# Communication by IT Decreases the Negative Effects of Work-Family Conflict on Life Satisfaction and Job Satisfaction

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#### **Abstract**

Work - family conflict (WFC) arises when an individual's work and family roles are incompatible. It may lead to negative outcomes for workers, since it can decrease motivation and performance. As such, we need to make efforts to reduce or eliminate WFC. This study focuses on communication by information technology Communication can motivate employees to work better, and provides a means for workers to express themselves at work and home. One of the reasons why WFC occurs is that workers do not spend enough time with family members, which can lead to a lack or absence of communication. Communication is a crucial element of family relations. CIT may help workers communicate better with their families as while they are at the workplace, workers can communicate with their families through information technology (IT) devices as needed. Thus, the quality and quantity of communication will improve, and the negative influence of WFC can be reduced. According to empirical analysis, WFC reduced the level of life satisfaction (LS) and job satisfaction (JS). In addition, CIT reduced the negative effect of WFC on LS, but it could not reduce the negative effect of WFC on JS.

**Keywords:** work-family conflict, life satisfaction, job satisfaction, communication, IT

# INTRODUCTION

Work-family conflict (WFC) is positively correlated to health complaints and depression. Furthermore, it is negatively correlated to JS [1]. As such, WFC can be expected to reduce employee's performance and it has a negative influence on family relationships and quality of life. When people work hard or spend long hours in an office, they may come to neglect their families. On the other hand, if people spend an excessive amount of time with their families, they may find it difficult to achieve a high level of performance in the workplace. Employees must seek a work-family balance, neither working excessively, nor spending too much time with their families. This will help them to avoid a host of problems related to WFC, such as job dissatisfaction, turnover intention [2], depression, somatic complaints and elevated blood pressure [1]. One of the most important reasons why WFC occurs is the absence of communication. If sufficient effective communication is achieved, the negative effects of WFC can be reduced. This study explains the negative effects of WFC on LS and JS. Further, we explain how communication by information technology (CIT) can be adopted to reduce the negative effects of WFC. Previous studies have shown that poor communication may play a key role in causing interpersonal conflict [3]. However adequate communication facilitating the sharing of information between employees and their families will reduce misunderstandings. Information technology (IT) is a tool that actively promotes communication. People can communicate by IT in real time, sharing different types of information (pictures, schedule, etc.), and see their children through video calls. Hence, if people make sufficient use of IT, the negative impacts of WFC can be decreased. The goal of this study is to explain the negative effects of WFC on job satisfaction (JS) and life satisfaction (LS). Moreover, we suggest a way to reduce WFC's negative influence through the use of CIT.

#### LITERATURE REVIEW

## Work-family conflict

Work-family conflict (WFC) is a type of role conflict that arises when pressures from both the work and family domains are incompatible, and the simultaneous performance of both roles becomes difficult [4]. WFC involves two components: work interference with family and family interference with work [5]. Existing research has identified three types of WFC, namely time-based conflict, strain-based conflict, and behavior-based conflict [6]. Time-based conflict arises from competing time demands, and includes such situations as when an individual cannot attend family activities due to having to spend time at work, or does not have time to care for infants or a sick family member. Strain-based conflict occurs when stress from one role is carried to another role, as for example when an individual does not feel like communicating with family because of work, or cannot concentrate on work because they are thinking about a sick family member. In behavior-based conflict a behavior that is appropriate in one role is applied inappropriately to another role. An example includes the situation where a role in the workplace requires members to be objective and secretive, whereas family members need to be open with each other.

### Life satisfaction

Life satisfaction (LS) can be defined as "A global assessment of a person's quality of life according to his or her chosen criteria" [7, p: 478]. It is a cognitive and judgmental process,

and has also been described as the cognitive part of subjective well-being [8]. There are two kinds of LS: General LS is an individual's overall evaluation of their life and its circumstances, such as whether the individual believes that their present life has reached his or her own ideal state; Special field LS is a specific evaluation of different areas of life, such as family satisfaction, school satisfaction, or community satisfaction [7].

# Job satisfaction

Job satisfaction (JS) refers to "a pleasurable or positive emotional state resulting from an appraisal of one's job or job experiences" [9, p: 1300]. Furthermore, JS is a "positive or negative evaluative judgment one makes about one's job or job situation" [10, p: 175]. There are several variables related to JS. In general, with greater organizational size, JS is smaller; however, with an expansion of the scope of work, JS is higher [11]. JS has a strong correlation with job performance [12] and it has a middle level correlation with organizational citizenship behavior. JS comes from the concept of the results of organizational justice, treatment, and procedures [3]. JS leads to customer satisfaction and loyalty, has a positive correlation with low levels of absenteeism [3] and has a negative correlation with turnover [13] Therefore, JS is an important resource for employees. We expect that a high level of JS may reduce negative outcomes in organizations such as turnover. On the other hand, it may lead to positive outcomes for organizations such as organizational commitment, organizational citizenship behavior, and employee's goal achieving.

# The relationship of WFC with LS and JS.

Work and family are the two most important social roles of most people. When there is a conflict between the two roles, family roles may be disturbed and individuals may be unable to take full responsibility for their families. This will inevitably reduce their quality of life and impact on their LS. On the contrary, when an individual's family interferes with work, they will have less time and energy to devote to work, which may lead to lower quality of work, which can negatively affect the JS of individuals. WFC is related to work related outcomes such as JS and non-work related outcomes such as LS [14]. Research also indicates that WFC reduces JS and LS [15]. A meta-analysis of a large number of previous studies shows that WFC is also negatively correlated with JS [16]. Research exists indicating that the relationship between WFC and LS is much stronger than the relationship between WFC and JS [16]. Thus, this study predicts that WFC could have a negative effect on LS and JS. Drawing from such empirical results, this paper proposes the following hypothesis.

H1: WFC will have a negative correlation with LS.

H2: WFC will have a negative correlation with JS.

# Communication

In any organization, it is trite to say that effective communication is vital. Misunderstanding often leads to interpersonal conflict [17]. Communication includes two aspects: the meaning of the transmission and understanding [3]. In a group or organization, communication has four functions: control, information, motivation and emotional expression [18]. Control refers to how communication can be used to control the behavior of employees. For example, a supervisor may relay on complaints or dissatisfaction to employees, or ask them to comply with the policies and regulations of the company. Information refers to how communication can provide information needed for decision-making by individuals and groups. Motivation refers to how good communication can motivate employees, such as clearly telling employees what to do and how to do it, and how to improve work. Emotional expression refers to the way that social interaction in the form of work group communications provides a way for employees to express themselves.

# The relationship of WFC, LS, JS and CIT

Today, IT and mobile communications are prevalent in our lives and they have had a radical impact on communities and companies [19]. Current technologies such as multicasting services can enhance the effectiveness and efficiency of team communications throughout internal and external environments [20]. It is advantageous when family members communicate more often with each other, as such communication improves understanding and reduces conflict. According to the literature, there is a significant correlation between the dimensions of organizational communication and JS [21]. Studies also demonstrate that there is a correlation between JS and communication with supervisors [22]. In other words, team processes (communication, leadership, and coordination) moderated the relationship between conflict and deep-level diversity [23]. Thus, the following hypothesis is offered to be tested

H3: CIT will moderate the relationship between WFC and LS.

H3: CIT will moderate the relationship between WFC and JS.

# **METHODS**

# **Participants**

This study surveyed IT workers in Korea. We distributed a total of 161 questionnaires and then used them for performing empirical analysis. Of the participants 96 (59.6%) were male, and 65 (40.4%) were female. In regards to the participants age 69 (42.9%) were in their twenties, 83 (51.6%) were in their

thirties, 8 (5%) were in their forties, and 1 participant (0.6%) was aged over fifty. 88 (54.7%) were married, 67 (41.6%) were not married, 6 (3.7%) were others (cohabitation). 35 of the participants (21.7%) finished work before 6 pm, 90 (55.9%) finished between 6-8 pm, 30 (18.6%) finished between 8-10 pm, and 6 (3.7%) finished work after 10 pm. 24 (14.9%) of the respondents worked no overtime, 16 (9.9%) did overtime once a month, 37 (23%) did overtime twice a month, 21 (13%) three times a month, 10 (6.2%) four times a month, 14 (8.7%) five times a month, 22 (13.7%) six times a month, and 17 (10.5%) worked overtime more than six times a month. Finally, 95 (59%) of the respondents had worked for between 1-3 years at their current workplace, 51 (31.7%) had worked for 3-5 years, and 15 (9.3%) had worked for over five years.

# Measurement

WFC is measured by [5] and it composed of 4 items. A sample item included "On the job I have so much work to do that it takes away from my personal interests". For measuring LS, we used 5 items by [6]. A sample item included "In most ways my life is close to my ideal". JS is measured by [24] and it is composed of 4 items. A sample item included "I receive recognition for a job well done". Communication is measured by 5 items and was created by the authors following [25]. A

sample item included "I have good communication with my family". We use a Likert 7-point scale to measure all items.

### **ANALYSIS**

This study used confirmatory factor analysis to verify the fit of factor structure. Several criteria were used to assess the suitability of the model. The results of the analysis average variance extraction of each variable is as follows. WFC=.805, LS=.703, JS=.665, CIT=.642. Construct reliability of each variable is as follows. WFC=.802, LS=.777, JS=.890, CIT=.778. Furthermore, absolute fit index showed  $X^{2}(p)=442.549$ ,  $X^{2}/df=2.021$ , RMSEA=.080. Incremental fit index showed TLI=.927, CFI=.937, IFI=.938). The result of the parsimonious fit index showed PNFI=.765. PGFI=.650. According to these results, the measurements of confirmatory factor analysis have significant validity. After performing reliability analysis, the results of all variables' Cronbach's a (WFC=.948, LS=.918, JS=.951, CIT=.850) were all above 0.8 and indicating high confidence level. After performing reliability analysis, the results of all variables' Cronbach's a (WFC=.948, LS=.918, JS=.951, CIT=.850) were all above 0.8 and it indicates high confidence level.

Table 1 shows the results of reliability, descriptive statistics, and correlation analysis. Table 1 shows WFC is negatively related to JS (r= -.476) and LS (r= -.450). Hence, hypothesis 1 and hypothesis 2 were accepted.

Table 1. Reliability, descriptive statistics, and correlation analysis

	Cronbach's α	Mean	Std.Deviation	WFC	CIT	LS	JS
WFC	.948	4.278	1.885	-			
CIT	.850	4.656	1.352	365***	-		
LS	.918	4.210	1.367	450***	.626***	-	
JS	.951	4.457	1.313	476***	.580***	.810***	-

<sup>\*\*\*=</sup>p < .001 \*\*= p < .01 \*= p < .05 †= p < .1

(WFC=work-family conflict, CIT=communication by IT, LS=life satisfaction, JS=job satisfaction)

Table 2. The moderating effect of CIT between WFC and LS

Dependan	t: LS							
	step 1	step 1		step 2		step 3		
	$oldsymbol{eta}$	t	β	t	β	t	VIF	
WTC	450***	-6.353	256***	-4.029	269***	-4.252	1.170	
CIT			.533***	8.409	.515***	8.079	1.182	
Moderating					.111*	1.860	1.029	
$R^2$ (Adjusted $R^2$ ) .202 (.197)		.449 (.442)		.461 (.451)				
$\triangle R^2$ ( $\triangle$ Adjusted $R^2$ )	-		.247 (.245)		.012 (.009)			
F	40.364***		64.390***		44.747***			

<sup>\*\*\*=</sup>p < .001 \*\*= p < .01 \*= p < .05 †= p < .1

Table 2 and 3 indicate the results of the regression analysis. Table 2 shows that the moderating effect of CIT between WFC and LS. The result showed that CIT positively moderated the relationship between WFC and LS ( $\beta$ = .111, p< .05). Hence, hypothesis 3 was accepted.

Fig 1 showed that LS can decrease when workers experience higher levels of WFC. Moreover, if employees have lower levels of CIT, LS decreases as WFC increases. However, although they experience higher level of WFC, their LS decreases less when employees have a higher level of CIT compared to when they have a lower level of CIT.

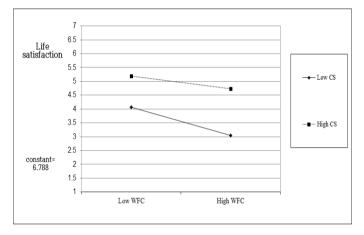


Figure 1: The moderating effect of CIT

Table 3 and Fig 2 showed that communication does not significantly regulate the negative relationship between WFC and JS ( $\beta$ = .029, p > .05). Hence, hypothesis 4 is not validated.

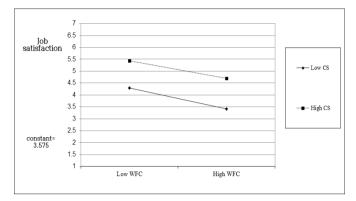


Figure 2. The moderating effect of CIT

Table 3.	The mo	derating	effect o	f CIT	between	WFC	and JS

Dependant : JS									
	step 1		step 2		step 3				
	β	t	β	t	β	t	VIF		
WFC	476***	-6.830	305***	-4.684	309***	-4.695	1.170		
CIT			.469***	7.185	.464***	7.005	1.182		
Moderating					.029	.468	1.029		
$R^2$ (Adjusted $R^2$ ) .227 (.222)		.417 (.410)		.418 (.407)					
$\Delta R^2$ ( $\Delta$ Adjusted $R^2$ ) -		.190 (.188)		.001 (003)					
F	46.655***		56.563***		37.595***				

<sup>\*\*\*=</sup>p<.001 \*\*= p<.01 \*= p<.05 †= p<.1

# CONCLUSION

# **Conclusion and implications**

The results of our empirical analysis have shown that WFC has negative correlations with JS and LS. JS and LS also have a very high level of relevance to each other. JS is directly related to work-related motivation and performance. This relationship means that WFC reduces the performance of workers. Furthermore LS, the degree to which an individual is satisfied with their life, plays an important role in an

individual's life. WFC, which negatively impacts these important factors, has to be managed and reduced. In addition, we tested the effectiveness of CIT to reduce the negative impact of WFC. It was found that CIT has the effect of reducing the negative influence of WFC on LS. CIT helps workers to better communicate with their families. Workers can maintain better relationships with families through CIT. Positive relationships with family can have a direct impact on workers' lives, so that the negative impact of WFC on LS can be reduced. In contrast, CIT did not seem to reduce the negative impact of WFC on JS. WFC is a phenomenon that

occurs between two objects: work and family. Thus, WFC has a negative impact on both work and family. Since CIT supports communication with family, it can play a role of reducing negative aspects of family relationships. A family has a deeper relationship with an individual than an individual's work. Thus, any reduction in any negative aspects of a family relationship can result in an increase in LS, which is related to an individual's overall life. We found that the improved satisfaction of family relationships through CIT can prevent WFC from reducing LS. However, even when the relationship between family members improved through CIT, JS did not directly increase or work related complaints diminish. WFC negatively affects not only the family but also the job. Nonetheless, because CIT is more concerned with family relationships, it does not reduce the negative impact of WFC on jobs. These different results firstly explain that there is a negative impact on both JS and LS by WFC. Secondly, it suggests that different methods are needed to reduce negative impacts of work and other aspects of life. This study does not focus on methods to eliminate WFC, but rather describes ways to reduce the negative impacts of WFC. The different negative impacts of WFC should be reduced through moderating strategies.

# LIMITATIONS AND FUTURE STUDY

Limitations of this study and suggestions for future research are as follows.

First, we confirmed the general impact of CIT. CIT can prevent a decline in levels of LS, but it cannot prevent levels of JS from decreasing. We suggest that these divergences should be studied. For instance, it is necessary to verify the discriminative effect of CIT on various situations such as family relations, individual differences, and overseas work. Second, we explained the role of CIT in reducing the negative effects of WFC. Future research needs to explore various methods for managing WFC and any factors that may reduce the negative effects of WFC.

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