REDUCTION EFFECT OF TECHNOSTRESS WITH ROLE OF PERCEIVED ORGANIZATIONAL SUPPORT

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Abstract: The technological revolution in the organization not only improve efficiency, but also reduce employee boredom with routine work is done manually. Over time this will lead role conflict and role in the self-perception of excess employees. The purpose of this study was to test the effect of technostress on work productivity with the perceived organizational support as a moderating variable. The object of research were employees of IT users as end users in the work environment Semarang State and private universities. Methods of data collection using survey questionnaires. The test data using analysis Moderated Regression Analysis (MRA). The results showed that organizational support does not moderate technostress influence on role conflict, on the other hand found that conflict and role overload has no effect on labor productivity. This is likely due to the nature of work IT users are employees at the faculty administration. Thus, a different character with IT users in previous studies, is the program designers. Routine work that makes the activity more easily done, manageable and predictable, so it does not decrease productivity.

BACKGROUND OF THE STUDY

The creation of computer software and hardware, telecommunications, databases, and also Internet has affected society as a whole by providing opportunities to workers who are able to master the technology and change the way they work(Gaither & Henderson, 2004).Technological revolution in the organization not only increase efficiency, but also reduce employee boredom from routine work which is performed manually (Norulkamar et al., 2009). It cannot be denied, that technology has become part of our lives. In the information age, the increasing use of technology has encouraged a person to work, learn, and even play (Drake, 2000). When this phenomenon is growing, then there is also a changing perception toward people who use the technology.

On the other hand, technological advancement also have a negative effect which is known as Technology Stress (Technostress). The term of Technostress is first introduced by Craig (in Shu & Wang, 2008). Technostress is defined into two

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senses: first, technostress is psychological discomfort due to inability to master or follow the technology development, Second, technostress is individual dependence on technology that has an impact on the physical and psychological discomfort (Brillhart, 2004). Based on the two senses of technostress, it can be concluded that technostress is a condition of physical and psychological discomfort caused by the interaction with technology.

The examples of Technostress are divided into three categories: first, it could be in the form of addictive behaviors, such as internet addict, mobile phone addict, and also online games addict. Second, it could be in the form of person's response to new technologies, such as excessive solitary behavior, low self-esteem and feel so depressed when they cannot be able to master a particular technology. Third, it can be in the form of behavioral dependence of technology when the intensity of interaction with technology is highly rising.

Shu and Wang (2008) found that the behavior of employees who are affected by technostress have a negative impact on work productivity, which leads to stress on the employees' role stress, especially the role conflict and overload conflict. Role is defined in two ways. First, the role associated with the tasks performed by a person in completing the work. Second, the role of a person in the organizational structure (particular position). Each role refers to an identity that defines who and how employees should act in certain situations. The use of technology allows a person doing a lot of work at the same time. Overload tasks make employees feel so difficult to concentrate on one thing at a certain time, while other tasks has comeat the same time.

Shu and Wang (2008) research found that technostress effects on employees can be reduced by increasing the role of organizational support, both on employees as individuals and the work which is performed by employees. When organization is able to support employees in mastery IT and also supervision of work, it will reduce the technostress in the form of role conflict and overload conflict for employees. Organization's support as known as Perceived Organizational Support is a condition where employees perceive that their organization wants to support and gives attention to employees in a variety of ways, including the system of compensation, a fair division of labor, supervision, even assists employees in the completion of the job when they have difficulty (Eisenberger et al., 1986). Employees will build a global beliefs about the organization through the contribution of the organization such as giving attention to welfare, listening the complaint, considering the advice and values held by employees.

One of the task of the IT section is to manage access to information and communication technologies throughout the academic community. Webometrics Ranking takes the role of the Internet in the university, including the accessibility

and visibility of the university websites, publications, open access to research results, the connectivity with the industrial world, and international activities of the university. Thus, there will be more activities which relies heavily with IT, because IT is a facility of administrative activities that provide high working efficiency and productivity. Because of it, employees are so easy to get technostress (stress-related technology), especially when employees are required to master IT rapidly or when they get some troubles due to system error while completing their work, in the end it influences employees' work productivity. However, if university gives some good supports for users of IT, then IT users will not experience role conflict and overload conflict, otherwise they will be happily and feel easy to increase productivity in order to achieve organizational goals.

REVIEW OF RELATED LITERATURE

In a situation of organization which is implementing IT, overlapping roles will gradually increase frequently. Theory of Role assumes that role conflict would lead to high levels of stress felt by employees when the expected role is conflicted each other. Role conflict is one of the most dominant stressor. Meanwhile, role conflict will also decrease the employees's performance. Even technostress can increase role stress of employees (Tarafdar et al., 2007).

Employess will experience role conflict when they are demanded to do the roles which are conflicting, incompatible, and does not suppot each other (Kahn et al., 1981; Rizzo et al., 1970 in Peterson et al., 1995). Research shows that in the science and technology industrial which are changing rapidly, the organizational structure tend to lean and employees face more pressure arising from the transfer of the personal role. Application of IT will change the process and the organization of information flows. Along with the expansion of someone's role, the relationship between one another role change as well, which will increase role conflict among employees. In addition, with the development of ICT, ad hoc teams (teams with specific tasks designated for short periods) often appears as a necessity.

Employees can become a member of the different working group at the same time. They have to deal with the assignment from more than one leader and the have to align more various opinion. In recent years, in the new system such as Enterprise Resources Planning System and Customer Relationship Management which is applied in large organizations, employees must not only strengthen its collaboration with the one department, but also must cooperate with other departments according to plan and system. This situation demands a higher ICT capability and professional ability of employees that will caused the increasing of role conflict. As a result, employees who have to finnish their job by using computer will experience more serious role conflict. To validate the result of the study, the proposed hypothesis is as follows:

H1: Technostress affect the role conflict

Hardy and Coway (in Peterson, 1995) mentions that role overload is when someone or employees are dealing with more than the expected role, so that the employees cannot complete every role in the allotted time. Wang and Shu (2008) mentioned several definitions of technostress from other researchers. Singh (1998) defines role overload is the condition when people feel that competence which is needed to complete task is too high and beyond their capabilities and motivation. While Kakabadse (1988) considers that many variations of work activity will lead to role overload.

The implementation of new technology requires employees to take more time and effort to learn the technology. Moreover, employees often have to handle many operations that are not directly related to the main task, such as updating the software, integrate files, inputting data, process the data, and so on. So the employees' work burden is increase. In addition, IT makes work result can be evaluated and measured easier, so that the demands of the employees to achieve work efficiency becomes higher. As a result, technostress will cause employees to getrole overload (Tarafdar et al., 2007; Shu and Wang, 2008). To validate the results, the proposed hypothesis is as follows:

H2: Technostress effect on role overload

Eisenberger (1986), a social psychologist, proposed the concept of Perceived Organization Support (POS). This concept states that in order to meet the socio-emotional needs and to determine the readiness of the organization in its effort to appreciate the performance of employees, they will develop the perception of the extent to which organizations assess the contribution and attention to the welfare of employees. More and more studies indicate that support given by organization to its employees could decrease employees' stress level (Asan and Khan 2003; Thomas & Ganster, 1995).

Organization's support to its employees is become moderator variable that has two roles; first, to reduce the high pressure of employees in psychological aspect, second employees who have the perception that organization is really supporting and giving supervision to them when certain technologies are applied, so employees will have desire to stay at organization, increase its commitment and provide appropriate feedback to the organization to achieve its goal (Shu & Wang, 2008). To validate the results, the proposed hypothesis is as follows:

H3: Perceived Organization Support is moderating technostress effect on role conflict

H4: Perceived Organization Support is moderating technostress effect on role overload

The type of role conflict that are most relevant to the condition of IT employees is a conflict between role maker and conflict between the expected role with a role in the perception of the individual. Conflict between role maker occurs when expectation of a role maker (leader) conflicts with other role maker (other leaders). For example, when an assignment between leaders give conflicting roles perceived by employees.

Employees are given the task of monitoring the academic system facilities of lecturers learning tools collection in the beginning of every new semester. One leader (Assistant Academic) gives a role to not only monitor the percentage of lecturers who responded, but also provide information notices (leaflet), guiding lecturers technically to use the system, even to contact the lecturers concerned when they do not collect learning tools. On the other hand, another leader (Academic Head) just give the employees a role in monitoring and reporting the percentage of lecturers who have collected, while other tasks are the responsibility of the leadership of the department. It creates a role conflict, confusion and even high pressure for employees that affects work productivity. This is according to the results of research Febriana and Sanusi (2006); Tarafdar et al. (2007) which states that employees who experience role conflict will be negatively related to work productivity.

The job demand by using IT gives some extra roles and responsibilities for employees. For the section which is responsible to develop IT and Communications, the jobdesk is to manage access to IT and Communications, set database of information management system, maintain clear access to the Internet network, hotspots, implement education, IT training and practicum, develop and manage the website, maintenance and hardware procurement, securing IT assets, dealing with the abuse of IT facilities. Then for educational section the jobdesk is inputting online presence, online class journal, operationalization sikadu, etc. It also includes jobs that depend on the Internet. For administrative section, they responsible to correspondence and archives administration personnel file or document which requires the ability to use Office Word and it does not depend on internet access.

Employees must complete a lot of work on time and on schedule, so sometimes employees are not able to finish according to the demands. The easiness of system access and also the unbalanced proportions between employees who quickly master IT and employees who are very slow to master it will create unequal division of labor between employees. Thus, the ratio of tasks and employees is unequal.

This case makes employees feel role overload, reduces enthusiasm in work, causes physical and psychological fatigue and decreases work productivity. This is consistent with the results of research Febriana and Sanusi (2006); Tarafdar et al.

(2007) which states that employees who experience role overload will be negatively related to work productivity. To validate the results, the proposed hypothesis is as follows:

H5: Role conflict influences work productivity.

H6: Role overload influences work productivity.

Research Design
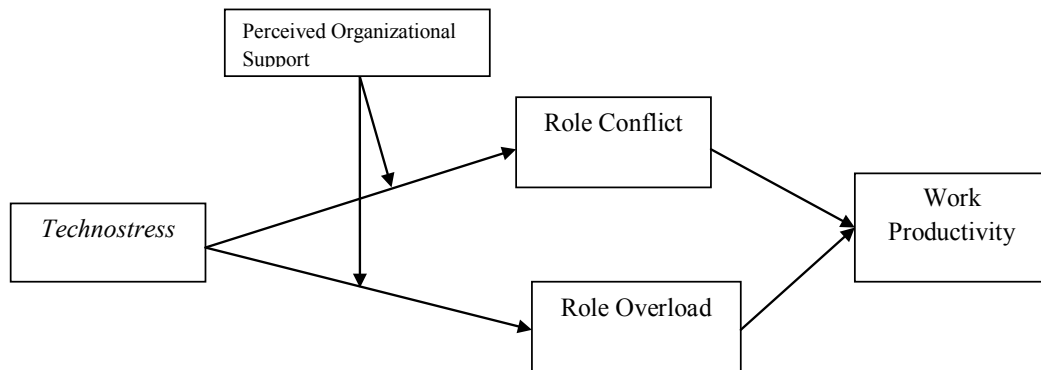
Respondents which were used as subjects in this study were Administration Staff of Colleges in Semarang. Questionnaire distributed to 152 Administration Staff. Rate of return was 71% with 108 sheets of questionnaire.

Result of the Study

Table 1

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.936	.349		8.402	.000
	Rata2_T	.152	.261	.091	.582	.562
	Inter_TDO	-.063	.060	-.165	-1.058	.293

Coefficients[a]

a. Dependent Variable: Rata2_KP

From Table 1 showed that technostress variable has a value of coefficient parameters (B) of 0.152 with 0.562 significance level (> 0.05). Thus, hypothesis one (H1) that there is no technostress influence on role conflict was rejected.

Table 2

	Coefficients[a]					
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.199	.237		13.504	.000
	Rata2_T	.238	.177	.201	1.343	.182
	Inter_TDO	-.118	.041	-.434	-2.897	.005

a. Dependent Variable: Rata2_OP

From table 2 showed that technostress variable has a value of coefficient parameters (B) of 0.231 with 0.182 significance level (> 0.05). Thus, the hypothesis 2 (H2) that there is notechnostress influence in role overload was rejected.

From Table 1 showed that moderator variable that is the interaction between technostress results and organization's support has coefficient parameter value of -0.063 with a significance level of 0.293 (> 0.05). Thus the third hypothesis (H3) that organizations support does not moderate technostress influence on role conflict was rejected.

From Table 2 showed that moderator variable that is the interaction between technostress results and organization's support has coefficient parameter value of -0.118 with a significance level of 0.005 (<0.05). Thus the fourth hypothesis (H4) that organization support moderate technostress influence on role overload was accepted. Organization support serves as a pure moderator here, because one of the influence is significant.

Table 3

	Coefficients[a]					
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.945	.191		20.678	.000
	Rata2_KP	-.024	.066	-.035	-.357	.722

a. Dependent Variable: Rata_PP

From Table 3 showed that the variable of role conflict has coefficient parameter value (B) of -0.024 with a significance level of 0.722 (> 0.05). Thus, the hypothesis 5

(H5) that there is no influence of role conflict toward employees' productivity was rejected.

Table 4

		Coefficients*a*				
Model		Unstandardized Coefficients		Standardized Coefficients	*t*	*Sig.*
		B	*Std. Error*	*Beta*		
1	(Constant)	3.588	.264		13.581	.000
	Rata2_OP	.105	.093	.109	1.126	.263

a. Dependent Variable: Rata_PP

From Table 4 showed that the variable of role overload has a value of coefficient parameters (B) of 0.105 with 0.263 significance level (> 0.05). Thus, hypothesis 6 (H6) that there is no influence of role overload toward employees' productivity was rejected. Although the results is in a positive relationship, the parameter value remains insignificant.

DISCUSSION

Hypothesis 1 (H1)of this study was rejected. It means that employees' stressed because of work activities related to technology does not make them to experience role conflict. The result of this study conflicts with Tarafdar et al. (2007), which states that employees who experience technostress are susceptible to role conflict. This is probably because the majority of the study respondents (53%) are employees who are categorized young age (20-40). Employees of this age is also called Generation Y was born in 1980s. At this time they are in the early phases of the pioneering career. Robbins and Judge (2008) suggests that the generation Y are employees who have new ideas, like to work in easy and efficient way and also quicker to learn and mastery of new technologies. These young age employees relatively can adapt to technology then they do not experience role conflict. Role conflict will not arise if each employee works professionally and adapts to new environment in their work place (Puspa and Rianto, 1999).

Hypothesis 2 (H2) of this study was rejected. It means that employees' technostress does not make them to experience role overload. This result is different from the study of Shu and Wang (2008). Respondents who are employees in the field of administration has been informed about the work activity every day. The character of administration field is a kind of routine tasks that are always repeated,

so that the work categorized by the type of routine decisions. The work was carried out based on a technical plan that is set by the leadership and customized with a variety of employment and labor requirements. This technical plan is able to minimize the risk of employees' role overload.

In addition, the respondents of this study is the end user not the IT professional employees. Research of Tarafdar (2007) on IT professionals found that technostress affect the role conflict. The demands of the tasks makes these IT professionals employees spend more time at work than with their families because IT professionals employees require more concentration and ability to think deeply, such as making applications that support designing work such as Enterprise Resource Planning (ERP) Systems and also Internet network.

Hypothesis 3 (H3) of this study was rejected. It means that the organizations' support is not a moderator variables that influence technostress on role conflict. This study is contrary to the result of Thomas and Ganster research (1995); Asan and Khan (2003) which found that the presence of the organizations' support is able to reduce the influence of technostress on role conflict. In this study the result is different because there are other moderator variables that affect technostress on role conflict. For example, Widyastary et al. (2014) found that emotional intelligence variables is able to moderate the role conflict in the performance of auditors. The events in work place could trigger positive and negative reactions, but the personality and mood affect employees in response to these events with a high or low intensity. People who have low emotional stability are more likely to react strongly to negative events, because emotions can affect the performance and satisfaction (Robbins & Judge, 2008). The high level of perceived employee technostress can be controlled by emotional intelligence, such as the ability to motivate yourself, endure frustration, set the mood, and prevent stress not to lead role conflict (Sanjaya, 2012).

Hypothesis 4 (H4) of this study was accepted. It means that the organizations' support is a pure moderator. This study is consistent with the results of Thomas and Ganster (1995); Asan and Khan (2003) which states that the existence of organizational support can reduce the influence of technostress in role overload. Perceived organizational support employees are able to reduce the high risk of psychological employees against technostress. This support is in the form of leadership role which realize that sufficient management mechanisms is needed to reduce technostress, for example, providing training to employees to master new technologies. In addition, the communication between leader and employees to ask the will greatly help reduce technostress.

Hypothesis 5 (H5) of this study was rejected. It means that the role conflict experienced by users of IT employees do not affect the decreasing work

productivity. The results are consistent with the Fogarty et al. (2000); Rahmiati & Kusuma (2004); Rahayu (2002); Paradise (2007). The employees' role conflict is supposed to reduce their motivation, cause tension among employees, and decrease their performance. However, this study found the opposite result. This is likely due to the character of the respondents work environment which is a public organization with the type of work performed daily routine. Employees already have the knowledge and ability to perform daily work. The routine nature of the work tends to make employees do not get difficulties in carrying out their job.

Hypothesis 6 (H6) of this study was rejected. It means that employees' role overload of IT did not affect the decreasing of work productivity. The results are consistent with the study of Rahmiati & Kusuma (2004) and Paradise (2007). This is likely due to the design or structure of a good division of labor among employees, the tasks variation has been adapted to the needs of the employees. In addition, because of their routine work, employees had memorized busy schedules every year (ie, new admissions, the turn of the semester, exams, etc.). Thus, the employees just feel role overload only at the certain time and it has no impact on employees' work productivity decreasing. It is also supported by leader assessment that employees have a good work productivity.

CONCLUSION AND SUGGESTION

The different result may occur because there are other variables as moderators and affect technostress on role conflict. For example, variables of emotional intelligence. Employees who have good emotional intelligence will greatly manage the task and overcome problems in the workplace easily and be able to control the level of their stress. Perceived Organizational Support are able to reduce the high risk of employees' psychological against technostress. This support is in the form of leadership role to emphasize the sufficient management mechanisms to reduce technostress.

Organizational support is indispensable for employees, especially in terms of facilitating employees to master new technologies. For example, training for employees when new technology is applying. Leaders should communicate to employees and make some good coordination with employees. The division of tasks that is adapted to variations of work, so it would make the employees do not experience role overload. When employees got technostress they should immediately consult to their leader to get some help, advice, and solution. Organization should have a system that allows employees to provide advice and suggestion related to factors that cause stress to organization.

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