

## Relationship between Transformational Leadership and Work-Related Flow in an Industrial Organization

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This study investigated the relationship between transformational leadership with work-related flow. Participants included 320 employees from an organization who completed Multifactor Leadership Questionnaire (Bass and Avolio, 1995) and Work-Related Flow scale (Bakker, 2008). The results show that the range of correlation coefficients between subscales of transformational leadership (idealized influence, inspirational motivation, intellectual stimulation, individualized consideration), and the three components of the construct of work-related flow (absorption, work enjoyment, intrinsic work motivation) are from .15 to .56 which are significant at  $p < .01$  and  $p < .05$ . In addition, the results of the stepwise regression technique showed that the intellectual stimulation and individualized consideration had the most significant effects on the dimensions of work-related flow.

*Keywords:* transformational leadership, work-related flow

The current study examined the relationship of transformational leadership with work-related flow. *Flow* is a psychological constructs that was first introduced by Csikszentmihalyi (1975). He defined *flow* as the “holistic sensations that people feel when they act with total involvement” (p. 36). Despite the realization that flow occurs at work, limited empirical research has focused on work-related flow until recently (Peifer, 2012). Also, while researchers have begun to study “flow” (Csikszentmihalyi, 1975) as it applies to the workplace, little is known about the impact of leadership on the followers’ flow experiences. Bakker (2008) has made significant contributions towards establishing a theory of work-related

flow. Bakker (2008) sought to operationalize flow within the work context and to identify the components of work-related flow. Through an examination of flow research, Bakker (2008) found that three core components underpinned most research on flow: absorption, work enjoyment, and intrinsic work motivation. By conducting empirical research in workplace settings, Bakker (2008) confirmed that the presence of these three components comprises the construct of work-related flow.

### **Absorption**

Absorption refers to the complete immersion and concentration in a work-related activity. In fact, Keller and Landauber (2012) state that the element of absorption is probably the most universal element of the flow experience. Complete cognitive absorption in an activity is necessary for flow to occur. Once this level of deep concentration is achieved, people are able to tune out other stimuli that are irrelevant to the task, which further improves their focus on the task. Because people become highly absorbed in an activity while in flow, there is no room in consciousness for irrelevant and distracting thoughts; consequently, feelings of self-consciousness vanish (Csikszentmihalyi, 1990). During flow experiences the consciousness becomes more ordered, the mind becomes clear, and all of one's attention can be focused on the immediate task (Csikszentmihalyi, 1988).

### **Intrinsic work Motivation**

Intrinsic motivation refers to one's desire to engage in a specific work-related activity with the intention of experiencing the satisfaction and enjoyment inherent in the activity itself (Bakker, 2005). Flow is most likely to occur when intrinsic motivation for the activity is high (Moneta, 2012). Csikszentmihalyi (1997) states that, within the framework of flow theory, intrinsic motivation is focused on specific work activities and immediate goals, such as excitement and enjoyment. Interestingly, the concept of flow helps explain why certain activities are intrinsically motivating in the first place. Flow experiences are intrinsically rewarding

because they permit individuals to become fully immersed in a task and to stretch their abilities toward their maximum potential (Csikszentmihalyi & Rathunde, 1993). Csikszentmihalyi (1978) found that employees who frequently experience flow will spend a greater percentage of their job time actually working. Research has also shown that work-related flow has predicted the in-role (Demerouti, 2006; Bakker, 2005) and the extra-role performance (Demerouti, 2006) at work.

### **Work Enjoyment**

In addition to complete absorption and intrinsic motivation, the experience of enjoyment is also a key element of the flow experience (Bakker, 2008; Csikszentmihalyi, 1990). Work enjoyment is described as very positive thoughts and feelings regarding the quality of one's work situation (Veenhoven, 1984). Bakker (2008) states that enjoyment results from one's affective and cognitive assessment of the flow experience (Diener, 2000). Haworth (2011) explains that enjoyment is the affective product of flow experiences. In fact, flow is described as a state of "optimal experience", because the characteristics associated with it lead to an overall, highly enjoyable experience. For example, the absence of random, distracting, and irrelevant thoughts, which is an element of the flow experience, is perceived as a pleasant experience (Diener & Diener, 1996).

Very few studies have investigated the situational factors that are most conducive to work-related flow. Empirical research has shown that autonomy (Bakker, 2008; Demerouti, 2006; Bakker, 2005), opportunities for self-growth (Bakker, 2008), social support (Bakker, 2005; Salanova, Bakker and Liorens, 2006), clear goals (Salanova, et al., 2006), and performance feedback (Bakker, 2005; Demerouti, 2006) facilitate the occurrence of flow. The current study examined the transformational style of leadership for two reasons. First, the transformational style of leadership is considered one of the most effective styles of leadership, because it inspires employees to perform beyond expectations (Bass &

Riggio, 2006). Second, studies have produced empirical evidence that transformational leaders generate high levels of intrinsic motivation in followers (Piccolo & Colquitt, 2006; Bono & Judge, 2003), as compared to other styles of leadership (Bass, 1985). Because intrinsic motivation is an important component of flow, transformational leadership was a logical choice for this study. Bass's (1985) theory of transformational leadership involves four sub-dimensions: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration.

### **Idealized Influence**

Bass (1985) used the term “idealized influence” to describe the charismatic quality of the transformational leaders. Specifically, this dimension refers to a charismatic leader’s ability to develop a vision and to influence others to accept and share that vision (Jung & Avolio, 2000).

The charisma associated with the behaviors of transformational leaders ultimately leads employees to identify with their leaders, which, in turn, helps the leaders rally support for their vision. Idealized influence also occurs when leaders earn the respect and trust of their followers by doing the “right thing” (Avolio, 1999).

### **Inspirational Motivation**

Inspirational motivation describes a leader’s ability to articulate a vision in a way that is appealing to followers (Piccolo & Colquitt, 2006). Transformational leaders demonstrate confidence and optimism when communicating a vision, which builds enthusiasm among followers (Yammarino and Dubinsky, 1994). In addition, inspirational leaders establish and convey high expectations (Bass, 1998) that challenge and inspire employees to achieve more than they thought was possible.

### **Intellectual Stimulation**

Intellectual stimulation refers to a leader’s ability to stimulate followers’ intellectual capabilities by questioning assumptions, taking

calculated risks, and seeking the input of followers. Avolio and Bass (2002) explain that transformational leaders tend to challenge assumptions and approach old problems and situations in new ways, which in turn, can stimulate followers' efforts to be creative and innovative; the leader's personal approach to problems is observed by others and is contagious.

### **Individualized Consideration**

Individualized consideration refers to a leader who demonstrates individualized attention towards their followers by identifying and responding to their needs (Bass, 1985). Based on an individual's needs, a transformational leader distributes special attention regarding growth and achievement (Avolio & Bass, 2002). Transformational Considerate leaders promote two-way communication through active listening (Avolio & Bass, 2002). The considerate leader develops employees by delegating tasks and then monitoring the situation in an unobtrusive manner, serving in a coaching role if guidance or support is needed (Rafferty & Griffin, 2004). The goal of this study was to investigate whether the presence of transformational leadership behaviors is related to the likelihood that followers will experience flow. By investigating the relationship between transformational leadership and employees' flow experiences, we can learn about the types of leader behaviors that might influence employees to flow or immerse themselves in their work.

### **Hypotheses**

Hypothesis 1: There is a positive relationship between dimensions of transformational leadership and absorption.

Hypothesis 2: There is a positive relationship between dimensions of transformational leadership and intrinsic work motivation.

Hypothesis 3: There is a positive relationship between dimensions of transformational leadership and work enjoyment.

## **Participants**

The research population consists of individuals employed in an industrial organization. Participants were 320 employees that were selected via the simple random sampling. Based on the employee's agreement to participate, the questionnaires were administered to all who chose to participate. Of the total participants, 85% were male and 15% were female. Participants age range from 23 to 65. Of the 320 participants, 15% were single, and 85% were married. In regards to having children, 65% of the participants reported having children. In regards to education, 60% of the participants reported having a high school diploma, and 40% of the participants reported having a graduate degree. The experience of the respondents was between 7 to 30 years.

## **Method**

### **Measure**

*Multifactor Leadership Questionnaire.* Transformational leadership was measured using the 16-item version of Bass and Avolio's (1995) multifactor leadership questionnaire (MLQ). These items ask the respondents to indicate the extent to which their leaders' engage in behaviors of idealized influence, inspirational motivation, individualized consideration and intellectual stimulation. Respondents indicated how frequently their supervisor displayed the behavior described in each item using a five-point response scale, where 1=not all, 2=once in a while, 3=sometimes, 4=fairly often, 5=always. Despite some concerns about psychometric validity of this measure, MLQ has been used extensively in the area of leadership research and is considered the best validated measure of transformational and transactional leadership. Avolio (1999) confirmed the four factor structure and the reliability of transformational leadership via the MLQ in a study involving over 9000 cases. In this research all the subscales yielded an internal reliability alpha greater than .70 (idealized influence=.88, inspirational motivation=.91, individualized consideration=.88, intellectual stimulation=.92).

### **Work-Related Flow scale**

The occurrence of flow at work was assessed with the Work-Related Flow scale (WOLF) developed by Bakker (2008). The 14-item scale assesses three dimensions: absorption (4 items), work enjoyment (4 items), and intrinsic work motivation (6 items). Participants were asked to report on the frequency of their experiences during the previous week (0 = never, 6 = every day). In the seven studies conducted by Bakker (2008), the three scales had good internal consistency, ranging from .75 to .86 for absorption, .88 to .96 for work enjoyment, and .63 to .82 for intrinsic work motivation. Test-retest reliability was also good for each scale, with coefficients around .75 (Bakker, 2008). In this research all the subscales yielded an internal reliability alpha greater than .70 (absorption = .77, work enjoyment = .79, and intrinsic work motivation = .80). The results of confirmatory factor analysis of WOLF showed a comparative fit index (CFI) of .96, goodness of fit index (GFI) of .89, and adjusted goodness of fit index (AGFI) of .84, and RMSE was .05, which indicate a good fit index for the three factor model.

### **Results**

Table 1 contains the Mean, standard deviation and correlation of transformational leader style facets with three dimensions of Work-Related Flow.

Hypothesis 1 stated that there is a positive relationship between dimensions of transformational leadership and absorption. As it is shown in Table 1, there are significant ( $p < .01$ ) and positive correlations between absorption with idealized influence ( $r = .29$ ), inspirational motivation ( $r = .35$ ), intellectual stimulation ( $r = .56$ ) and individualized consideration ( $r = .29$ ). Therefore, hypothesis is confirmed.

**Table 1**  
**Means, Standard Deviations and Correlations of Transformational Leadership Style Facets and Three Dimensions of Work-Related Flow**

Variable	Mean	Standard deviation	5	6	7
1 Idealized influence	11.40	7.59	.29**	.26**	.12*
2 Inspirational motivation	12.12	9.34	.35**	.15*	.15*
3 Intellectual stimulation	12.99	3.21	.56**	.51**	.26**
4 Individualized consideration	11.21	12.43	.29**	.34**	.25**
5 Absorption	10.12	2.44			
6 Intrinsic work motivation	16.87	5.55		*P<.05 **P<.01	
7 Work enjoyment	11.04	2.08			

**Table 2**  
**The Facets of Transformational Leadership Regressed on Absorption**

Variables	R	RS	B	$\beta$	t	P
Idealized influence	.29	.09	.03	.09	1.50	.13
Inspirational motivation	.44	.20	.12	.29	5.38	.001
Intellectual stimulation	.64	.41	.09	.50	8.11	.001
Individualized consideration	.64	.41	.001	.01	.02	.98
Stepwise						
Variables	R	RS	B	$\beta$	t	P
Intellectual stimulation	.57	.32	.09	.53	9.89	.001
Inspirational motivation	.64	.40	.12	.29	5.42	.001

F=36.11, P<.001

Through hierarchical multiple regression analysis, findings (Table 2) indicated that the combination of idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration were able to significantly predict absorption ( $F=36.11$ ,  $P<.001$ ). The RS indicated that 41% of the variance in the absorption was explained by this regression model. Next, attention was focused on determining which of the predictor variables is most closely related to absorption. For this purpose, the researcher employed the stepwise multiple regression technique. The statistics on the two variables that entered the stepwise multiple regression equation for absorption are given in Table 2. Intellectual stimulation was the first and the most salient of the variables that entered the regression equation ( $\beta=.53$ ), and accounted for 32% of the variation in absorption. At step 2, inspirational motivation entered the regression equation ( $\beta=.29$ ) and accounted for an additional 8% of the variation in absorption. Together, these two variables explained 40% of the variation in absorption.

Hypothesis 2 stated that there is a positive relationship between dimensions of transformational leadership and intrinsic work motivation.

As it is shown in Table 1, there are significant and positive correlations between intrinsic work motivation with idealized influence ( $r=.26$ ,  $p<.01$ ), inspirational motivation ( $r=.15$ ,  $p<.05$ ), intellectual stimulation ( $r=.56$ ,  $p<.01$ ) and individualized consideration ( $r=.29$ ,  $p<.01$ ). Therefore, hypothesis 2 is confirmed

**Table 3**  
**The Facets of Transformational Leadership Regressed on Intrinsic Work Motivation**

<b>Variables</b>	<b>R</b>	<b>RS</b>	<b>B</b>	<b>b</b>	<b>t</b>	<b>P</b>
Idealized influence	.26	.07	.01	.04	.72	.47
Inspirational motivation	.29	.08	.04	.09	1.50	.13
Intellectual stimulation	.52	.28	.08	.43	6.30	.001
individualized consideration	.53	.29	.03	.11	1.60	.11
<b>Stepwise</b>						
<b>Variables</b>	<b>R</b>	<b>RS</b>	<b>B</b>	<b>b</b>	<b>t</b>	<b>P</b>
Intellectual stimulation	.51	.26	.08	.44	6.70	.001
Individualized consideration	.52	.27	.03	.13	2.03	.001

F=20.40, p<.001

Through hierarchical multiple regression analysis, in Table 3, the findings indicate that the combination of the four components of transformational leadership was able to significantly predict the intrinsic work motivation ( $\beta=.53$ ) (F=20.40, p<.001). The RS indicated that 29% of the variance in the intrinsic work motivation was explained by this regression model.

The results of the stepwise multiple regression technique (Table 3) showed that intellectual stimulation ( $\beta=.44$ ) was the first and the most salient of the two variables that entered the regression equation, and accounted for 26% of the variation in the intrinsic work motivation. At step 2, individualized consideration ( $\beta=.13$ ) entered the regression equation and accounted for an additional 1% of the variation in absorption. Together, these two variables explained 27% of the variance of the intrinsic work motivation.

Hypothesis 3 stated that there is a positive relationship between dimensions of transformational leadership and work enjoyment. As show

in Table 1, there are significant and positive correlations between work enjoyment and idealized influence ( $r=.12$ ,  $p<.05$ ), inspirational motivation ( $r=.15$ ,  $p<.05$ ), intellectual stimulation ( $r=.26$ ,  $p<.01$ ) and individualized consideration ( $r=.25$ ,  $p<.01$ ). Therefore, hypothesis 3 is supported.

**Table 4**  
**The Facets of Transformational Leadership Regressed on Work Enjoyment**

<b>Variables</b>	<b>R</b>	<b>RS</b>	<b>B</b>	<b>b</b>	<b>t</b>	<b>P</b>
Idealized influence	.10	.001	.05	.06	.82	.41
Inspirational motivation	.18	.03	.12	.12	1.88	.05
Intellectual stimulation	.29	.08	.07	.18	2.38	.01
Individualized consideration	.33	.11	.10	.19	2.34	.02
<b>Stepwise</b>						
<b>Variables</b>	<b>R</b>	<b>RS</b>	<b>B</b>	<b><math>\beta</math></b>	<b>t</b>	<b>P</b>
Intellectual stimulation	.26	.07	.07	.18	2.43	.001
Individualized consideration	.30	.09	.09	.16	2.22	.001

F=6.17, P<.001

The regression analysis in Table 4, with the significant F value (F=6.17, P<.001), indicates that idealized influence, inspirational motivation, intellectual stimulation and individualized consideration predict work enjoyment. Thus hypothesis 4 is supported.

The results of the stepwise multiple-regression revealed that intellectual stimulation ( $\beta=.18$ ) and individualized consideration ( $\beta=.16$ ) exerted the most profound influence on work enjoyment. These variables explain 09% of the variation of work enjoyment.

### **Conclusion and Discussion**

This research aimed to explore that each one of the four dimensions of transformational leadership (idealized influence, inspirational motivation,

intellectual stimulation and individualized consideration), maintained a Positive, and Significant relationship with facets of work-related flow (absorption, intrinsic work motivation, work enjoyment). In other word, as hypothesized, supervisors who exhibited higher levels of transformational leadership behaviors had employees who reported higher levels of work-related flow. In addition, the results illustrated the importance of intellectual stimulation and individualized consideration as the most predictors of the work-related flow.

Leaders impact the behavior and experiences of the followers through many mechanisms, such as goal definition, role modeling, resource allocation, expression and communication of organizational norms and values, and the shaping of others' perceptions of the work environment (Van Fleet & Yukl, 1986). Transformational leaders move beyond exchange relationships and inspire individuals to perform beyond expectations, often achieving more than they believed was possible (Bass & Riggio, 2006). Transformational leaders are able to motivate their followers by transforming their attitudes, beliefs, values, and needs (Yukl, 1999).

In their self-concept based theory of transformational and charismatic leadership, Shamir, House, and Arthur (1993) articulate that leaders increase the intrinsic motivation of followers by linking goals and efforts to followers' valued aspects of self-concepts. Bono and Judge (2003) explain that personal values make the work goals more relevant and intrinsically motivating. Judge and Piccolo (2004) point out that the significance of intrinsic rewards is emphasized in both Burn's (1978) and Bass's (1985) theories of transformational leadership and also in Shamir's et.al, (1993) conceptualization of charismatic leadership. In fact, the theory underlying transformational leadership (Bass, 1985) suggests that each of its four primary components has the potential to elevate followers' levels of intrinsic motivation. For example, because the charisma associated with "idealized influence" elevates employees' expectations about what they can accomplish, it is also likely to enhance the

accomplishment and task orientation aspects of intrinsic motivation (Charbonneau, Barling, & Kelloway, 2001). Similarly, Kirkpatrick and Locke (1996) demonstrated that employees who have a charismatic leader are likely to perceive their work as more interesting. Charbonneau et al. (2001) found that “individualized consideration” and “intellectual-stimulation” are also related to the intrinsic motivation of the followers. For example, the behaviors associated with “intellectual-stimulation” encourage employees to think innovatively and creatively in order to approach old problems in new ways. It follows then that the behaviors associated with “individualized consideration” would make employees feel that their innovative efforts and ideas were appreciated. For many people, this opportunity to apply and express themselves creatively would enhance intrinsic motivation for their work.

The impact of transformational leadership on the absorption component of the work-related flow has not been directly examined by organizational researchers. However, some research suggests that the transformational style of leadership has a positive influence on followers’ effort and performance levels, both of which could indicate high levels of absorption in one’s work.

For example, Bass (1985) states that transformational leaders provide constructive feedback to the followers that encourage them to think creatively about problems, and motivate them to put forth extra effort, all of which should influence the degree to which followers will immerse themselves in their work. In addition, through their verbal and symbolic behaviors, transformational leaders increase followers’ identification with their work unit, internalization of group values, and enjoyment in their task or role, which, in turn, act as powerful motivational forces to enhance the follower performance (Bono & Judge, 2003). Furthermore, when employees are intrinsically motivated by their work, they are more likely to immerse themselves in their work to the point of complete absorption. Thus, because transformational leaders tend to have a positive influence on followers’ levels of intrinsic motivation, transformational leaders

should also have a positive influence on the extent to which employees become absorbed in their work.

Intrinsic motivation and enjoyment are closely linked together; employees enjoy engaging in work that is intrinsically motivating to them. Thus, to the extent that transformational leaders enhance followers' levels of intrinsic motivation, they should also influence employees' enjoyment with their work.

It can be proposed that meaningful work was the mechanism by which transformational leadership affected flow-related work. The opportunity to derive meaning from one's work is intrinsically motivating to the employees. This is because intrinsic motivation for one's work is an essential element of the flow experience (Csikszentmihalyi, 1990). In addition, when work is perceived as meaningful, and thus, intrinsically motivating, people will be more likely to immerse themselves in their work; thereby, increasing the levels of absorption in their work, which is another primary component of work-related flow.

A methodological limitation of the current study was that it was correlational. Another limitation of the current study was the reliance on self-report data. Future studies should include some longitudinal components to better measure changes in variables over time, testing causal hypotheses more directly.

The findings of this research suggest that it would be beneficial for organizations to develop training programs for managers and supervisors to learn how to apply transformational leadership style to increase work-related flow.

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