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An Investigation of User Satisfaction with Human Resource Information Systems in Public University of Malaysia

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Abstract: The study sought to examine the influence of system factors on user satisfaction amongst employee, particularly the administrative staffs in one of public universities in Malaysia, which is Universiti Utara Malaysia (UUM). The application of human resource information system (HRIS) in the UUM is known as PERSIS. At the end of the data collection period, a total of 132 questionnaires were used for analysis. The regression result indicated that system factors are significantly related to HRIS success. Support and ease of use have strongly related to user satisfaction compared to other factors. Therefore, a few suggestions have been proposed to enhance the efficiency and effectiveness of PERSIS in UUM.

Key words: human resource management, information system, human resource information system, user satisfaction, UUM.

INTRODUCTION

The effectiveness of human resource information system (HRIS) in problem solving throughout many organizations has led many human resource (HR) managers to incorporate as much information system technology as possible in HR sub functions such as recruitment and selection, training and development, compensation and benefits, payroll, career development, employee relations, safety and health, and law. In fact, organizations are optimizing the computerization of HR functions not only for record keeping or data administration but also for strategic and cost-based decision-making (Kossek, Young, Gash & Nichol, 1994). Moreover, HRIS can facilitate the organization to develop its competitive edge, especially in idea generation and customer delivery (Shilpa & Gopal, 2011). Hussain, Wallace, and Cornelius (2007) and Martinsons (1994) also noted that HRIS enables HR specialists and HR managers to better manage the complexity of managing human resources, support the decision makers by providing fast quality information, facilitate participation in internal consultancy activities, and facilitate the adaptability of organizations to the environmental changes.

Universiti Utara Malaysia (UUM) as one of public universities in Malaysia is not exempt from making investments and initiating efforts in HRIS implementation, which is known as Personnel Information System (PERSIS). The main objective of this system is to store employee information in a more effective and safe; facilitate administrative tasks related to personnel; simplify and accelerate access to personnel information from any location and at any time; provides reports quickly and accurately to internal users, management and external agencies; and automate certain functions to facilitate staff and administrators in performing their tasks pertaining to human resource management aspect. PERSIS is wholly owned by Registrar Department of UUM. It has about more or less 40 modules that support all human resource activities to be performed effectively and efficiently.

Despite the benefits of HRIS, organizations should also be aware of some important issues of using the system in optimizing the full potential of HRIS. As for now, organizations realize that user satisfaction towards the information system that they use, may affect the successful of system implementation. Therefore, organizations should investigate the perceptions of the users about the system and where its minus points lie. According to Zmud (1979), to measure the information system success is a complex issue. Therefore, it is easier to measure satisfaction as a surrogate of system success.

To date, many empirical studies have examined relevant issues related to HRIS (Ball, 2001; Gupta & Saxena, 2011; Hosnavi & Ramezan, 2010; Hussain *et al.*, 2007; Rezaie, Asadi, Rezvanfar, & Hassanshai, 2009) including the failure of HRIS systems. For example Al-adaileh (2009) found that only 16.2% of IS projects in Jordan were completed within the time frame and budget, while 83.8% were considered as a partial failure or complete failure. He found that often the whole IS project is abandoned or cancelled due to over costing, over time, and/or lack of the features and functions originally specified. Such situation arises because of a number of factors such as lack of strong top management support, sophisticated computer based information system capabilities, extensive computerization of tasks, easy accessibility to computer facilities and more educated end-users (Foong, 1999). In addition, other system factors such as documentation, user support, user involvement, training, support, ease of use, and usefulness have also been identified as critical conditions for HRIS success (Haines & Petit, 1997; Doll & Ahmed, 1985; Gemoets & Mahmood, 1990; Fuerst & Cheney, 1982). Based on the previous studies, system factors have been reported to play a significant role in HRIS success.

Although there are an abundant amount of studies on HRIS, most of the studies were conducted in western countries quite a long time back. Further research is needed to investigate the success of HRIS in the new era of technology, especially in the context of Malaysia. Thus, the main objective of the study is to identify the influence of system factors (user involvement, training, support, ease of use, documentation and access) on user satisfaction towards PERSIS in UUM. To fulfill the objective, a survey is conducted among administrative staffs (clerical) in UUM. The main reason of targeting the group is they are actively using the system for performing their tasks. Therefore, their perceptions and ideas are more relevance compared to other groups.

LITERATURE REVIEW

Human Resource Information Systems (HRIS)

Generally, HRIS refers to a systematic procedure in collecting, storing, maintaining, retrieving, and validating data needed by an organization about its human resources activities (Broderick & Boudreau, 1992; Kovach

& Cathcart, 1999; Tannenbaum, 1990). Ceriello and Freeman (1991) also defines HRIS as software, hardware, functional support, and policies and procedures for system computer that created for supporting human resources activities. Specifically the systems serves as a computerised technology, which stores, records, links, analyses and presents data about the human resources within the business (Ball, 2001). The purpose of this system is to provide information to assist in making human resource-related decisions.

HRIS is also known as human resource management system (HRMS), employee information system (EIS) and electronic human resource management (EHRM). The term of EHRM is also used interchangeably with HRIS. These two terms are widely used in many IS studies related to HRM. Even, some scholars and researchers debated that EHRM and HRIS are two different concepts (Ruel, Bondarouk, & Looise, 2004). Ruel, Magalhaes, and Chiemek (2011) claimed that the terms like EHRM, web based HRM, and information technology (IT)-based HRM are considered as developments of HRIS.

Literature on EHRM or HRIS is steadily increasing with various issues examined, such as acceptance and effectiveness of system, attitude towards using HRIS, impact of HRIS and satisfaction with HRM system (Gupta & Saxena 2010; Hussain et al. 2007; Marler & Fisher, 2013; Yusliza & Ramayah, 2011). In the context of information system (IS), a review of the literature shows that more studies in IS have highlighted the issue of satisfaction with certain applications. However, very limited studies have been conducted on employee satisfaction with HRIS. One of the studies in this context was Gupta and Saxena's (2010), who investigated the satisfaction level of employees with EHRM or HRIS in India. Four hundred employees of the IT and banking sector participated in the study. They found six main factors that influenced employee satisfaction with EHRM or HRIS: faster communication, improvements, benefits, employee management, time efficiency, and client orientation. They also observed that employees had different satisfaction levels with all the factors.

User satisfaction

Studying the end-user satisfaction is one of the most suitable ways of investigating the effectiveness of IS (Dastgir & Mortezaie, 2012). In fact, user satisfaction is widely used all over the world by researchers and scholars as a measure of IS success and has been studied in many different contexts (Gudigantala, Song, & Jones, 2011; Sabherwal, Teyaraj, & Chowa, 2006). DeLone and McLean (1992) pointed out the popularity of information satisfaction because of the high face validity, other instruments are problematic and many instrument exist to measure satisfaction. The term of user satisfaction is used interchangeably with end-user satisfaction, end-user information system satisfaction (EUISS) and end user computing satisfaction (EUCS).

There have been several definitions offered for satisfaction. Bailey and Pearson (1983) and (Wixom & Todd, 2005) define satisfaction in a given situation is the sum of one's feeling and attitudes toward a variety of factors affecting the situation. More precisely, Oliver (1993) summarized the definition of satisfaction as the individual's emotional state following a certain experience. In the IS context, satisfaction is referred to the recipient's reaction to the use of the output of an IS (Irani, Weerakkody, Kamal, Hindi, Osman, Anouze, & Al-Ayoubi, 2012). Doll and Torkzadeh (1988) defines user satisfaction as the affective attitude towards a specific computer application by someone who interacts with the application directly. The level of satisfaction depends on the extent of users perceived that the system meets or fails to meet the expectations (Seddon & Kiew, 1994, Ives, Olson & Baroudi, 1983). Furthermore, a number of previous studies have

confirmed that user satisfaction has been widely accepted when it is measured against user satisfaction (DeLone & McLean, 1992, 2003; Foong, 1999; Haines and Petit, 1997; Hosnavi & Ramezan, 2010; Jurizan, 2002).

Generally, individual satisfaction on certain things or situations is mainly based on the individual motivational level. Based on motivation theory of hygiene, the attitude and employees' motivation depend on the environmental factors that caused the employees' satisfaction or dissatisfaction with certain things or situations. As referred to Fuerst and Cheney (1982) employees will be more motivated to do their works if the information systems incorporates with certain features such as ease of use and usefulness. As a result, individual satisfaction and motivation can be enhanced and this will also lead to high performance among employees.

Systems Factors

A review of literature found that various factors are believed to influence the success of HRIS implementations and applications, such as criteria of the users, system conditions, and management actions. Many researchers throughout the world have examined the factors influencing the success of HRIS or other IS, for instance; individual differences (Kasper & Cervený, 1985), user involvements (Barki & Hartwick, 1994; Ives & Olson, 1984; Klobas & McGill, 2010; Peter, DeLone & McLean, 2013), organisational contexts (Ein-Dor & Segev, 1978), documentation systems (Doll & Ahmed, 1985; Gemoets & Mahmood, 1990), training (Raymond, 1985), conditions that influence the successful implementation of HRIS such as ease of use, usefulness and access (Haines & Petit, 1997), decision support systems (Fuerst & Cheney, 1982) and user development of computer applications (Rivard & Huff, 1988).

Notably, user involvement or participation in the design and implementation stages of information technology affects the adoption of these technologies in future (Barki & Hartwick, 1994). In the context of learning management system (LMS), student involvement was found to be related with LMS success (Klobas & McGill, 2010). The more involvement among student with the LMS site, the more they obtain the benefits from the system. We believe that this situation will also be the case with HRIS implementation.

Support is another important element that ensures success of HRIS. Support is defined by Jarvenpaa and Ives (1991) as the involvement and participation of the executive or top management of the organization in the implementation of IS activities. This is reflected by the presence of a HRIS unit/department whose staff members are responsible in helping other users use the system (Haines & Petit, 1997). Support has been widely examined in studies that looked at information system success (Al-Adaileh, 2009; Hussein, Selamat, Anom, Karim & Mamat, 2005; Jarvenpaa & Ives, 1991; Sabherwal et al., 2006). Furthermore, the symbolic actions of support presented by senior managers contribute to the user satisfaction of the information system. In addition, top management support in terms of allocation resources is highly needed during the adoption and implementation stage of new system (Lee, Kim, Rhee, & Trimi, 2006). Without top management support users may neglect the systems and lead to dissatisfaction with system (Guimaraes & Igbaria, 1997). Additionally, support and user involvement were found to be two of the factors that were most significantly related to end-user satisfaction. Moreover, top management support was found to have the strongest effect on IT/IS usage and user satisfaction, followed by availability of training and user involvement in Kuwait (Rouibah, Hamdy, & Al-Enezi, 2009).

Ease of use is one critical factor that determines the success of a HRIS implementation. Ease of use refers to the degree to which an individual believes that using a particular system would be free of effort (Davis, 1989). The original TAM model (Davis, 1989) and Wixom and Todd Model (2005) considers ease of use as a key factor in influencing IS usage and success. Previous studies also found a strong impact of ease of use on the adoption of electronic human resource management (e-HRM) (Yusliza & Ramayah, 2011; Yusliza, Ramayah, & Haslindar, 2010). In other words, HRIS which incorporates ease of use feature would be able to satisfy users as such feature would reduce confusion and frustration, costs, and increase employee morale and effort. Hence, users experience with the application would be more enjoyable and less frustrating.

Additionally, Doll and Ahmed (1985) and Gemoets and Mahmood (1990) also prove that the system documentation which is generated by the system also influence user satisfaction. Indeed, training and documentation are two examples that can be used by the organization to increase IS related awareness. These mechanisms can reduce the intensity of complexity. Thus, it can lead to satisfaction to computer system or applications.

Further more, accessibility have appeared in many studies that investigated the effect of system factors toward various contexts, for instance user satisfaction and IS usage (Aggelidis & Chatzoglou, 2012; Hou, 2012; Gudigantala *et al.*, 2011; Nelson, Todd, & Wixom, 2005; Urbach, Smolnik & Riemp, 2010).

RESEARCH MODEL AND HYPOTHESES

Previous studies noted that successful implementation of HRIS is influenced by a number of critical factors, namely individual characteristics, features of the system and the structure of the organization (Haines & Petit, 1997). In measuring HRIS success, it is easier to assess the level of user satisfaction with the system. Among the three factors, the characteristics of the system have been identified as having the most significant relationship with the success SMSM.

In addition, Fuerst and Cheney (1982) also conducted a study on the factors that influence the success of an information system. Among those factors are user involvement, training, and support from management during the implementation process of the system. Therefore, this study was conducted to determine the relationship between system and user satisfaction for measuring the HRIS success. Based on Figure 1, independent variable in this study is the system characteristics (involvement, training, support, ease of use, documentation and access) and user satisfaction is the dependent variable. Therefore, we hypothesized that:

- H1: Involvement is positive related to user satisfaction
- H2: Training is positive related to user satisfaction
- H3: Support is positive related to user satisfaction
- H4: Ease of use is positive related to user satisfaction
- H5: Documentation is positive related to user satisfaction
- H6: Access is positive related to user satisfaction

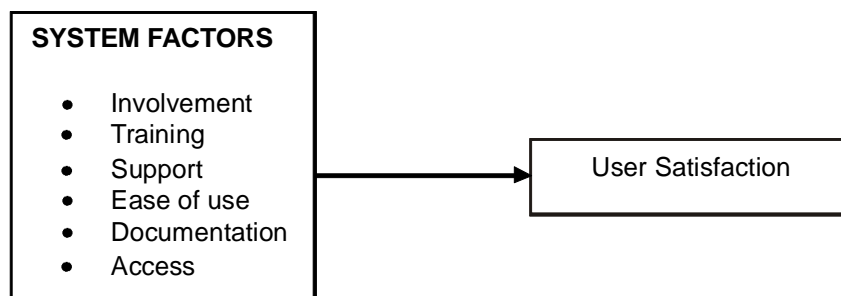


Figure 1: Research model

METHOD

Study sample and procedures

To meet the research objective, a survey was conducted among administrative staffs (clerical) in UUM. A random sampling method was used to select the sample for this study. Each participant received one set of questionnaire with cover letter attached, explaining the purpose of the study and the instructions on how to answer the questionnaire. Participants were also provided with a pre-addressed so that they could return the questionnaire through internal mail back to the researcher. One hundred and ninety questionnaires were sent out to the staffs out of which 135 were returned. Three questionnaires were rejected due to blank responses. Thus, 132 questionnaires were finally analysed (n=132) representing 69.5 percent valid response rate.

Measures

User satisfaction is defined as behavior that is influenced by the use of a computer that contains specific systems applications and features (Igbaria & Nachman, 1990). In this study, user satisfaction is measured using 15 items of 'User information satisfaction's instruments which has been modified by Haines and Petit (1997) from the original work by Bailey and Pearson (1983). The user information satisfaction's instrument has been adopted by most researchers, including Ives, Olson, and Baroudi (1983) and Igbaria and Nachman (1990). This instrument also reported high reliability which is ranged between 0.62 to 0.89 (Haines & Petit, 119).

Of the 15 items, two items were dropped because it did not fit the context of PERSIS. The items were support software vendors and the time required to develop new HRIS module. All questions used a scale of 5 points, ranging from '1' 'Strongly disagree' to '5' "Strongly agree". Respondents were asked about the relationship with the staff of information system unit, appropriateness of information staff in troubleshooting the system, the training provided to users, understanding, involvement and commitment of the users to the system, reliability, relevance, accuracy, and completeness of reports, data security and the effect of system usage to work.

In this study, 20 items of the instrument used by Haines and Petit (1997) was adapted. Most of these items are reported reliability value between 0.70 and 0.97 (Haines & Petit, 1997). All questions were used 5 point Likert scale, ranging from '1' 'Strongly disagree' to '5' "Strongly agree". Respondents were asked about the level of involvement in the process of system development and implementation, training on the system that was attended by the respondents, the support given by the management and co-workers about

the use of the system, the system facilities in terms of their nature, the ease of use of the system in helping the duties and responsibilities, documentation system, and the level of accessibility of information system data. Most of the items were also used in the study by Davis (1989) and Igbaria, Pavri, and Huff (1989).

In order to obtain data about the respondents' background, the questions asked are age, gender, education level, and occupation. For these questions, respondents are required to choose the answer provided or answer an open question.

ANALYSIS AND FINDING

Table 1 to Table 4 presents the findings based on the analysis that has been done. Discussion on the findings will be based on three things. There are the background of the respondents, the reliability of the measurement, and the relationship between system factors and user satisfaction.

Based on Table 1, majority of the respondents of the present study composed of female (69.7%) and were between 32 to 41 years old (50.4%). Based on percentage of age, 16 are male (24.4%), and 48 are female staffs (76%). In terms of education achievement, 61 respondents (47.3%) have SPM certificate or equivalent, while 47 respondents (36.4%) possess STPM or equivalent, 10 respondents have a first degree (7.8%), 9 respondents have Diploma (7.0%), only one respondent has master degree and other certificate (0.8%). Based on the SPM percentage, 17 respondents were male (27.9%), while 44 respondents were female (72.1%).

Besides that, majority of the respondents (67.2%) were posted at administrative departments as compared to faculties (32.77%). It can be seen that, majority of the staffs were used at the departments to perform their tasks. So that, their involvement in the study are truly important in order to identify the user satisfaction towards .

Table 1
Profile of Respondent

<i>Demographic characteristics</i>	<i>Frequent</i>	<i>Percentage (%)</i>
Department		
Administrative	80	67.2
Faculty	39	32.8
Gender		
Male	40	30.3
Female	92	69.7
Age Group		
22 – 31	64	37.8
32 – 41	48	50.4
> 41	15	11.8
Education achievement		
SPM	61	47.3
STPM	47	36.4
Diploma	9	7.0
Degree	10	7.8
Master	1	.8
Others	1	.8

User Information Satisfaction's instrument which has been modified according to the context of PERSIS proved that it can be adopted in this study ($\alpha = .93$). The reliability of all system factors also reported acceptable value (involvement = .83, training = .80, Support = .74, ease of use = .90, documentation = .84, and access = .61).

Table 2
Reliability analyses (n = 132)

<i>Variables</i>	<i>No. of items</i>	<i>Alpha</i>
User satisfaction	15	.93
Involvement	2	.83
Training	3	.80
Support	4	.74
Ease of use	3	.90
Documentation	3	.84
Access	2	.61

Correlation matrix

Table 3 shows the correlation matrix between the system factors and user satisfaction. All these factors have the strongest positive correlation with user satisfaction as reported in previous studies. The r and p values for these factors are as follows: involvement ($r = .442$, $p < .01$); training ($r = .582$, $p < .01$); support ($r = .700$, $p < .01$), access ($r = .528$, $p < .01$), ease of use ($r = .739$, $p < .01$), and documentation ($r = .663$, $p < .01$). This shows that all factors are important factors that influence user satisfaction with PERSIS. This study was supported by Haines and Petit (1997) which claimed that system characteristics have a strong relationship with user satisfaction compared with the characteristics of individuals and organizations.

Table 3
Correlation matrix of system factors and user satisfaction (n=132)

	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>
User satisfaction	-	.442**	.582**	.700**	.528**	.739**	.743**	.663**
Involvement		-	.624**	.410**	.459**	.343**	.371**	.386**
Training			-	.591**	.441**	.549**	.609**	.526**
Support				-	.424**	.479**	.562**	.396**
Access					-	.474**	.509**	.428**
Ease of use						-	.735**	.724**
Documentation							-	.461**

** significant at $p < 0.01$ (two tailed).

Further, the multiple regression analysis was performed to identify factors which significantly related to user satisfaction. Based on Table 4, system factors have a strong influence on user satisfaction ($r = .836$, $F = 41.135$). The results of the study also showed that all factors have explained 70 percent of variance in user satisfaction. In addition, only support and ease of use have a significant impact on user satisfaction. Therefore, H3 and H4 were supported.

Table 4
Multiple regression for system factors and user satisfaction

R	R ²	Adjusted R ²	Std. Error of the Estimate	F	Sig.
.836(a)	.699	.682	.32699	41.135	.000(a)

Variable	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	t	
(Constant)	.400	.195		2.055	.042
Involvement	.057	.039	.097	1.459	.147
Training	-.004	.057	-.005	-.067	.947
Support	.232	.069	.251	3.338	.001
Access	.025	.048	.034	.521	.603
Ease of use	.263	.075	.293	3.494	.001
Documentation	.078	.063	.095	1.250	.214

Dependent variable: User satisfaction

DISCUSSIONS AND CONCLUSIONS

The purpose of this study is to examine the relationship between the system factors and user satisfaction among PERSIS users. System factors are user involvement, training, support, ease of use, documentation and access. To identify this relationship, Pearson correlation analysis and multiple regression analysis were used. The results have shown that all of these factors have a strong positive correlation with user satisfaction with PERSIS. However, among all the factors only support and ease of use are most significant factors affecting user satisfaction with PERSIS. The findings are consistent with studies conducted by previous researchers on the impact of system factors on user satisfaction, including user involvement (Baroudi, Olson, & Ives, 1986), training (Raymond, 1985), and documentation (Doll & Ahmed, 1985).

User involvement or participation among users in the process of development and implementation of information systems has been identified as an important activity that can improve the quality of the system and ensure the successful implementation of the system. Indirectly, this activity will also influence the attitudes and feelings of the users towards information system. This is because of a sense of responsibility towards the successful implementation of information systems have been formed among users from the development process until it is successfully implemented. Thus this will make them confident in using information systems and easily accept changes made to the information system. Indirectly, this attitude will encourage and improve user satisfaction towards information systems as claimed by Baroudi, Olson and Ives (1986).

In the context of this study, most of the respondents were directly involved with the development and implementation of PERSIS. Their involvement is not more on technical aspect but more on data management of PERSIS. For example, staffs who are involved to develop PERSIS need to obtain complete information about purposes or characteristics of PERSIS that required by users. Here, respondents were

responsible to give the information needed as they are also among the staff that will always use PERSIS. Baroudi, Olson and Ives (1986) have assumed that involvement of users during planning and implementing stage will encourage them to use the system more frequently. Indirectly, this will increase user satisfaction with the system.

In terms of training, it is undeniable that the comprehensive training programs are able to enhance the skills and knowledge of individuals. This will give the same effect to the users as they will be more familiar with the operation of information systems and use them more effectively. Conversely, if the individual is less skills in respect of human resource information systems so they will feel fear and unease to use system information (Raymond, 1985).

In addition, Fuerst and Cheney (1982) explained that training will affect the use of information systems and encourages the user satisfaction as discussed in the paragraph above. Users are encouraged to receive training until they are comfortable with the system and more satisfactory results will be obtained if the training is carried out in stages and not mixed up with daily tasks. With increasing knowledge and skills acquired as a result of the training, it could give users the opportunity to develop their career and seize the opportunity provided by organization such as promotion. This is consistent with the theory of motivation 'hygiene', which describes the improvement in learning is one of the factors that motivate an individual. If the individual feels that his skill has improved, indirectly the level of satisfaction and job performance are also increased. Notably, training is an important factor to increase the use of information systems, to motivate individuals and to improve job satisfaction. It is also an important mechanism for professional development.

The support either from administration officers, information system officers and colleagues also showed a strong correlation with the level of user satisfaction ($r = 700$). The findings are in line with Ein-Dor and Segev (1978, in Fuerst & Cheney, 1982). In the context of this study, the administrative staffs (clerical) UUM were received overall support from administration officers, information system officers and colleagues which helped them to use PERSIS (mean = 3.86). This condition leads their satisfaction with PERSIS. If they are not given assistance or direct support both in terms of encouragement or guidance, it is possible this system cannot be fully utilized by them. Similarly, if the organization is not aware of the effect of support and easily assign tasks to information systems officer to guide users to use PERSIS.

Generally, users need an information system that has the features easy to use and usefulness in helping with daily tasks. This is because the system which is easy to use allows users to perform daily tasks efficiently. Besides, it can accelerate the routine activities and to facilitate in the decision making process. Both of these factors are strong factors that influence user satisfaction towards PERSIS. PERSIS is considered as a system that is useful because it can help the administrative staffs carry out their responsibilities effectively. Since their official duties require administrative staffs to always use PERSIS, then the crucial need of these factors cannot be denied. This is consistent with the findings that show the mean value of the 'information contained in the system support me to do daily tasks (mean = 3.92)', the use of the system can increase the productivity of work '(mean = 3.85)', the use of the system can help me make decisions more accurate and faster '(mean = 3.85)', systems is easy to use '(mean = 3.81), and' systems is user friendly '(mean = 3.73).

In addition, the documentation of system is also among the features of system which is required by the user. In this study, this factor indicated a relatively strong correlation with user satisfaction towards

PERSIS. This is evidenced by correlation analysis that shows the value of r for documentation is .663. Good documentation helps the user to optimize the use of information systems more efficiently (Doll & Ahmed, 1985; Gemoets & Mahmood, 1990). Clearly, users need documentation system that can improve the knowledge and understanding of the system and this information will help them to use the system properly and effectively. In addition, Schaffer (1977, in Gemoets & Mahmood, 1990) also pointed out that good documentation can affect the achievement of cost-effectiveness of the overall system

Furthermore, the researchers also found a significant effect of access on user satisfaction towards PERSIS. According to Foong (1999), users should be given the freedom to access certain information in order to perform the task well. Similarly, the freedom to use their computer equipments should be given to the users. Indirectly, this will improve users' skills and facilitate their understanding of information systems more quickly. Users who are less skilled and less knowledge may not be able to carry out their duties properly and this will affect their satisfaction of the system and performance.

In conclusions, the findings of this study provide important implications for managers and HR practitioners. Managers and HR practitioners need to focus on the system design, system development, and systems implementation. They should highlight on the factors that have been discussed in order to carry out PERSIS. Therefore, managers and HR practitioners need to take appropriate actions such as the provision of a comprehensive training program on human resource information system, strong support from all parties whether top managers, information systems officers and colleagues, and the quality, complete and accurate of system documentation. Hence, it can influence and affect the successful of human resource information system, particularly PERSIS.

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