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VALIDATION OF THE TURKISH VERSION OF WORK-RELATED FLOW INVENTORY (WOLF) AND ITS RELATIONSHIP WITH BURNOUT AND JOB SATISFACTION

Research article

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Abstract

The current paper was conducted for two aims: the first aim was to adapt the Work-Related Flow Inventory (WOLF) developed by Bakker (2008) into Turkish. In this context, the inventory was applied 198 (128 females 64.6% and 70 males 35.4%) teachers working in public schools in Ankara for construct validity and reliability. WOLF, consisting of 13 items and three sub-dimensions, was found to be a valid and reliable tool for measuring teachers' work-related flow. The second aim was to examine the relationships between work related flow, burnout, and job satisfaction through the structural equation model. The data were collected from 274 teachers (155 females 56.6% and 114 males 41.6%) working in public schools in Ankara. The relationships between the variables were examined with the hybrid model. A negative and statistically significant relationship was found between flow and emotional exhaustion; a positive and statistically significant relationship was found among flow, personal accomplishment, and intrinsic satisfaction variables. However, no statistically significant relationship was found between work related flow and depersonalization as well as extrinsic satisfaction variables. The fit index values of the model examining the relationships among the variables were in the range of good fit values accepted in the literature. Findings were discussed within the relevant literature and culture, and suggestions were provided for future researchers and educators. Also, recommendations were listed for future studies with an emphasis on the need for research in Turkey.

Keywords: Work related flow, burnout, job satisfaction

1. Introduction

Work is *sine qua non* of human life. People spend about half of their time in the workplace. Besides, work is one of the elements that make sense of human existence. Therefore, work also has a psychological effect on human life. For example, job satisfaction is related to general life satisfaction and well-being. On the other hand, unemployment is one of the important causes of psychological problems such as life dissatisfaction, depression, and negative affect (Boniwell, 2012).

The utilitarian and cost-benefit approach in the field of work and organizational psychology affected the research and application orientation in the field in this direction (Wright & Wright, 2002). The literature abounds in research which was based on the cost-benefit approach in organizational psychology and examined organizational problems, unhappiness, dissatisfaction and the cost of these variables to organizations. On the other hand, the positive psychology movement frequently emphasized what the truth is rather than what is wrong in people (Nelson & Cooper, 2007). Seligman (2002) advocates that the main purpose of the positive psychology movement is to understand happiness and to make subjective well-being easier. Positive psychology places emphasis on issues stated as personal experiences at an individual level such as well-being, contentment, satisfaction, hope, optimism, happiness, and flow (Seligman & Csikszentmihalyi, 2000).

According to Luthans (2002a, 2002b), the concepts put forward by positive psychology in organizational research should be examined with a more widespread and more effective approach. He states that the positive organizational behaviours of the employees, their strengths, positive orientations, and psychological skills should be managed effectively. Research displays that specific purpose-oriented and structured activities are directly related to mental health (Kelloway & Barling, 1991; Turner et al., 2002) and indirectly affect employees' satisfaction with life (Hart, 1999; Judge & Watanabe, 1993). Therefore, the positive psychology movement has gained momentum in work and organizational psychology (Snyder & Lopez, 2002; Wright, 2003).

Flow is one of the concepts that is considered important by positive psychology and contemporary motivation theories in terms of mental health. Like contemporary intrinsic motivation theories, flow theory also has an important place in intrinsic motivation theories and positive psychology. In theory, flow experience refers to a prototype of intrinsic motivation (Csikszentmihalyi, 1975; 1990; 1993). Flow is defined as being engaged in-depth with an enjoyable activity by different people in different cultures (Csikszentmihalyi & Csikszentmihalyi, 1988). On the other hand, Asakawa (2004) defines flow as a situation where an individual feels the consciousness and cognitive competence at the highest level, is deeply engaged with the activity he is doing, is highly motivated, and enjoys the activity. Flow refers to being in the zone for athletes and being visited by the muse for artists (Csikszentmihalyi, 2014).

The person is fully concentrated on the activity he is busy with during a flow state. Therefore, the person's consciousness and awareness of the activity she or he is busy with is at a high level. In the flow state, the steps to be followed in the work or activity are clearly identified. In other words, the objectives are very clear and certain. The person knows how well she or he did something in this emotional state. Hence, there is clear feedback. For example, a tennis player knows how best to hit the ball, and a violinist knows whether the played note is right or wrong. During flow, people lose their self-consciousness and the vulnerable ego disappears. The feeling of time becomes complicated and the hours pass like minutes during this activity. If the aforementioned conditions occur, the person becomes busy with the activity just to experience these feelings without any extrinsic reward expectations (Collins, Sarkisian & Winner, 2009; Csikszentmihalyi, 2014). However, the most important thing is that there is a harmony and balance between the person's abilities regarding the activity he is busy and the environmental difficulties he perceives. For example, a tennis player cannot enjoy the game if his opponent is too talented or too untalented (Csikszentmihalyi, 2014). Especially the fact that the activity is below the persons' abilities may cause them to be bored, and their ability to be overstepped. Therefore, a balance between the person's abilities and the difficulty level of the activity is very important for flow (Rogatko, 2009).

Csikszentmihalyi (1997) states that flow can occur in any activity. Therefore, flow is likely to be experienced in various activities (e.g. snowboard, dance, athletics, painting, playing musical instruments) (Bakker, 2005; 2008). The reasons for flow in these activities are listed as activities require a rule and a skill to learn, there is a need to set goals in events, activities provide feedback and provide a sense of control. Flow has nine basic elements: (i) *challenge-skills balance* (an equal balance between the skill level and the challenge), (ii) *action-awareness merging* (experiencing automatic and spontaneous emotions that requires deep and dense participation in the activity), (iii) *clear goals* (confident in his/her action), (iv) *unambiguous feedback* (immediate and clear feedback on one's actions), (v) *concentration on the task* (focus on the whole action), (vi) *sense of control* (a sense of coping that the person knows how to react in the next stage of the action), (vii) *loss of self-consciousness* (lack of

anxiety and evaluation of self), (viii) *transformation of time* (feeling as if time stopped when engaged in activity) and (ix) *autotelic experience* (the activity being engaged provides an intrinsic reward) (Csikszentmihalyi, 1990).

In a study carried out by Csikszentmihalyi (1997) with the experience sampling method, the flow was observed while working rather than free time. This situation is considered as an indication that people invest time and energy for flow while working. When the flow is applied to the workplace, it is defined as a high-level experience observed while performing various aspects of the job such as *absorption*, *work enjoyment*, and *intrinsic work motivation*. In this definition, absorption is conceptualized as the employees' giving themselves completely to the job they do. Time passes very fast during the absorption process and people forget everything around them. Work enjoyment is conceptualized as employees' positive evaluations of the quality of work life as a result of the pleasure of the employees from their jobs. Time is believed to pass very fast during the absorption process and the person forgets everything around him. Work enjoyment is defined as positive evaluations related to the quality of work life as a result of the pleasure of the employees. This enjoyment or happiness is seen as a result of the cognitive and emotional evaluation of the flow experience. The intrinsic work motivation indicates that the work is done without any expectation of any extrinsic reward. In other words, the person does it for the pleasure and satisfaction provided by the event (Bakker, 2005; 2008). The enjoyment that people feel after the flow situation arises from the sense of competence resulting from the struggle with the task and the sense of mastery. Accordingly, a qualified flow experience depends on the harmony between the difficulty of the task and the person's abilities (Moneta & Csikszentmihalyi, 1996). Bakker (2008) states that employees with high intrinsic motivation are constantly interested in their jobs, they are willing to work in their jobs, and they are impressive with their performance in the workplace.

It is crucial to understand and analyse the concept of flow, which provides a perspective on experiences. Nakamura and Csikzentmihalyi (2002) emphasize that the flow experience leads to personal development and growth with an interpretation that "*a good life is one that is characterized by complete absorption in what one does*" (Seligman & Csikszentmihalyi, 2000). Briefly, the concept of flow is described as making life valuable for living (Csikszentmihalyi & Csikszentmihalyi, 2006). Recently, this concept has also been an important for organizations. It is emphasized for developing creative ideas and developing useful and extraordinary projects for organizations (Moneta, 2012). Positive moods (e.g. flow) in work life extend the behavioural repertoire of employees. The expansion and enrichment of the behaviour repertoire lead to the development of new skills and resources that enable employees to display more resiliency features when faced with difficulties. These positive work experiences have a positive effect on their work performance (Demerouti, Bakker, Sonnentag & Fullagar, 2012). Also, the concept of work-related flow is considered as an indicator of work engagement. Bakker, Schaufeli, Leiter and Taris (2008) state that work engagement is associated with low burnout, a high level of job satisfaction, job participation, and occupational well-being.

Today, the structural model for emotional states has also been adapted to work life. This model is expressed by four different well-being indicators related to work, which are frequently used in work life: Burnout, work engagement, workaholism and job satisfaction. These four different concepts related to professional well-being presented in the model are used to explain the emotional well-being of employees (Mäkikangas et al., 2015). The concept of work engagement in the model includes a positive and satisfying emotional state. It is a combination of dimensions of enthusiasm, dedication and integration into the workplace. These dimensions are also used as sub-dimensions of engagement in measuring

work engagement (Schaufeli, Salanova, González-Romá, & Bakker, 2002). This situation is also expressed as taking action and pleasure. Workaholism, which is another variable in the model, expresses an compulsive and problematic passion for excessive work (Bakker, Albrecht & Leiter, 2011; Gorgievski & Bakker, 2010). Job satisfaction is the appraisal of the employees' work values and success in the workplace and the state of pleasure they receive from the job. In other words, job satisfaction is the positive evaluations of people for their jobs. Job satisfaction is also a positive or negative intrinsic emotional state of work (Wu & Nguyen, 2019). On the other hand, burnout is considered as the exact opposite of work engagement and job satisfaction is considered as the opposite of workaholism. In the most general sense, burnout is defined as joylessness and a decrease in effectiveness in the workplace. Job satisfaction refers to being active and enjoyable in the workplace. Burnout results in exhaustion, depersonalization and inadequacy. Besides, burnout often negatively affects people working in the field of education. Key features in the dimensions of burnout are the sense of frustration and anger for the emotional exhaustion dimension and insufficiency as well as failure for the depersonalization dimension. This affects personal and social functions negatively (Maslach & Goldberg, 1999). While teachers teach in the classroom, they also perform tasks such as preparing lessons, taking notes, and evaluating students' exams. Thus, it is stated that teachers often experience work-related flow. Therefore, efforts such as carrying out these activities, contributing to the personal development of the students, and self-improvement to benefit students are associated with optimal experiences. The flow observed in teachers facilitates teachers' performances and optimal experiences in learning activities (Basse & Fave, 2012).

Within the above-mentioned theoretical explanations, the effects of positive and negative emotions on employees are observed in the workplace. In this context, it may be useful to examine the relationships between these emotions in employees. In Turkey, literature abounds in studies examining employee burnout in general and teacher burnout as well as job satisfaction in particular. However, there is a dearth of research on positive organizational psychology or positive psychological practices in organizations. This paper aimed to a measurement tool for work-related flow, which is one of the important concepts of positive psychology and to examine the relationships between this variable and burnout as well as job satisfaction.

2. Method

This study adopted the survey research design. However, survey models are classified in various forms in the literature. Model examining the relationships between variables is considered as a relational survey (Karasar, 2011). Therefore, the model in this research is a relational survey model.

2.1. Participants

The study was carried out with 274 (155 females [56.6%] and 114 males [41.6%]) volunteer teachers working in state schools in Ankara, Turkey. Five of the participants (1.8%) did not provide any information about their gender. The average age of the participants is M = 33.09 with standard deviation (SD = 8.41), professional seniority average is M = 9.28 years with standard deviation (SD = 8.57).

2.2. Data Collection Tools

2.2.1. Work Related Flow Inventory (WOLF)

Validity and reliability studies of this inventory developed by Bakker (2008) were provided with data from seven different sample groups. There were 16 items in the original inventory. Then three items were excluded and the final form was created as a 7-item Likert-

type (1 = Never - 7 = Always). The final version explained 65% of the total variance. This inventory developed to measure the work-related flow consists of three sub-dimensions: Absorption, Work Enjoyment, and Intrinsic Work Motivation. The Cronbach's alpha internal consistency coefficient was calculated as .80 for absorption, .90 for work enjoyment, and .75 for intrinsic work motivation. In the test-retest application carried out with 248 participants working in different business lines, the reliability values were found to be .74 for absorption, .77 for work enjoyment, and .71 for intrinsic work motivation.

WOLF was adapted to Turkish culture by the researcher and its validity and reliability values were examined. In the first stage, the researcher sent an email to Arnold Bakker, who developed the inventory, and received approval for adaptation. Then, the 13-item form was adapted to Turkish culture. For expert opinion, the adapted form was presented to six faculty members in the fields of Educational Psychology, Guidance and Psychological Counseling, and Measurement and Evaluation. Who had good language proficiency. Experts suggested that 7-point Likert scoring intervals were not suitable Turkish context. In the original form, score intervals were 1 = Never, 2 = Almost Never, 3 = Sometimes, 4 = Regularly, 5 = Often, 6 = Very Frequent, and 7 = Always. As these intervals were not suitable, the inventory was created as 1 = Never and 7 = Always without naming other intervals. In line with the suggestions from the field experts, the inventory was revised and applied (Appendix 1).

The final version of inventory was applied to 128 female teachers (64.6%) and 70 (35.4%) male teachers working at various educational levels in Ankara, with an average age of M = 29.69 (SD = 5.74). Thus, the construct validity and reliability of the study were investigated. Confirmatory factor analysis (CFA) was performed to test the construct validity and standardized path coefficients and corrected item-total correlation coefficients were presented in Table 1.

Table 1. *Corrected item-total correlations, standardized factor loads and Cronbach's alpha coefficients for WOLF*

Dimensions	**Items**	**R_{ij}**	**β**	**T**	**R^2**	**Cronbach's alpha**
Absorption	1	.505	.53	7.10**	.28	.82
	2	.783	.84	15.15**	.71	
	3	.593	.68	11.47**	.46	
	4	.726	.80	14.91**	.65	
Work Enjoyment	5	.762	.87	18.10**	.76	.93
	6	.836	.94	20.49**	.89	
	7	.833	.92	19.53**	.85	
	8	.747	.75	12.83**	.57	
Intrinsic Work Motivation	9	.644	.70	12.24**	.49	.81
	10	.543	.53	8.17**	.29	
	11	.791	.85	16.49**	.73	
	12	.521	.57	8.43**	.33	
	13	.681	.71	11.10**	.50	

*$p < .05$ **$p < .01$

Considering Table 1, the standardized path coefficients of the items were found between β = 0.53 and β = 0.94, the item-total correlations (r_{ij}) were between .51 and .84, and the variance values (R^2) between the items were between .28 and .89. After the CFA, goodness-of-fit indexes were calculated as RMSEA = 0.082, SRMR= 0.054, $\chi 2$ / df = 2.32, GFI = 0.87, AGFI = 0.80, IFI = 0.98, CFI = 0.98, NNFI = 0.98, and NFI = 0.97. When these goodness-of fit indexes were examined, the values indicated a good fit. In other words, the factor structure of the inventory consisting of 13 items and 3 sub-dimensions was confirmed. After the CFA, the Cronbach's alpha internal consistency coefficient was calculated and the reliability values were determined as 0.82 for absorption, 0.93 for work enjoyment, and 0.81 for intrinsic work motivation. Regarding the adaptation and distinctive validity studies of the scale, the researcher applied the Positive and Negative Affect Schedule (PANAS) which was developed by Watson, Clark and Tellegen (1988) and adapted to Turkish by Gençöz (2000) and the Satisfaction with Life Scale (SWLS) developed by Diener, Emmons, Larsen and Griffin (1985) and adapted to Turkish by Köker (1991). Table 2 exhibits the findings of convergent and discriminant validity.

Table 2. *Relationships between WOLF, PANAS, and SWLS*

Variables	Positive Affect	Negative Affect	Life Satisfaction
Absorption	.479**	-.081	.328**
Work Enjoyment	.584**	-.241**	.486**
Intrinsic Work Motivation	.533**	-.351**	.443**

*$p < .05$ **$p < .01$

Regarding the correlation values in Table 2, the WOLF did not share a significant correlation value with the Negative Affect sub-dimension of Absorption dimension (r = -.081; $p > .05$). However, the relationships between other sub-dimensions and other subscales were statistically significant. Based on these correlation values, WOLF has convergent and discriminant validity. In addition to the validity and reliability analysis regarding the WOLF, the Cronbach's alpha internal consistency was calculated within the scope of this research (n = 274) and was calculated as .75 for Absorption, .92 for Work Enjoyment, and .77 for Internal Work Motivation dimension.

2.2.2. Maslach Burnout Inventory (MBI)

It was developed by Maslach and Jackson (1981) and is widely used to measure the levels of employees' exhaustion. MBI consists of 22 items including three sub-dimensions: *Emotional Exhaustion*, *Depersonalization*, and *Personal Accomplishment*. High scores on the emotional exhaustion and depersonalization dimensions and low scores on the personal accomplishment dimension indicate burnout in individuals. The Cronbach's alpha internal consistency coefficient for the original version of the inventory was calculated as .74 for the emotional exhaustion dimension, .59 for the depersonalization dimension, and .77 for the personal accomplishment dimension. Ergin (1992) adapted the MBI to Turkish culture and arranged as it 5-point Likert. The Cronbach's alpha internal consistency coefficient calculated for the revised inventory was .83 for the emotional exhaustion dimension, .65 for the depersonalization dimension, and .67 for the personal accomplishment dimension. In this study, the Cronbach's alpha internal consistency coefficient was calculated as .86 for the emotional exhaustion dimension, .71 for the depersonalization dimension, and .73 for personal accomplishment dimension.

2.2.3. Minnesota Job Satisfaction Questionnaire (MSQ)

It consists of 20 items and two sub-dimensions, developed to determine the level of satisfaction that employees receive from their jobs. It has two dimensions: *Intrinsic Satisfaction* and *Extrinsic Satisfaction*. Satisfaction scores of the participants are calculated by adding the scores of 20 items. The reliability values of the original form were found between 0.84 and 0.91 for the intrinsic satisfaction dimension, between .77 and .82 for the extrinsic satisfaction dimension, and between .87 and .92 for the entire scale (Weiss, Dawis, England, & Lofquist, 1967). Turkish version was carried out by Baycan (1982) with 120 participants working in four different institutions. However, no validity and reliability analyzes were performed. In this study, the Cronbach's alpha internal consistency coefficient was calculated as .88 for the intrinsic satisfaction dimension, .83 for the extrinsic satisfaction dimension, and .91 for the overall scale.

2.3. Data Analysis

SPSS and LISREL programs were used for data analysis. The descriptive statistics and the correlation coefficients between the variables were performed with the help of the SPSS program. Structural Equation Modelling (SEM) was used to reveal predictive relationships between variables. LISREL was used to test the model created with SEM. The validity of the model created was evaluated by examining the model fit indexes.

3. Findings

After analysing the data, descriptive statistics were calculated for the data set and the distribution of the scores of the variables was examined. Then, the correlation matrix of the variables and the relationship pattern between the variables were revealed. Finally, findings of SEM regarding to what extent teachers' job satisfaction and professional burnout levels predict work-related flow were included. Table 3 displays descriptive statistics of the variables.

Table 3. *Descriptive statistics*

Variables	Min.	Max.	M	SD	Skewness	Kurtosis
Emotional Exhaustion	.00	33.00	13.64	6.68	.602	.260
Depersonalization	.00	17.00	4.51	3.31	.857	.750
Personal Accomplishment	8.00	32.00	21.77	4.12	-.490	.435
Intrinsic Satisfaction	16.00	60.00	45.37	7.63	-.893	1.149
Extrinsic Satisfaction	8.00	40.00	26.26	6.04	-.584	.239
General Satisfaction	24.00	98.00	71.64	12.73	-.852	1.105
Absorption	5.00	28.00	17.73	4.72	.112	-.475
Work Enjoyment	8.00	28.00	19.87	5.33	-.222	-.886
Intrinsic Work Motivation	6.00	35.00	21.56	6.38	-.019	-.586

The descriptive statistics in Table 3 include the highest, lowest, average, standard deviation, skewness and kurtosis values of the participants received from the instrument. According to the skewness and kurtosis values, these values were observed to be between -1 and +1. Only the kurtosis value of extrinsic satisfaction and overall satisfaction (total score) dimensions of MSQ was slightly above +1. According to Pituch and Stevens (2016, p.228), the data set is considered to have a normal distribution when the skewness and kurtosis

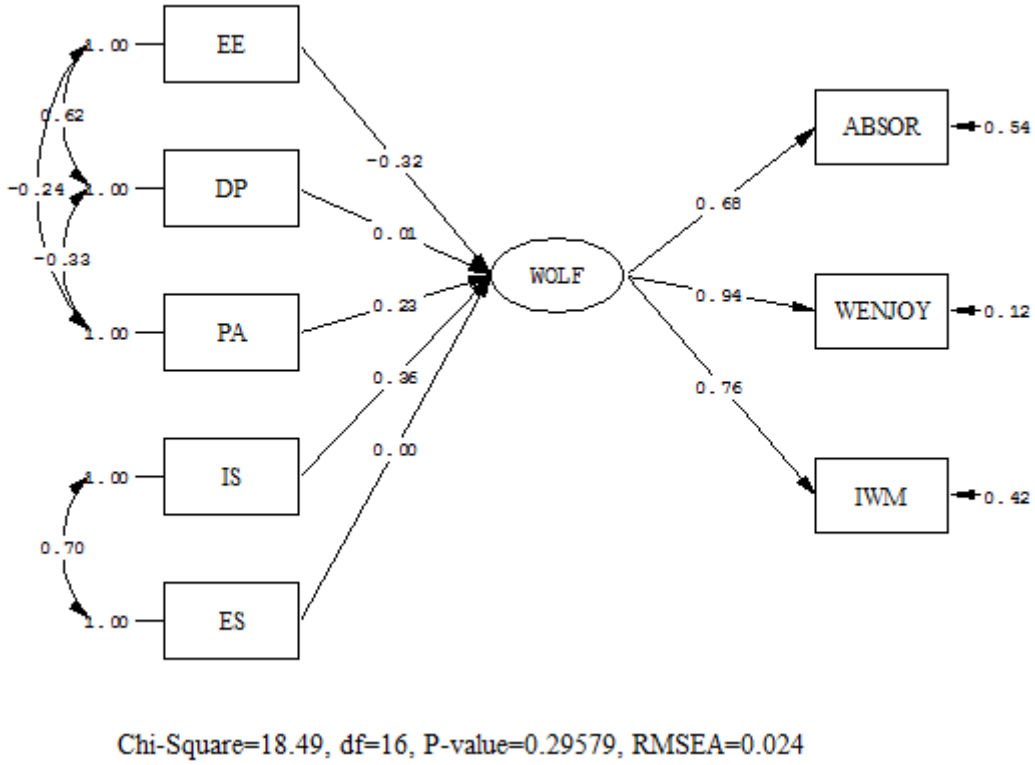
values are between -1.5 and 1.5. Thus, the data set obtained from the research shows normal distribution. Then, the Pearson correlation coefficient was calculated to determine the relationships between the variables. Table 4 illustrates the correlation matrix of variables.

Table 4. *Correlation matrix of relationships between variables*

Variables	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
1. EE	-	.624**	-.255**	-.490**	-.438**	-.502**	-.280**	-.549**	-.382**
2. DP		-	-.303**	-.382**	-.278**	-.361**	-.224**	-.390**	-.288**
3. PA			-	.419**	.180**	.336**	.282**	.410**	.384**
4. IS				-	.729**	.946**	.343**	.560**	.515**
5. ES					-	.912**	.246**	.403**	.372**
6. GS						-	.322**	.527**	.485**
7. AB							-	.663**	.572**
8. WE								-	.723**
9. IWM									-

* $p < .05$ ** $p < .01$

Considering the Pearson correlation coefficients in Table 4, other dimensions of professional burnout, except the personal accomplishment dimension, had a negative and statistically significant relationship with both job satisfaction and the work-related dimensions. The lowest correlation coefficient was between the personal accomplishment dimension of burnout and the intrinsic satisfaction dimension of job satisfaction [r = .18; $p <$ .01]. The highest correlation coefficient was observed to be between the job satisfaction dimension and work enjoyment dimension of the work-related flow [r = .56; $p < .01$]. After examining the correlation coefficient between variables, SEM was used to examine the predictive role of burnout and job satisfaction on flow. The hybrid model created within the scope of SEM was tested and the model fit was evaluated by examining the fit indexes of the model.



EE: Emotional Exhaustion, **DP:** Depersonalization, **PA:** Personal Accomplishment, **IS:** Intrinsic Satisfaction, **ES:** Extrinsic Satisfaction, **AB:** Absorption, **WE:** Work Enjoyment, **IWM:** Intrinsic Work Motivation.

Figure 1. Path diagram of the structural model

As is seen in Figure 1, depersonalization dimension of burnout [β = .01; $p > .05$] and the extrinsic satisfaction dimension of the job satisfaction [β = .00; $p > .05$] might not be a statistically significant predictor of work related flow. When the path between the extrinsic satisfaction variable and flow was examined, the standardized road coefficient (β) was observed to be zero. This shows that there was no statistically significant relationship between extrinsic satisfaction and flow. However, the relationship between Personal Accomplishment dimension of burnout and flow was positive and statistically significant [β = .23; $p < .01$]. A negative and statistically significant relationship was found between flow and Emotional Exhaustion dimension that is considered as the main element of burnout [β = -.32; $p < .01$]. Finally, a positive and statistically significant relationship occurred between intrinsic job satisfaction and flow [β = .36; $p < .01$]. In addition to the β values, the amount of variance explained by the variables that had significant relationships on flow was also calculated. Thus, the Personal Accomplishment dimension of burnout explained approximately 5% of the variance in the flow variable [β = .23, $p < .01$; $R^2 = .05$]. Emotional Exhaustion dimension explained about 10% of the variance in flow [β = -.32, $p < .01$; $R^2 = .10$]. Finally, the Intrinsic Satisfaction variable, a dimension of job satisfaction, explained about 13% of the variance in flow [β = .36, $p < .01$; $R^2 = .13$]. In a nutshell, the variables that explained the variance in flow the most were Intrinsic Satisfaction, Emotional Exhaustion, and Personal Accomplishment, respectively.

After calculating the relationships between variables and the amount of explained variance, the validity of the model created was evaluated with the model fit index values. Therefore, the fit index values, which are frequently used in the literature, were examined. The fit index values calculated for the model created were found to be RMSEA = 0.042, $\chi 2$ / df = 1.48, SRMR = 0.029, GFI = 0.98, AGFI = 0.95, IFI = 0.99, CFI = 0.99, NNFI = 0.99 and

NFI = 0.98. Considering the obtained fit index values, the model created to determine the predictors of the flow showed good fit and variables contributed statistically to predicting flow.

4. Discussion

This study has introduced an instrument to measure flow which is one of the positive psychological features in work life and examined the relationships among work-related flow of teachers, their professional burnout, and job satisfaction levels through structural equation modelling. First of all, the WOLF, which was developed by Bakker (2008) and has 7 Likert scores consisting of 13 items with three dimensions, was adapted to Turkish. Cronbach's alpha internal consistency coefficients were calculated as .82 for absorption dimension, .93 for work enjoyment dimension, and .81 for intrinsic work motivation dimension. Besides, the fit index values were found as follows: RMSEA = 0.082, SRMR = 0.054, $\chi 2$ / df = 2.32, GFI = 0.87, AGFI = 0.80, IFI = 0.98, CFI = 0.98, NNFI = 0.98, and NFI = 0.97. It can be said that this study shared similar findings with the original form by Bakker (2008). The fit index values of the original version were calculated as RMSEA = 0.04, $\chi 2_{(919.97)}$ / df $_{(372)}$ = 2.47, GFI = 0.88, IFI = 0.93, CFI = 0.93, and NNFI = 0.91. Also, the Cronbach's alpha internal consistency coefficients ranged from .75 to .86 for absorption dimension, .88 to .96 for work enjoyment dimension, and .63 to .82 for intrinsic work motivation dimension. Regarding the validity and reliability values of this paper and the original study, the Turkish version of WOLF is a valid and reliable instrument to measure flow. In addition, it can be interpreted that the correlation values calculated among PANAS, SWLS, and the Turkish version of WOLF provide the convergent and discriminant validity condition of the inventory.

In this study, emotional exhaustion was found to have a negative relationship with the flow but a positive relation with personal accomplishment. However, the relationship between the depersonalization dimension and flow was not statistically significant. To examine both the construct validity of the instrument and the relationships between the variables, the fit indexes of the tested model were calculated. Considering work-related flow, burnout, and job satisfaction variables, the fit index values of the model tested were as follows: RMSEA = 0.042, $\chi 2$ / df = 1.48, SRMR = 0.029, GFI = 0.98, AGFI = 0.95, IFI = 0.99, CFI = 0.99, NNFI = 0.99, and NFI = 0.98. The literature provides various criteria for evaluating the fit indexes (Çokluk, Şekercioğlu & Büyüköztürk, 2010; Schermelleh-Engel & Moosbrugger, 2003; Sümer, 2000). According to these criteria, the calculated fit index values of the model showed good fit between the model and the data. As a result, the model tested is well-fit and acceptable.

Conditions such as work-related burnout and stress affect people's physical and psychological health negatively. To reduce their negative effects, they apply techniques such as being purified from work-related thoughts or relaxation in the workplace. Sometimes they prefer to remain in a positive mood with less intellectual effort to work (de Bloom et al., 2017). A study conducted with medical students found a similar finding with this research. A high relationship was found between flow and burnout levels of students (r = -.594; $p < .01$) in a study conducted with 2500 medical students studying in China. Based on this, flow is associated with burnout of individuals (especially students) not only in the workplace but also in educational settings. Being also expressed as a kind of intrinsic motivation, the flow was observed as a situation related to student burnout. More clearly, the decrease in intrinsic motivation (flow) of students increases their burnout (Xie, Cao, Sun & Yang, 2019).

Flow, which is one of the important positive emotional states, protects people against burnout and stress feelings occurred due to work life (Zito, Cortese & Colombo, 2019). Organizations expect their employees to be proactive, supportive, and in continuous

professional development. On the other hand, employees are in search of using their skills, developing and connecting with passion for their work. Employees are expected to have good psychological health to achieve their goals. Therefore, the flow has an important place in terms of the mental health of employees (Bakker & Schaufeli, 2008; Luthans, 2002b). The roles and demands expected from people in work life constitute a source of stress in them. The long-term effects of work-related demands expected from people result in burnout. However, the individual resources (coping skills, motivation and positive emotions) help individuals effectively deal with these negative feelings of work (Bakker & Demerouti, 2007). For that reason, as the burnout increases in employees, they mentally withdraw from work, get less satisfaction from their jobs, their engagement decrease, and they feel emotionally unhappier. More specifically, burnout has a negative effect on work engagement and happiness (Buitendach et al., 2016). Negative emotions such as stress and burnout also narrow people's thought-action repertoires (such as fight or flight). However, positive emotions broaden the thought-action repertoires of people. Positive emotions provide individuals with new thought-action options (such as play and research) (Fredrickson, 1998). Flow also makes it easier for people to do their job with vigor and experience less emotional burnout. With this aspect, the sense of flow strengthens individuals' resilience in dealing with stress effectively and creates a personal resource for them. With this aspect, the flow provides individuals with personal resources (such as resiliency) that they can effectively cope with stress. At the same time, the flow provides a high level of motivation in the workplace, prevents the depletion of the energy resources of individuals, and helps to renew their emotional resources (Fredrickson et al., 2000).

Another aim was to investigate the relationship between job satisfaction and flow. Accordingly, the relationships between teachers' job satisfaction levels and flow were examined. Although a statistically significant relationship was found between the Intrinsic Satisfaction and flow, no statistically significant relationship was observed between Extrinsic Satisfaction and flow. When the types of motivation were examined, there was often an emphasis on the internal and external motivations of individuals. Csikszentmihalyi (1975; 1990; 1993) advocates that flow theory can be regarded as one of the intrinsic motivation theories. Therefore, the sense of flow can be considered as an element of intrinsic motivation. In the light of such information, the finding of this study is consistent with the literature as it displayed a significant relationship between intrinsic satisfaction and flow, and as it found no relationship between extrinsic satisfaction and flow. Psychological features such as job satisfaction and work engagement are considered as indicators of well-being of employees. These affect the happiness of employees in everyday processes. Therefore, the positive emotions experienced by individuals increase their happiness (Xanthopoulou, Bakker & Ilies, 2012). Accordingly, the flow, which is among the positive emotions, can be also a variable that affects happiness elements such as job satisfaction. Positive emotions such as flow in the workplace increase the pleasure and satisfaction of employees. Also, these emotions reduce the intention of people to quit their jobs and lead them to work more efficiently. As a result, this increases the work engagement of employees (Carr et al., 2016).

Teachers' having a high level of autonomy in their workplace, principal support, social support, and feedback about their work form the basis of flow. It is possible that teachers with these resources will experience higher flow, satisfy their work more, and have less burnout. Hence, teachers achieve their goals more effectively in the workplace (Salanova, Bakker, & Llorens, 2006). The emotions of employees in many professional groups, including teaching, have a contagious nature. Therefore, no matter which feelings (positive or negative) teachers experience in workplace, it is likely that other colleagues will experience these emotions as well. In other words, employees transmit positive and negative emotions to

each other. This situation is not only observed among employees but also teachers transmit their students with these feelings. In a study with music teachers, the transmission of emotions hypothesis was empirically supported. The frequency of experiencing flow reported by teachers and students were found to be related to each other. Therefore, the emphasis is placed on the importance of teachers' positive feelings, such as flow and happiness, in the workplace (Bakker, 2005). Because according to the Broaden-and-Build of Positive Emotions Theory, positive emotions in people's lives lead to the building of new psychological resources and increase emotional well-being. Not only do people experience these emotions in momentary situations, but their potential to experience them in the future increases (Fredrickson & Joiner, 2002).

In the study, a negative relationship was found between flow sense and work-related burnout while there was a positive relationship between flow and job satisfaction. Besides, although no relationship was observed between the extrinsic satisfaction dimension of job satisfaction and flow, there was only a positive relationship between flow and the extrinsic satisfaction dimension. Thus, it can be interpreted that work-related flow is protective against negative features such as burnout, and it has an enhancing effect on the elements that increase productivity such as inner satisfaction. The results of both theoretical and empirical research emphasize the importance of this emotion in the workplace. Therefore, it will be beneficial to provide teachers or other employees with tasks in which they can feel autonomous, receive feedback, and be compatible with their abilities to support flow. Thus, teachers will be free from negative emotions in the workplace by contributing to their potential to experience positive emotions. Assuming that emotions are contagious, positive emotions experienced by teachers or other employees will increase the likelihood of other people around them (such as family and students) to experience positive emotions.

This study has some limitations. The data collection method is one of these limitations. Teachers' work-related flow was determined via a self-report based measurement tool. However, the experience sampling method is used for learning how often and in what situations high-level experiences such as flow are experienced. The experience sampling method (Csikszentmihalyi & Larson, 1987; Moneta and Csikszentmihalyi, 1996) is a method developed to randomly measure the location of people, their activities, and their cognitive and emotional experiences. This method is crucial especially for identifying the personal experiences resulting from the interaction of the people with their environment. In the experience sampling method, people receive a signal sent by the researcher during the day with a beeper or a similar tool. Then, the participants answer the questions in the experience sampling form. Thus, the researcher obtains information about people's emotions, activities, motivations, perceptions of freedom, challenges, skills, attention, and self-consciousness during the day. Undoubtedly, this method provides more reliable information compared to self-report based methods in determining emotional states such as flow that are experienced but not easily remembered later. Therefore, using the experience sampling method in further studies. The experience sampling method may be preferred in further studies. Thus, it might be determined when, during which activity, with whom, and in which environment teachers experience the flow. So, it will be possible to determine both flow and possible negative emotions.

This paper examined the relationships among flow, burnout, and job satisfaction, which are considered as individual variables. However, studies investigated flow and organizational variables such as leadership, job characteristics, demands and resources in the workplace (Zito, Cortese & Colombo, 2019, Demerouti, 2006; Lan, Wong & Mao, 2017). The literature advocates that organizational features (such as work environment where people can use their creativity, providing feedback, and being autonomous in work life) have a positive effect on

the occurrence of flow experienced by the employees (Llorens, Salanova & Rodriguez, 2013). Although international literature abounds in such studies, there is no on this issue in Turkey. Accordingly, further studies can focus on the relationships between flow and organizational variables (leadership, organizational trust, organizational justice, and organizational culture).

It is important to conduct studies with teachers on flow that is an important emotion both in work life and in terms of personal mental health. Thus, it can be possible to identify the features of the concept in Turkey and the situations that make this emotion easier or more difficult to live in the workplace. Considering the work-related flow, the information in the literature is mostly based on the studies carried out in the countries that have the characteristics of the individualist culture (such as America and European countries). Markus and Kitayama (1991) state that individualist and collectivist culture differ in terms of some features. For example, autonomy is an important attribute in individualist cultures, but in collectivist cultures, interdependence is considered important. Therefore, there is a possibility that culture may affect emotions at work. It will be useful to examine the cultural determinants of flow especially in countries (such as Turkey) reflect the characteristics of the collectivist culture more.

5. Conflict of Interest

The authors declare that they have no conflicts of interest.

6. Ethics Committee Approval

The study considers the ethical concerns, and does not require ethics committee approval since the data were collected before 2020.

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APPENDIX 1. Work Related Flow Inventory (WOLF) Turkish Form

Aşağıda son iki hafta boyunca iş yerinizde yaşadığınız deneyimlerinize ilişkin bazı ifadeler yer almaktadır. Lütfen her bir ifadeyi dikkatli bir şekilde okuyarak bu deneyiminizin sıklığını puanlayınız. (Please, select the frequency of your experiences in your work place.)

1= Hiçbir zaman (Never)

7= Her zaman (Always)

Ölçek Maddeleri (Scale Items)	1	2	3	4	5	6	7
1. Çalışırken başka bir şey düşünmem. (When I am working, I think about nothing else)							
2. İşim beni heyecanlandırır. (I get carried away by my work)							
3. Çalışırken işim dışında çevremdeki her şeyi unuturum. (When I am working, I forget everything else around me)							
4. Çalışırken kendimi tamamen işime veririm. (I am totally immersed in my work)							
5. İşim bende olumlu duygulara yol açar. (My work gives me a good feeling)							
6. İşimi büyük bir keyifle yaparım. (I do my work with a lot of enjoyment)							
7. Çalışırken mutluluk duyarım. (I feel happy during my work)							
8. Çalışırken neşeliyimdir. (I feel cheerful when I am working)							
9. Daha az ücret alsam bile yine bu işi yaparım. (I would still do this work, even if I received less pay)							
10. Boş zamanlarımda da çalışmak istediğimi fark ettim. (I find that I also want to work in my free time)							
11. İşimden keyif aldığım için çalışıyorum. (I work because I enjoy it)							
12. Bir şey üzerinde çalışırken bunu başkaları için değil kendim için yaparım. (When I am working on something, I am doing it for myself)							
13. İşten elde edilecek ödüller değil, bizzat işin kendisi beni güdüler. (I get my motivation from the work itself, and not from the reward for it)							