods to control and reduce the effects of the common bias as the researchers had designed the questionnaire following the advice of King and Bruner (2000), as follows: a. Instrument's administration would be kept anonymously. b. Instrument's development, the researchers gave coding sheets to each construct (EL, PE, SL, CR, and WE). c. Researchers also provided some reversed code items on the measurement indicators including (DO8, DP3, DK1, OP4, RD8, and KR2).

The study followed the 10-times rule method for its sample's size estimation (Hair et al., 2014). The sample's size should be greater than 10-times the maximum number of inner or outer model links pointing at any latent variable in the model. This study had seven links in the relations; thus, sampling should be more than 70. The total number of respondents was 117, but four respondents were eliminated because the data were indicated as outliers. Finally, the study used 113 respondents which fulfilled the threshold of greater than 10-times. The respondents comprised 53% male and 47% female, more than 61% of the respondents worked in non-IT companies, and 70% of the respondents had an undergraduate education.

#### Measurement

**Empowering Leadership**. Empowering leadership is operationally described as a leader's behavior to support performance by providing autonomy and self-development. The measurement consisted of two dimensions; first, the dimensions of autonomy support consisted of 10 items, such as: "My leader said that I would be responsible" and "My leader gave me authority over problems within the department". Second, the dimension of development support, which consisted of eight items, such as: "My leader lets me see how he/she manages his/her job" (Amundsen and Martinsen, 2014). All used a scale from 1 = strongly disagree to 5 = strongly agree. The autonomy support had a Cronbach's alpha of 0.72 and composite reliability of 0.83, and the development support had a Cronbach's alpha of 0.78 and composite reliability of 0.85.

Psychological empowerment. It is operationally described as a motivational condition manifested through four cognitive dimensions of meaningfulness, competence, self-determination, and impact. The measurement consisted of four dimensions that had three items for each dimension. The dimensions were a. meaningfulness, "This job is very important to me", b. self-determination "I can decide for myself how to do my job", c. competence "I master the necessary skills for my job", and d. a strong impact, "I influence this line of work" (Spreitzer, 1995). All the items used a scale from 1 =strongly disagree to 5 = strongly agree. The dimension of meaningfulness had a Cronbach's alpha of 0.82 and composite reliability of 0.89; 0.68 and 0.81 respectively for self-determination; 0.77 and 0.87 respectively for competence, and 0.61 and 0.83 respectively for impact.

**Self-leadership.** It is defined as self-control to lead oneself by implementing specific procedures of self-regulations and

cognitive strategy. This measurement used a construct of Martinsen (2009). This measurement was designed based on the initial definition of self-leadership by Manz (1986). There were a few items from the self-leadership that need to be improved. Martinsen (2009) argues that self-leadership involves not only individual thoughts of self-orientation and self-regulation, but also efforts to coordinate and cooperate. The construct of self-regulation consisted of two-dimensional measurements: First, the dimension of the achievement-orientation that consisted of 12 items including "I often monitor my working performance and my job" and "I work with specific goals and set it to myself personally". Second, the dimension of self-regulation consisted of eight items including "I'm doing my task which I have competence in" and "I'm doing work activities in a conducive environment". All the items used a scale from 1 = strongly disagree to 5 = strongly agree. The dimension of attainment of self-orientation had a Cronbach's alpha value of 0.80 and composite reliability of 0.85, and 0.76 and 0.84 respectively for the dimension of self-regulation.

**Creativity.** It is defined as behavior which could create novelty products, services, ideas, and procedures which have usefulness and value. This measurement used a construct of Zhou and George (2001) with 13 items reflecting the creativity of the respondents, such as: "I often propose new ways to achieve the goals or objectives, come up with new ideas, enhance performance, or promote ideas to others". All the items used a scale from 1 = strongly disagree to 5 =strongly agree with a Cronbach's alpha value of 0.89 and composite reliability of 0.91.

**Employee work-effort.** The construct is defined as behavior involving thought and

body resources to achieve specific purposes in work. This measurement used the construct of Kuvaas and Dysvik (2009) with 5 items that reflect the work-effort of respondents, such as: "I often exert extra effort in doing the job" and "I usually do not hesitate to exert more effort when more effort is needed". All the items used a scale from 1 =strongly disagree to 5 = strongly agree with a Cronbach's alpha of 0.79 and composite reliability 0.86.

**Control variable.** This study had four demographic control variables: age, gender, education, and type of job (IT and non-IT) (Zhou and George, 2001; Zhang and Bartol, 2010; Amundsen and Martinsen, 2015). Control variables were dedicated to assess the external variables confounding the hypothesized relations (Cooper and Schindler, 2014).

#### Results

The study applied PLS-SEM to test the hypotheses due to the multivariate relations between the latent variables manifested in a complex model, which could be estimated simultaneously (Kock, 2018; Hair et al., 2014). Table 1 shows the mean, standard deviation, and correlation.

The mean values of the entire constructs were above the scale of 3.5, indicating that the respondents agreed with moderate to high responses to all the constructs. Table 1 also gives the correlation between the constructs of discriminant validity that can be seen from the root of the AVEs. The threshold of the discriminant validity of the AVEs' root was higher than the value of the correlation (Hair et al., 2014) fulfilled. Thus, discriminant validity was confirmed.

According to Hair et al., (2014), convergent validity is confirmed if the value of each indicator's loading factor is  $\geq 0.70$  with a p-value  $\leq 0.05$ , and elimination is suggested for those with a loading factor value of  $\leq 0.40$ . As for the loading factor, values between 0.40 and 0.70 should also be kept from the data if it will increase the value of the AVE. Referring to the above criteria, the study deleted some item statements, including: (1) "My leader said that I should be responsible", (2) "My leader let me see how he organizes his work", (3) " I have a great impact on this type of work", (4) "I need to find new knowledge when I feel my compe-

Construct Laten	Mean	S.D	1	2	3	4	5	6	7	8	9	10
1. Creativity	3.77	0.59	0.71									
2. Work-Effort	4.25	0.62	0.20**	0.75								
3. Empowering Leadership	4.10	0.68	0.30***	0.08	0.84							
4. Psychological Empowerment	4.20	0.57	0.57***	0.29**	0.57***	0.71						
5. Self-Leadership	4.03	0.58	0.55***	0.51***	0.47***	0.59***	0.82					
6. Gender	0.45	0.50	0.09	-0.27	0.19***	-0.02	-0.10	1.00				
7. Tenure	1.44	1.00	0.08	0.04	0.04	0.25	0.09	-0.20	1.00			
8. Age	2.35	0.71	0.06	-0.03	0.09	0.04	0.05	0.05	0.31	1.00		
9. Education	3.56	0.80	0.18	0.05	0.08	0.13	0.19**	-0.14	0.17	0.09	1.00	
10. Type of Job	0.37	0.48	0.12	-0.01	0.14	0.22**	0.08	0.00	0.25	0.03	0.22**	1.00

Table 1. Mean, standard deviation, correlation of constructs.

Note: Diagonal line (Bold) is the root AVEs of correlations between constructs of AVE.

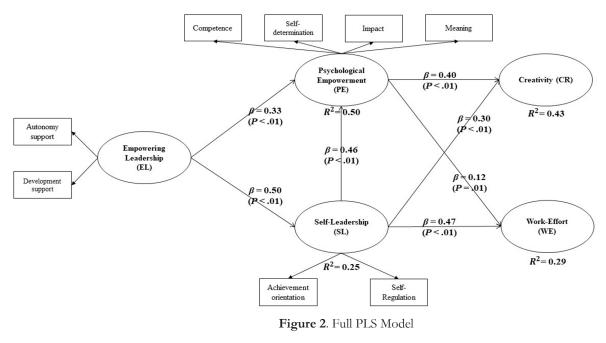
n = 113; \*\*\* sig. p = <0.01; \*\* sig. p = <0.05.

tency is inadequate", (5) "I really expect the best results through planning for maximum performance", and (6) "I propose a new idea that is practical to improve performance". Further, as previously reported, the results showed a satisfactory reliability with the value of the whole constructs' composite reliability being  $\geq 0.70$ .

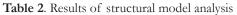
#### Analysis of Structural Model

The structural model showed the magnitude of R-squared as well as the effect size. Goodness-of-fit could be seen from the average path coefficient (APC), average R-squared (ARS), average variance inflation factor (AVIF), and Tanenhaus goodness-offit (GOF). The models were said to have little suitability if they had a value of  $\geq 0.10$ , the next level was medium if they had a value of  $\geq 0.25$ , and great suitability if they had a value of  $\geq 0.36$  (Kock, 2018). The results indicated the APC and ARS models' fit criteria to be significant at p < 0.05 and AVIF < 3.3. Results of the models' fit showed that APC = 0.20 and ARS = 0.39, were both significant at p < 0.01 and AVIF = 1.38. The structural model or path analysis is shown in Figure 2, which investigated the exploration of mediation mechanisms and the effect of empowering leadership on creativity and work-effort through psychological empowerment and self-leadership.

Results of the PLS-SEM can be seen in Figure 2 and the path analysis is in Table 2. There was a positive effect of empowering leadership on psychological empowerment  $(\beta = 0.33, p < 0.01)$ , thus H1a was supported. Empowering leadership had a positive effect on self-leadership ( $\beta = 0.50$ , p < 0.01), thus H1b was supported. Self-leadership had a positive effect on psychological empowerment ( $\beta$ = 0.46, p < 0.01), thus H1c was supported. Psychological empowerment had a positive effect on creativity ( $\beta = 0.40$ , p <0.01), thus H2a was supported. Psychological empowerment had a positive effect on work-effort ( $\beta$ = 0.12, p = 0.01), so H2b was supported. Self-leadership had a posi-



Construct	Path-to (β and <i>p</i> -value)							
	Psychological	Self-Leadership	Creativity	Work-effort				
	Empowerment							
Direct link								
Empowering	0.59 ***		0.39 ***	0.15 **				
Leadership (EL)								
R-squared(Adjusted)	0.34		0.14	0.01				
Q-squared	0.35		0.14	0.02				
Full Model								
Empowering	0.33 ***	0.50 ***	0.04	-0.03				
Leadership (EL)								
Psychological empowerment (PE)			0.40 ***	0.12 ***				
Self-Leadership (SL)	0.46 ***		0.30 ***	0.47 ***				
R-squared (Adjusted)	0.49	0.24	0.43	0.28				
Q-squared	0.50	0.25	0.54	0.39				
Effect Sizes:								
EL	0.19	0.25	0.17	0.00				
PE			0.22	0.04				
SL	0.30		0.17	0.22				
Control Constructs								
Gender			0.13	-0.23 ***				
Age			0.07	-0.09				
Education			0.27 ***	0.07				
Job Type			-0.02	-0.05				



Note:n = 113; sig \*\*\* p = <0.01; sig \*\* p = <0.05.

tive effect on creativity ( $\beta$ = 0.30, p <0.01), thus H3a was supported. Self-leadership had a positive effect on work-effort ( $\beta$ = 0.47, p <0.01), thus H3b was supported.

Meanwhile, the mediation mechanism was analyzed with the Baron and Kenny, (1986) test by using variance accounted for-(VAF) by Hair et al., (2014). The VAF method is claimed to be more powerful in explaining the mechanism of mediation compared to the Sobel test (Hair et al., 2013). VAF procedures based on (Hair et al., 2014) were conducted in several stages. Firstly, the direct effect must be significant, see Table 2 under direct link section. Secondly, after mediation constructs were included in the model, the indirect path effect must be significant. Third, the value of the VAF was calculated with formula indirect effect divided by total effect. The direct effect calculated the total effect (path c) summed with the indirect influence (path ab) using the formula (ab + c). Table 3 shows the results of the mediation mechanism's testing.

Table 3 shows the results of the mediation mechanism by the SEM analysis guidelines of Baron and Kenny (1986) based on the VAF method from (Hair et al., 2014). The results indicated a partial mediation for the value of VAF > 20% - < 80%. Mediation exploration to examine the effect of employee self-leadership was shown to be

Alif and Nastiti

Table 3. Results of mediation	n testing with Variance Accounted	For-(VAF) Method
Indirect effect (EL-SL-PE)	0.50 x 0.47	0.24
Direct effect (EL-PE)		0.59
Total Effect		0.83
VAF (EL-SL-PE)	0.24 / 0.83	0.28 (28%) **
Indirect effect (EL-PE-CR)	0.33 x 0.40	0.13
Direct effect (EL-CR)		0.39
Total Effect		0.52
VAF (EL-PE-CR)	0.13 / 0.52	0.25 (25%) **
Indirect effect (EL-PE-WE)	0.33 x 0.12	0.04
Direct effect (EL-WE)		0.15
Total Effect		0.19
VAF (EL-PE-WE)	0.04 / 0.19	0.21 (21%) **
Indirect effect (EL-SL-CR)	0.59 x 0.30	0.18
Direct effect (EL-CR)		0.39
Total Effect		0.57
VAF (EL-SL-CR)	0.18 / 0.57	0.31 (31%) **
Indirect effect (EL-SL-WE)	0.50 x 0.47	0.24
Direct effect (EL-WE)		0.15
Total Effect		0.39
VAF (EL-SL-WE)	0.24 x 0.39	0.61 (61%) **

Note:\*\* VAF value > 20% - < 80% of partial mediation.

partially mediated in the relationship between empowering leadership and psychological empowerment (VAF; 0.28 / 28%), thus H4 was partially supported. Psychological empowerment partially mediated the positive effects of empowering leadership on employee creativity (VAF: 0.25 / 25%), thus H5a was partially supported. Psychological empowerment partially mediated the positive influence of empowering leadership on work-effort (VAF: 0.21 / 21%), so H5b was partially supported. Meanwhile, employee self-leadership partially mediated the positive effect of empowering leadership and employee creativity (VAF: 0.31 / 31%), thus H6a was partially supported. Lastly, employee self-leadership partially mediated the positive effect of empowering leadership on work-effort (VAF: 0.61 / 61%), thus H6b was partially supported.

#### Discussion

This study elucidates the relationship among empowering leadership on employee creativity and work-effort through psychological empowerment and self-leadership. The subject of the study is millennials who are employed and work in the creative industries at digital start-up businesses established in Indonesia. Digital start-up businesses are dominated by millennials. They have the characteristics of working with creativity and effort. This study finds that their work contributions of creativity and effort are boosted by more empowerment in their working environment. The results of this study show that the empowering leader plays a vital role in influencing employee cognition, so the employees feel empowered and guided. In turn, employees feel obliged to respond to their employer organizations with positive

behavior, creativity and a greater work-effort. Therefore, when the talents of millennials dominate the organization, empowerment is needed to harvest their creativity and work-effort contributions when working.

Social interaction from an empowering leader can affect employees through the support of autonomy and development so that employees will feel empowered within the organization. The process of social exchanges in the work environment can be explained with a socio-structural approach, which involves sharing power and the formal delegation of responsibility and authority (Dewettinck and van Ameijde, 2011). However, a leader's activity by providing employees with legal autonomy is not enough; employees also need to develop adequate intrinsic motivation to work independently. This is called the psychological empowerment of motivational-approaches. Thomas and Velthouse (1990) claim that empowering is energizing. This is in line with the terms of providing motivation and delegating task autonomy to promote self-learning, skill development, and responsibility to decide about the employee's job (Jones and George, 2016). These experiences are the basis of the psychological needs of working. If the social exchanges run well between a leader and employee, the employee will evaluate it by providing positive performance outcomes. Therefore, empowering leadership is able to improve the outcome of a positive performance by giving employees autonomy and development by promoting energy and effort to them, providing motivational support, as well as facilitating their skills and competencies to work independently, thus positively affecting the employees' psychological outcomes of self-confidence, high self-orientation, and ease of creating new ideas.

Empowerment in the workplace contributes to the increased productivity and performance of employees. Productivity and performance are increased as a result of the process of mutual empowerment from the leader, which positively affects employees' creativity and work-effort. It is supported by the nature of the digital start-up business venture, which has very dynamic working in a lean organization structure. The empowerment process conducted by leaders in that dynamic work environment can improve self-esteem and motivation with the orientation toward high achievement to create ideas and produce novelty for their business environment. According to Houghton and Yoho (2005), empowering leaders can improve employee attitudes through a great deal of support for development and dealing better with more dynamic jobs.

The study implements partial least squares structural equation modeling (PLS-SEM) and variance accounted for- (VAF) by Hair et al., (2014) for examining the mediation mechanisms. The findings show that all the hypotheses are supported either directly or indirectly through the exploration of mediation. The findings about the mediation mechanisms show that the psychological empowerment of employees is able to partially mediate the effect of empowering leadership on the behavior of employee creativity and work-effort. Furthermore, the self-leadership of employees is able to partially mediate the effect of empowering leadership on outcomes of psychological empowerment, creativity, and work-effort. These results are consistent with previous studies conducted by several researchers (Nastiti et al., 2014; Klerk and Stander, 2014; Zhang and Zhou, 2014; Zhang and Bartol, 2010; Alif and Nastiti, 2019). Nevertheless, the results of this study contribute to elucidate the void caused

by the inconsistent findings in the relations of empowering leadership, psychological empowerment, self-leadership, creativity, and work-effort (Kim et al., 2018; Amundsen and Martinsen, 2015).

### Conclusion

Research related to empowering leadership is attracting a greater degree of consideration because of its applicability and the previous inconsistent findings. This study elucidates the influence of empowering leadership to performance outcomes (creativity and work-effort) through the mediation variables of psychological empowerment and self-leadership. The meta-analysis study of Kim et al., (2018) state that the dynamics of self-leadership and psychological empowerment in empowerment leadership are interesting to examine and, further, they should be extended to the outcomes of creativity and work-effort.

Applied to the millennial generation employees, this study highlights an implication to grow the work-effort and creative behavior of the millennials through empowerment values in their organizations. This study implies suggestions for the management of digital start-up businesses that empowerment-based training and coaching for leaders, with the purpose of providing autonomy and development support for millennial generation employees to make them be more active and creative at work. Autonomy support skills include the ability to delegate trust, share information, encourage initiative, and support efficacy. Development support skills include the ability to guide, protect, and inspire. The behavior of the empowering leaders will affect the positive attitudes of the employees, whereby the employees will evaluate the relationship of social exchanges as a positive thing in itself. In turn, they will feel obliged to reciprocate for this interaction by showing positive behavior in their creativity and better work-effort in the workplace.

There are some limitations in this study. First, this study uses a single source perspective of the employees to assess the behavior of the leaders to address the overall construct, both exogenous and endogenous constructs. Self-reported bias from a single source can lead to errors in measuring the bias. However, in this study, self-reported bias is already controlled by anonymity, as suggested by Sjostrom and Holst (2002). It is hoped that future research may use multiple sources (leader and employee) to measure the constructs in this study. Zhang and Bartol (2010) suggest that employee creativity can be measured through the perception of its leaders and assessments of employee creativity can be assessed objectively. Therefore, the research advises dyadic measurements so that the creativity of the employees can be assessed objectively by the leader, and vice versa, the leadership behavior can be measured from the perception of the employees. This method also has a way to handle common method bias in behavioral research. Second, this research only applies to one sector of the creative industries, digital start-up business enterprises, in Indonesia. Future studies are expected to be made in various sectors, with heterogeneous samples.

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