

The Influence of Workplace Friendship, Job Involvement, and Organizational Identification on Job Performance: Administrative Staffs of Private Science and Technology Universities in South Taiwan as an Example

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Abstract

Due to Taiwan's lower birth rate resulting in fewer children, the widespread prevalence of higher education, as well as pressure from international competition and limited resources, higher education institutions are now encountering severe challenges, particularly for private science and technology universities. Administrative staffs of private science and technology universities play critical roles in the development of school affairs, and therefore their job performance is important. Past research findings have noted that workplace friendship influences job performance, yet the reason for this is uncertain. This study treats administrative staff of private science and technology universities as samples and includes job involvement and organizational identification as mediators to explain why workplace friendship can enhance job performance. Based on the empirical findings, workplace friendship does directly influence job performance, while it indirectly influences job performance through job involvement and organizational identification. From the research results, this study proposes specific suggestions as reference for organizational leaders of private science and technology universities as well as for academia.

Keywords: workplace friendship, job involvement, organizational identification, job performance, administrative staffs.

Research Motives

Administration and instruction in schools are two major systems of school operations. In order to obtain remarkable academic research and instructional quality, universities must be supported by an administration system with high efficiency and high efficacy. Currently, at universities, administrative staffs are mainly in charge of the management of affairs related to students and teachers. Efficiency and efficacy of a school's administration are not only the force of growth for the schools, but also the source of competitiveness. When an administration system can support teachers' instruction and research, teachers will not be distracted by administrative affairs and thus can enhance their productivity and value added towards instruction and research (Tai, 2006). Administrative staffs provide service not only for teachers, but also for students, parents, and even the public. Thus, administrative staffs' work content is relatively complicated. In order to effectively reduce administrative staffs' work stress and loading, some past research argued that organizations can fulfill organizational goals through team work (Mohrman Cohen, & Mohrman, 1995). Positive workplace friendship enhances team work (Sias & Cahill, 1998), and therefore workplace friendship is important for organizations that require team work.

Workers' interpersonal interaction and workplace friendship make up informal relationships in organizations (Wright, 1978). Positive interpersonal interaction entails confidence, sharing interests, using resources, and sharing information at work. The relationships are more significant than just mere acquaintances (Berman, West, & Richter, 2002). In terms of affection, they provide social support (Kram & Isabella, 1985).

The effect of workplace friendship on job performance has been supported by past research (Francis & Sandberg, 2000; Jehn & Shah, 1997). However, the causes by which workplace friendship enhances job performance are still uncertain. This study includes two mediators to explain why workplace friendship positively influences job performance and makes an empirical research. Research motives are elaborated below.

In the general theoretical model of job involvement, Rabinowitz & Hall (1977) argued that job involvement is the interaction between individuals and situations. It means that job involvement is influenced by the work situation. Riordan & Griffeth (1995) and Nielsen, Jex, & Adams (2000) stated that workplace friendship is a kind of work situation and influences workers. Therefore, there could be a close relationship between workplace friendship and job involvement. This is the reason why this study selects job involvement as a mediator. The first motive of this study is: "Does workplace friendship influence job performance through job involvement?"

Miller, Allen, Casey, & Johnson (2000) argued that organizational identification means that employees believe that they are part of the organization, and that they identify with the organizational missions, visions, values, and goals. When they make decisions, they are concerned about the organizational benefits. Andrews, Kacmar, Blakely, & Bucklew (2008) stated that friendly colleagues in organizations reinforce employees' affection to organizations, which refers to organizational identification. Therefore, it seems that workplace friendship can reinforce organizational identification. When employees identify with organizational culture and organizational goal and values, they make their best efforts to contribute to the organizations and believe that all their sacrifices are worthy. They also show an extremely high degree of loyalty to the organizations (Sharma & Patterson, 1999). Thus, organizational identification can be another mediator between workplace friendship and job performance. This is the second motive of this study.

Research Framework

This study treats workplace friendship as an independent variable, job involvement and organizational identification as mediators, and job performance as a dependent variable to explore the relationship among variables, as shown in Figure 1.

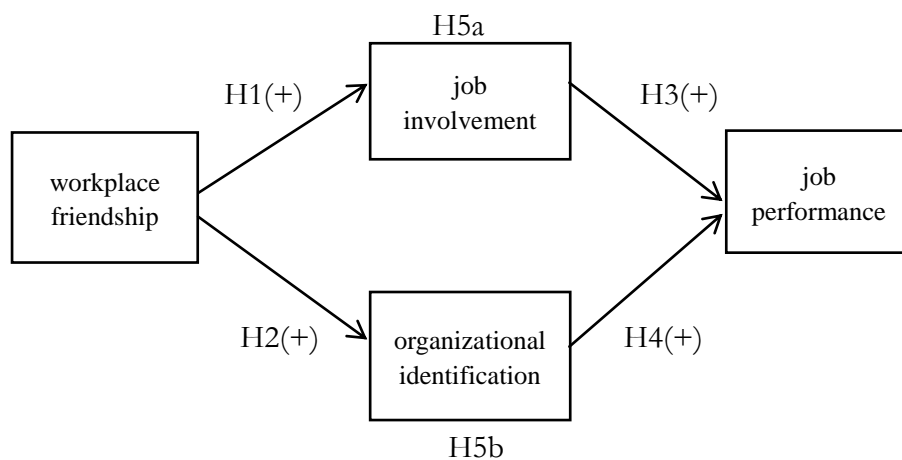


Figure 1. Research framework

Research Hypotheses

Workplace friendship and job involvement

According to past research, workplace friendship benefits organizations and employees (Markiewicz, Devine, & Kausilas, 2000; Sias, Smith & Avdeyeva, 2003). Employees can obtain support and resources provided by colleagues from a good peer relationship (Tse & Dasborough, 2008), thus enhancing the operations of work, lowering stress, increasing job quality (Berman, West, & Richter, 2002), and strengthening employees' satisfaction with their job (Markiewicz, Devine, & Kausilas, 2000). In addition, Sias (2005) stated that when team members' relationship is more positive, they are more likely to provide valuable and useful information in the workplace. In other words, employees exhibit a positive job performance by work information sharing with peers at work (Ross, 1997). On the contrary, when employees lack workplace friendship, their work competence will be reduced, and it influences job progress (Sias, Heath, Perry, Silva & Fix, 2004). Based on this, the study develops a hypothesis below.

H1: Workplace friendship of administrative staffs in private science and technology universities positively influences their job involvement.

Workplace friendship and organizational identification

Mao, Chen, & Hsieh (2009) treated similarity as the basis of workplace friendship. According to the social identity theory (SIT), people are attracted to those with which they feel a similarity since it can enhance their own self-image. People are more friendly with in-group members that exhibit similarity, in comparison to out-group ones (Tajfel & Turner 1986). Hence, workplace friendship classifies organizational members into in-group and out-group members. Based on Mannix & Neale (2005), in-group members have a high degree of mutual support. Thus, employees with workplace friendship give high support to each other.

Atkinson (1958) stated that a job has some chances to satisfy employee needs. Job satisfaction results in employees' organizational identification. Glisson & Durick (1998) demonstrated that colleagues' support leads to job satisfaction. Since employees with workplace friendship offer high support to each other, this results in job satisfaction, and further results in employees' organizational identification. Based on the above, this study develops the next hypothesis.

H2: Workplace friendship of administrative staffs in private science and technology universities positively influences their identification with the organization.

Job involvement and job performance

According to Bakker, Demerouti, & Sanz-Vergel (2014), fatigue and job involvement are associated with important job output and performance. Hence, employees' job involvement significantly influences their job performance. Keller (1997) found that employees' job involvement significantly influence their job performance. When job involvement is higher, job performance will be higher. According to Chen (2006), "job orientation" of job involvement is positively and significantly related to job performance. Kung (2012) studied the relationships among job involvement, organizational change, and administrative efficacy of employees in the district offices of Kaohsiung City and realized that when district office employees' job involvement is higher, their performance of administrative efficacy is also higher. Shimazu, Schaufeli, Kamiyama, and Kawakami (2015) found that job involvement effectively enhances employees' personal life satisfaction and job performance. Based on the above, this study develops the third hypothesis.

H3: Job involvement of administrative staffs in private science and technology universities positively influences their job performance.

Organizational identification and job performance

Organizational identification influences employees' attitude and efficiency at work. When employees highly identify with their own organizations, they have a greater intention to think and act from the perspective of that organization. They are also more willing to contribute more to their organization (Mael & Ashforth, 1992). Cameron (1986) suggested that in the process of promoting organizational operation, information of organizational activities must be consistently and precisely be provided to everyone in the organizations. It is expected that they must certainly recognize the purpose, strategy, and goal of organizational policy in order to establish identification with organizational policy and to have a positive effect on the efficacy of leadership. Lee (2002) studied non-profit organizations and showed that dimensions of organizational identification are significantly related to performance. According to Chien (2003) on the military information publicity system of the general headquarters of the ROC armed forces, there is a medium correlation between members' identification and organizational efficacy. In a study on organizational identification and organizational performance at the Department of Coastal Control, Huang (2006) realized that an increase in members' organizational identification reinforces organizational job performance. Li's (2008) empirical study on the finance industry demonstrated a positive correlation between organizational identification and job performance. Based on the above, this study develops the fourth hypothesis.

H4: Organizational identification of administrative staffs in private science and technology universities positively influences their job performance.

Inference of the mediating effect

Rumens (2016) argued that workplace friendship can be highly connected with improvements of organizational outcome, such as efficiency and performance. When organizational members' network is denser, it means friendships among employees and colleagues are stronger, and they tend to exchange work information (Chien, Chuang, and Yi, 2009). In a situation with high workplace friendship, members are willing to share knowledge and experience and help each other to solve problems at work (Nielsen, Jex, and Adams, 2000). On the contrary, when employees lack workplace friendship, their work competence is reduced, and it influences their job progress (Sias, Heath, Perry, Silva & Fix, 2004). Hsu & Hung (2013) stated that employees' behavioral performance is influenced by organizational climate and personal factors. Workplace friendship enhances cooperation and results in a harmonious work environment. In such an organizational climate, employees have higher job involvement (Riordan & Griffeth, 1995). Friendship at workplace and organizational environment can enhance employees' work through affective support (Saloni, 2014). In addition, Sias (2005) suggested that when relationships with group members are more positive, they are more willing to provide valuable and useful information of work. In other words, they have a higher intention to engage in work and will have better job performance.

Mannix & Neale (2005) stated that in-group members highly support each other. Employees with workplace friendship treat each other as in-group members and highly identify with their organizations (Hsieh & Yang, 2011). These employees support each other and share information, allowing employees to improve job quality. With employees' mutual support and improvement of organizational climate, organizations can increase production (Berman & West, 1998). There is also a positive relationship between organizational identification and job performance (Lee, 2002; Chien, 2003; Huang, 2006; Li, 2008). Hence, workplace friendship influences job performance through organizational identification. Based on the above, this study develops two hypotheses below.

H5a: In the influence of workplace friendship of administrative staffs in private science and technology universities on their job performance, job involvement shows a mediating effect.

H5b: In the influence of workplace friendship of administrative staffs in private science and technology universities on their job performance, organizational identification shows a mediating effect.

Research Method

Research Subjects and Sampling Method

This study focused on science and technology universities in southern Taiwan and selected six of them related to medicine and nursing. It targeted official or long-term administrative staffs who have worked for at least one year as its research subjects. The study did not include teachers who also undertook administration works, assistants of the old system, teaching assistants, instructors, labor technicians, and guards. Administration refers to the work content of administrative affairs, document processing, business planning, official document processing, file management, computers, assigned business (including projects and activities), etc. This study conducted random sampling on these subjects and distributed 350 questionnaires, retrieving back 326 questionnaires. After deleting 30 invalid questionnaires with incomplete responses, this study obtained 296 valid ones, for a valid return rate of 84.6%.

Research Tools

The questionnaire of this study includes two parts as shown below: 1. Personal basic information; 2. Measurement of variables.

1. Personal basic information

It includes gender, age, educational background, service unit, title of work, and working years at the school.

2. Measurement of variables

Variables in this study include workplace friendship, job involvement (including energy, contribution, and concentration), organizational identification (including similarity, cohesion, and loyalty), and job performance (including accomplishment of task, interpersonal interaction, and service evaluation). Measurement is based on the Likert-type five-point scale. It includes five levels: Strongly disagree, Slightly disagree, Fair, Agree, and Strongly agree. The scoring is 1, 2, 3, 4, and 5.

(1) Scale of workplace friendship

This study adopts the scale of friendship prevalence established by Nielsen, Jex, & Adams (2000) since that scale can quantify “depth” of friendship in the workplace. The operational definition of this scale is “employees’ perceived quality of friendship in the workplace”. The main purpose is to measure administrative staffs’ perception of workplace friendship. The scale is based on a single dimension with five items. Higher scores mean that the perception of administrative staffs in private science and technology universities regarding workplace friendship is higher.

(2) Scale of job involvement

The study took Kanungo’s (1982) Job Involvement Questionnaire (JIQ) as the tool to measure job involvement. The scale includes ten items. The operational definition of job involvement is “the degree to which a person identifies psychologically with his or her work and the importance of work to one’s self image”. Higher scores mean that the job involvement of administrative staffs in private science and technology universities is higher.

(3) Scale of organizational identification

The main purpose of this questionnaire is to explore organizational identification of administrative staffs in private science and technology universities. The questionnaire is designed according to Cheney’s (1982) three dimensions of organizational identification based on Patchen (1970): Organizational Identification Questionnaire (OIQ). Patchen argued that organizational identification consists of three dimensions, as shown below.

- a) Similarity: Individuals’ perceived common goals and benefits with other members in

the organization.

- b) Cohesion: Connection between individuals' self-concept and organization.
- c) Loyalty: Individuals' support and maintenance for the organization.

The original questionnaire included 25 items, and this study reduces it to 12 items. The operational definition of organizational identification is "an attitude in the process of individuals' socialization. It means the degree to which organizational members think organizational mission, values, goals are same as theirs". Higher scores mean that the organizational identification of administrative staffs in private science and technology universities is higher.

(4) Scale of job performance

In this study, scale of job performance aims to explore business performance and job outcome of administrative staffs in private science and technology universities. It adopts Wu's (2010) items measuring job performance of the administrative staffs in universities. It includes three dimensions. "Accomplishment of task" includes 7 items. The operational definition is the "administrative staffs' performance and job outcome of executing administrative business or activities, including accomplished goal and task quality". "Interpersonal interaction" includes six items. The operational definition is the "administrative staffs' behavior and attitude of executing administrative business or activity, such as team cooperation, positive interpersonal relationship, and active assistance". "Service evaluation" includes 7 items. The operational definition is the "administrative staffs' self-evaluation of executing administrative business or activity and service receivers' support, identification, and feedback toward their jobs". Higher scores mean that the personal job performance of administrative staffs in private science and technology universities is higher.

Research Results

Reliability and validity analysis

This study elaborates upon the reliability and validity of the measurements of four variables (workplace friendship, job involvement, organizational identification, and job performance), as shown in Table 1. According to this study, Cronbach's α of the four variables are 0.741, 0.750, 0.857, and 0.940, which are all higher than 0.7. It means that the measurements of the four variables show good reliability. Composite reliabilities (CR) are 0.764, 0.786, 0.866, and 0.893, which are all higher than 0.6. Average variances extracted (AVE) are 0.568, 0.577, 0.651, and 0.708, which are all higher than 0.5. It means that the measurements of the four variables show good convergent validity. In addition, the correlation coefficients of two variables are lower than the reliability coefficient for Cronbach's α of individual variables. It means that the measurements of the four variables show good discriminant validity.

Table 1 Reliability and validity analysis

Variables	1	2	3	4	CR	AVE
1. Workplace friendship	1				0.764	0.568
2. Job involvement	0.522*	1			0.786	0.577
3. Organizational identification	0.582*	0.356*	1		0.866	0.651
4. Job performance	0.655*	0.609*	0.571*	1	0.893	0.708
Cronbach's α	0.741	0.750	0.857	0.940		

Note: * $p < 0.001$

Validation method of the mediating effect

This study treats workplace friendship of administrative staffs in private science and technology universities as the independent variable, job involvement and organizational identification as the mediators, and job performance as the dependent variable. It conducts regression analysis by the method of Baron and Kenny (1986) to test the mediating effect, which is based on the following four conditions: first, the independent variable significantly influences the mediator; second, the mediator significantly influences the dependent variable; third, the

independent variable significantly influences the dependent variable; fourth, when the effect of the independent variable on the dependent variable is reduced and is still significant after the mediator is added as the other independent variable, the mediator shows a partial mediating effect; when the effect of the independent variable on the dependent variable becomes insignificant after the mediator is added as the other independent variable, the mediator shows a full mediating effect. In the following, this study respectively analyzes the mediating effects of job involvement and organizational identification.

Validation of the mediating effect of job involvement on the effect of workplace friendship on job performance

According to the method of Baron and Kenny (1986), the validation of a mediating effect includes four steps. The validation result is shown in Table 2.

Workplace friendship influences job involvement

In the first regression model, workplace friendship is treated as an independent variable and job involvement is a dependent variable for regression analysis. According to the results of regression analysis, the standardized regression coefficient is 0.522 and reaches the significance level $p < 0.001$ ($t=10.867$). It means that workplace friendship positively influences job involvement. This matches Condition 1: the independent variable significantly influences the mediator.

Job involvement influences job performance

In the second regression model, job involvement is treated as an independent variable and job performance is a dependent variable for regression analysis. According to the results of regression analysis, the standardized regression coefficient is 0.609 and reaches the significance level $p < 0.001$ ($t=13.152$). It means that job involvement positively influences job performance and matches Condition 2: the mediator significantly influences the dependent variable.

Workplace friendship influences job performance

In the third regression model, workplace friendship is treated as an independent variable and job performance is a dependent variable for regression analysis. According to the results of regression analysis, the standardized regression coefficient is 0.655 and reaches the significance level $p < 0.001$ ($t=15.054$). It means that workplace friendship positively influences job performance and matches Condition 3: the independent variable significantly influences the dependent variable.

Workplace friendship and job involvement both influence job performance

In the fourth regression model, workplace friendship and job involvement are treated as independent variables and job performance is a dependent variable for regression analysis. According to the results of regression analysis, with the mediator of job involvement, the standardized regression coefficient of workplace friendship on job performance reduces from 0.655 (Mode 3) to 0.501 (Mode 4). However, it still reaches the significance level $p < 0.001$ ($t=9.427$). Hence, it matches Condition 4: when the effect of the independent variable on the dependent variable is reduced, but is still significant after the mediator is added as the other independent variable, the mediator shows a partial mediating effect.

Table 2 Regression analysis of the mediating effect of job involvement on the effect of workplace friendship on job performance

Variables	Regression analysis model							
	Dependent variable							
	Job involvement		Job performance		Job performance		Job performance	
	Mode 1		Mode 2		Mode 3		Mode 4	
	β	t value	β	t value	β	t value	β	t value
Workplace friendship	0.522	10.867*			0.655	15.054*	0.501	9.427*
Job involvement			0.609	13.152*			0.405	7.549*
R ²	0.272*		0.371*		0.429*		0.468*	
ΔR^2	-		-		-		0.039*	

Note: *p < 0.001

Validation of the mediating effect of organizational identification on the effect of workplace friendship on job performance

According to the method of Baron and Kenny (1986), the validation of a mediating effect includes 4 steps. The validation result is shown in Table 3.

Workplace friendship influences organizational identification

In the first regression model, workplace friendship is treated as an independent variable and organizational identification is a dependent variable for regression analysis. According to the results of regression analysis, the standardized regression coefficient is 0.582 and reaches the significance level $p < 0.001$ ($t=12.515$). It means that workplace friendship positively influences organizational identification and matches Condition 1: the independent variable significantly influences the mediator.

Organizational identification influences job performance

In the second regression model, organizational identification is treated as an independent variable and job performance is a dependent variable for regression analysis. According to the results of regression analysis, the standardized regression coefficient is 0.571 and reaches the significance level $p < 0.001$ ($t=11.843$). It means that organizational identification positively influences job performance and matches Condition 2: the mediator significantly influences the dependent variable.

Workplace friendship influences job performance

In the third regression model, workplace friendship is treated as an independent variable and job performance is a dependent variable for regression analysis. According to the results of regression analysis, the standardized regression coefficient is 0.655 and reaches the significance level $p < 0.001$ ($t=15.054$). It means that workplace friendship positively influences job performance and matches Condition 3: the independent variable significantly influences the dependent variable.

Workplace friendship and organizational identification both influence job performance

In the fourth regression model, workplace friendship and organizational identification are treated as independent variables and job performance is a dependent variable for regression analysis. According to the results of regression analysis, with the mediator of organizational

identification, the standardized regression coefficient of workplace friendship on job performance reduces from 0.655 (Mode 3) to 0.512 (Mode 4). However, it still reaches the significance level $p < 0.001$ ($t=10.121$). Thus, it matches Condition 4: when the effect of the independent variable on the dependent variable is reduced, but is still significant after the mediator is added as the other independent variable, the mediator shows a partial mediating effect.

Table 3 Regression analysis of the mediating effect of organizational identification on the effect of workplace friendship on job performance

Variables	Regression analysis model							
	Dependent variable							
	organizational identification		Job performance		Job performance		Job performance	
	Mode 1		Mode 2		Mode 3		Mode 4	
	β	t value	β	t value	β	t value	β	t value
Workplace friendship	0.582	12.515*			0.655	15.054*	0.512	10.121*
organizational identification			0.571	11.843*			0.387	5.846*
R ²	0.339*		0.326*		0.429*		0.376*	
ΔR^2	-		-		-		0.031*	

Note: * $p < 0.001$

Conclusion and Suggestions

This study treats administrative staffs of private science and technology universities as the samples, and after validation, it realizes that workplace friendship directly influences job performance. Aside from a direct effect, there is also an indirect effect. In other words, workplace friendship indirectly influences job performance through job involvement. In addition, workplace friendship indirectly influences job performance through organizational identification.

This study supports the viewpoint of the positive relationship between workplace friendship and job performance as argued in past research. Besides, the most significant contribution herein is to adopt job involvement and organizational identification to explain why workplace friendship can reinforce job performance. This study demonstrates that an increase in employees' workplace friendships reinforces their job involvement and thereby enhances their job performance. This study also shows that an increase in employees' workplace friendship reinforces their organizational identification and thereby enhances their job performance. Therefore, employees' workplace friendship is extremely important. Managers must examine employees' workplace friendship, improve and enhance their workplace friendships, and use workplace friendship to enhance employees' job involvement and organizational identification and thereby enhances their job performance.

This study only explores two mediators, job involvement and organizational identification. There are certainly other mediators to explain why workplace friendship can enhance job performance, and thus it is suggested that future researchers can consider other variables such as team cooperation, knowledge sharing, and organizational climate. In addition, this study only explores the positive results of workplace friendship. Job involvement, organizational identification, and job performance are all positive variables. However, researchers in the future can consider whether workplace friendship will not produce negative results. This study argues that if the workplace friendship is not the friendship of the entire organization, but the

friendship of a little circle, managers who fail to make good use of the friendship of a little circle may incur negative results, such as various kinds of confrontations among small separate groups.

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