

Work Design and Competencies in Relation to Work Performance: A Proposed Framework

Mohd Faizal Hamzah*

Ph.D. Candidate, University of Technology MARA, Malaysia
Senior Librarian, University of Malaya, Malaysia

Mohamad Noorman Masrek

Senior Lecturer, Faculty of Information Management, University of Technology MARA, Malaysia

Irwan Kamaruddin Abdul Kadir

Senior Lecturer, Faculty of Information Management, University of Technology MARA, Malaysia

Abstract

Work performances are an essential key indicator for various organizations, especially in the library. Work performance guide libraries to develop business strategy, and achieved mission and vision of the libraries. Unfortunately, a study in work design concepts in librarianship literature is very limited. In contrast to others, profession work designs are always a key indicator to measure work performance. Therefore this fissure opens a new perspective on work performance study in library fields. Accordingly, this study proposed a new dimension in measuring work performance. Hence, the objective of this study is 1) to identify the conceptual frameworks of work performance and work design, 2) integrating these to propose a heuristic conceptual framework. A systematic review was conducted in social science, psychology, library and management databases. The generic framework was identified and the dominant dimension was listed in the systematic table. The underpinning generic framework, model, and theories were identified. The frequently used to describe work design, competencies and work performance were integrate. Based on the systematic review of the previous study, a heuristic conceptual framework of work performance, competencies, and work design were proposed. The proposed framework can serve as a fundamental conceptual framework for future study on work performance in library fields.

Keywords: Work performance; Work design; Framework.



CC BY: [Creative Commons Attribution License 4.0](https://creativecommons.org/licenses/by/4.0/)

1. Introduction

No doubt in any profession, measuring employee's work performance is one of the greatest difficulties faced by many industries (Koopmans *et al.*, 2014a). Güntert (2015a); Morgeson F. P. and Humphrey (2006a); Parker (2014); Rayburn S. W. (2014a); has studied the various aspect of work design and the outcome. The finding of the study has developed various empirically-based models to explain the work performance and work design in various occupations. Model for work design such Self-Determination Theory (Panatik, 2012) Job Demands-Resources (JD-R) model (Rayburn S. W., 2014a) and Job Characteristic Model (Hackman and Oldham, 1976a) are among the widest models adopted or adapted by researchers to measure work performance and work design in many fields. However, there is still a space to examine such as motivation (Parker, 2014), job stressors and well-being (Bakker and Demerouti, 2014) as an output. Similarly, there is no comprehensive prominent conceptual framework of work performance exist (Koopmans *et al.*, 2011). Besides that (Koopmans *et al.*, 2012a) and (Koopmans *et al.*, 2014a) believed that approaches to study work performance especially individual work performance is not consistent. In the recent study of work performance, most of the researcher is focusing on indicators of work design and not on its factors (Koopmans *et al.*, 2011) In line with that, the relationship between employee participant and work design in work performance is not well study (Gyan-Baffour, 1999). Additionally, Parker (2014) shared that, most dominant moderator of work design in uncertainty. Further details, Demerouti *et al.* (2001) and Hackman and Oldham (1976a) found that some theories lose credibility such two-factor theory and sociotechnical systems theory due to research finding from the researchers. Furthermore, Sharon and Wall (1998a) believed that these situations create a space for the researcher to study deeper of work performance and work design. In library fields, the number of literature combining work performance, competencies and work design is almost nonexistence. Therefore, not much study and the empirical study proves that relationship in library fields. As a matter of fact, the existing measurement of work performance in library fields are still incomplete (Shupe *et al.*, 2015). Under those circumstances, there is still a space for further research related to work performance and work design, especially in librarians' fields. The proposed model may help the practitioner to understand the relationship between work performance, competencies, and work design. The Model also may strengthen the methodological aspect to measure work performance among librarians.

2. Work Performance

Work performance is not a new dimension as dependent variables in various studies. In searching for the suitable work performance indicator, the researcher had search for evidence as a guideline for the framework. The discussions about the previous indicator strengthen the proposed conceptual framework. [Motowildo *et al.* \(1997\)](#) highlight that, performance model should focus on behavior instead of results. Therefore it is very important to propose a dimension that not represents results of the work performance. Moreover, the dimension adapted should answer the research objective of the study. As mention in the making sense of work performance, the most comprehensive study on work performance study was conducted by [Koopmans *et al.* \(2014a\)](#) and [Koopmans *et al.* \(2012a\)](#). [Koopmans *et al.* \(2014a\)](#) The model has been cited more than 442 in Google Scholar. Four prominent dimensions namely, 1) task performance, 2) contextual performance, 3) adaptive performance, 4) counterproductive work behavior is playing a big significant to measure work performance. In the context of this study, two out of four of the dimension have been adopted to the proposed conceptual framework. The dimensions selected are the best dimension to define the nature of the work performance of the academic librarians. [Griffin *et al.* \(2000a\)](#) and [Kahya \(2009\)](#) claim that task performance and contextual performance are the dimensions of behavior that independently contributes to effectiveness in the organization. Based from the literature search, various study has proposed task performance and contextual performance as the main dimension in work performance model and model [Díaz-Vilela *et al.* \(2015\)](#); [Hernaus and Mikulićs \(2014\)](#); [Koopmans *et al.* \(2014a\)](#); e.g [Koopmans *et al.* \(2014a\)](#); [Li and Voola \(2005a\)](#). Not only that, the dimension has been used in various fields such as job satisfaction ([Perera *et al.*, 2014](#)), overall performance ([Borman and Motowidlo, 1997](#); [Motowidlo, 2013](#); [Roe, 1999](#)), industrial and organizational psychology ([Kahya, 2009](#)), and air traffic control ([Griffin *et al.*, 2000b](#)).

2.1. Task Performance

Task performance is the most used dimension in various model and theories. [Kahya \(2009\)](#) claims that various researchers defined task performance as a synonymous of the overall performance. In general, task performance can be defined as proficiency ([Koopmans *et al.*, 2014a](#)) and effectiveness ([Hernaus and Vokic, 2014](#)) in adding value and perform the task given. On the other hand, ([Bekenova, 2015](#)) believed that task performance is an action or performance that linked with the finishing the task given. [Singh \(2016\)](#) added that task performance is also known as a common term on how an employee does on a given task and quantifying someone's performance on carrying out job given.

2.2. Contextual Performance

Even though task performance is the most dominant dimension, numerous experts believed that contextual performance is also an important dimension in work performance study ([Kahya, 2009](#)) In general, contextual performance can be defined as behaviors of the employees to support the organization, social and psychological environment ([Koopmans *et al.*, 2014a](#)); ([Bekenova, 2015](#)) added, contextual performance is an extra role that may not directly be linked to the job or task but it supports the main task given. Contextual performances can be classified as behavior under the individual motivational control ([Griffin *et al.*, 2000a](#); [Koopmans *et al.*, 2014b](#)). Furthermore, contextual performance contributes to the organizational effectiveness by supported organizational, social, and psychological context ([Kahya, 2009](#)) The concept of contextual performance is almost similar to organizational citizenship behaviors whereby the employees perform extra roles in the organization. However [Koopmans *et al.* \(2011\)](#) believed contextual performance are playing bigger roles compared to organizational citizenship behaviors.

3. Competencies

There is no standardization of core competency for the academic librarian. Therefore, the researcher required to refer to the previous study to develop the comprehensive competencies. As mention in the making sense of the competencies, the chosen dimension for competencies should generalized the academic library in Malaysia. The competencies proposed should not too specific. This is because the intention of this study is not focusing on a specific division in the library. Not only that, the nature of the working environment in Malaysia is based on job rotation. With that, the proposed competencies should not focus on detailing on the job scope. To develop the competencies for this study, the researcher had referred to [Khan S. A. and Bhatti \(2017\)](#); [Khan A. \(2015\)](#); [Khan A. *et al.* \(2015a\)](#), and [Masrek *et al.* \(2012a\)](#). The competencies proposed are 1) emotional intelligence, 2) cognitive abilities, 3) library leadership, 4) collection management, 5) technology management, 6) research and reference service, 7) content organization and structure. Listed below are the further explanations on each competency chosen.

4. Work Design

In general, work design can be used as one of the indicators to measure job satisfaction. Increasing job satisfaction among the employees will promote positive values such as improvement of work performances, competence, well-being, and much more. The proposed model was develop based on two primary indicators of work design namely, task characteristic and knowledge characteristic. The indicator chosen in the proposed framework is the most prominent work design character in work design model (eg. ([Griffin *et al.*, 2000a](#); [Hackman and Oldham, 1976a](#); [Hernaus and Vokic, 2014](#); [Morgeson F. P. and Humphrey, 2006b](#); [Sharon and Wall, 1998a](#)).

4.1. Task Characteristic

Task characteristic is one of the work design prominent indicators. Task characteristic has been used in many prominent frameworks in work design research [Morgeson F. P. and Humphrey \(2006a\)](#). A total of four indicators proposed in the framework namely, autonomy, task variety, task significance, and task identity.

4.1.1. Autonomy

Autonomy is one of the dominant indicators in work design character. According to [Sharon and Wall \(1998a\)](#) autonomy can be defined as a scenario which allows jobholders to perform choice and preference in their job. There are few autonomy perspectives suggested by [Campion *et al.* \(2005a\)](#) and [Morgeson F. P. and Humphrey \(2006a\)](#) namely; autonomy in work scheduling, decision making, and work methods. The dimension of autonomy gives freedom for librarians to perform task characteristic and significantly contribute to positive work performance's outcomes.

4.1.2. Task Variety

Initially, task variety is one of the improvisations of work design characteristic develop by [Hackman and Oldham \(1976a\)](#) According to [Sharon and Wall \(1998a\)](#), task variety involves in the primary job given, and does the job given requires the performance of a huge choice of the task. Task variety studies the variety of librarian's job scope in an academic library. By nature, the roles of an academic library are very multitasking due to the nature of information needs and technology advancement. This indicator will help the researcher to identify the significant of variety task in the academic library field and work performance among librarians. Findings from the research conducted by [Lundberg *et al.* \(2009a\)](#) explain that people easy to get motivated if there is an excessive choice of needs.

4.1.3. Task Significant

In searching for the right conceptual framework for work performance through work design, task significant is one of the dimensions needs to be highlighted. Task significant is one of the core job characteristics in job characteristics model developed by [Hackman and Oldham \(1976a\)](#). TS is the impact of the job to which extent has a significant impact on other employees, people inside or outside the organization ([Sharon and Wall, 1998a](#)) Significantly does work performed on the job has a significant impact beyond the organization ([Morgeson F. P. and Humphrey, 2006a](#)) whereby in this case outside the library.

4.1.4. Task Identity

Task identity is the degree to which employees perform the entire job given ([Sims *et al.*, 1976](#)) and be able to recognize the result of the job given ([Hackman and Oldham, 1976a](#)) This allows librarians in an academic library to identify the job workflow from the beginning and ending. Task identity allows librarians to identify whether the job scope and tasks were given was arranged accordingly to support the work from the beginning to end.

4.2. Knowledge Character

Although task characteristic is the most indicators used in many frameworks, knowledge character playing an important role in work design studies ([Hernaus and Vokic, 2014; Morgeson F. P. and Humphrey, 2006a](#)) Based on the previous study, knowledge character is also one of the prominent indicators used to measure work design. There are several variables suggested by [Morgeson F. P. and Humphrey \(2006a\)](#) the researcher decided to focus on a few namely job complexity, information processing, problem-solving, and skills variety. The indicator was chosen because of its fit with the librarian's job scope.

4.2.1. Job Complexity

Job complexity is the degree to which whether the jobs given are difficult or challenging to perform. This indicator was originally conceptualized as one of the features of mechanistic job design ([Morgeson F. P. and Humphrey, 2006a](#)). This indicator studies the nature of librarian whether the jobs given are simple, uncomplicated and relatively does the task given involves a simple task. The degree of JC required librarian's additional skills and knowledge. This will increase the motivation of librarians as mention in Herzberg two-factor theory whereby the increasing of motivational factor such as advancement will increase job satisfaction.

4.2.2. Information Processing

Information processing is one of the important indicators as suggested by [Morgeson F. P. and Humphrey \(2006a\)](#) and [Hackman and Oldham \(1976a\)](#) Information processing can be defined as the degree which the job required information to full fill the tasks were given. Information processing is part of the job scope of the librarian. It is significantly related to the librarian's jobs.

4.2.3. Problem Solving

Problem-solving is the degree, to which the task given required solution-based and creativity in completed the job ([Morgeson F. P. and Humphrey, 2006a](#)). There is a demand for problem-solving in the work design characteristic

as mention by Wall *et al.* (1995). Job scope of academic librarians is slightly different from the public library and special library. The nature of the job scope of academic library required the high involvement of skills to solve and cater the information needs of the researchers. On the other hand, the advancement of the technology, especially in information retrieval, required librarian to be up to date and technology literate.

4.2.4. Skill Variety

Skill variety is the last indicator proposed in the framework. Skill variety one of the indicators developed by (Hackman and Oldham, 1976a) and has been improvised by Morgeson F. P. and Humphrey (2006a) and Garg and Rastogi (2006a). Skill variety can be defined as a variety of skills that needed by the employees to full fill the job given. Skill variety supports the nature of the job scope of librarians whereby librarians in the academic library need to be flexible and skillful to deliver the information on various platforms. Some academic libraries conduct an information class and provide references service for people with disable.

5. The Basic Research Model

The basic research model is adapted from various previous studies including Contingency theory of action and job performance by Boyatzis R. E. (2008), Job Characteristics Model (JCM) by Hackman and Oldham (1976a), Morgeson F. P. and Campion (2003b), Khan A. *et al.* (2015a), Morgeson F. P. and Humphrey (2006a) Koopmans *et al.* (2014a), as well as Masrek *et al.* (2012a). The new work design and performance model developed by Garg and Rastogi (2006a) claim that the extended job characteristic of the work design predicts proactive performance which consists of an element of competencies. The competencies element in the model was a mediator to predict work performance. The model divide three categories of performance outcome namely, organizational outcome, individual or group outcome, and social outcome. The study has cited more than 200 citations in Google Scholar from various experts such as Kost *et al.* (2018); Bailey *et al.* (2018); Pató (2017) and Zawawi and Nasuridin (2017). The model creates better understanding to structure the basic relationship of this study. On the other hand, Self-Determination Theory is well explained as a good mediator between work design characteristic and positive work effect by Rayburn S. W. (2014b). In line with Garg and Rastogi (2006a) the relationship between the indicator gives parallel concepts to developed the basic model for this study. One of the indicators proposed in the Self Determination Theory is competence. Competence is playing significant roles to predict positive work effect. Even though previous experts have debate competence and competencies, Farooq *et al.* (2016) believed that the terms are the same. The model proposed by Rayburn S. W. (2014b) has been extended to study job stress to improve service employee (Elmadağ and Ellinger, 2018), motivate customer-oriented behaviors (Rayburn S. W. and Gilliam, 2016) and personality traits (Rayburn S. W. and Gilliam, 2016).

On the same side, Li and Voola (2005a) have proposed an organization performance model by looking from the organizational cultural perspective. The model claims that the organization cultural (work design) and organizational performance is significant when competencies occur as a mediator. Even though the model indicates the organization level of performance, (Li and Voola, 2005a) believed that it will influence individual performance also. To strengthen the relationship in the basic model, it is equally important to mention (Hernaus and Mikulić, 2014) and (Hernaus and Pološki, 2014) research model. The model has been cited from numerous experts such as (Shih *et al.*, 2018); (Hassan *et al.*, 2017); Hasgal and Ahituv (2017) and Santoro *et al.* (2017). Hernaus and Mikulić (2014) research model proposed a direct effect of the relationship between work design and work performance. Three work design characteristic proposed namely, task characteristic, knowledge characteristic, and social characteristic. Further details, two work performance indicator was found in the proposed model namely, task performance and contextual performance. Even though various study had proposed competencies as a mediating effect between work design and work performance, the relationship of direct effect from both concepts should not be ignored. Therefore it is important to develop a direct effect between work design and work performance in the basic model.

6. The Proposed Conceptual Framework

Studies to enhancing performance among librarian are not a new research area in library fields. Numerous study conducted to identify the best conceptual framework that suits the nature of the working environment of the librarian. However, by looking form different perspective this study proposed a new dimension to study the relationship of work design and competencies towards work performance. Previous research has discover the potential of work design and competencies in determining the work performance Grant (2007); Griffin *et al.* (2007); Güntert (2015a); Hernaus and Mikulić (2013) Sharon and Wall (1998a). Several improvisations made to strengthen the previous framework to suit the nature of the population. With that, the proposed theoretical framework for this study is presented in figure 1. The proposed theoretical framework is developed based on underpinning theories and models presented in the previous subtopic.

6.1. Making Sense of Work Design and Competencies

To develop a clear picture of the relationship between work design and competencies, the researcher is referring to the integrated work design model proposed by Morgeson F. P. and Campion (2003b) Boyatzis R. E. (1982) theories and Li and Voola (2005a)'s work performance model. First to mention is Morgeson F. P. and Campion (2003a) integrated work design model. The model claims that the characteristic of work (work design) has a significant toward empowerment (competencies). Modification made from the previous study conducted by Hackman and Oldham (1976a) strengthen the model and has been refer in many studies such as Parker *et al.* (2017)

and Grant (2007). Furthermore, in Bailey *et al.* (2018) theories, the organization environment (job design) and individual (competencies) playing a significant role in developing the best fit concept. Similarly, even though the proposed conceptual model by Li and Voola (2005a) is an organizational level, the concept of work design in any level of study will indirectly improve individual competencies. To strengthen the justification of the relationship, the researchers also adapted several models to developed the proposed framework namely, Job Characteristic Model by Hackman and Oldham (1976a) and Garg and Rastogi (2006a) 's job design model. Both models were the most widely used theoretical approach to study work design (Sharon and Wall, 1998a). Job Characteristic Model is playing an important role in most of work design study. The model was divided into three main dimension which is core job characteristic, critical psychological states, and the outcome (Sharon and Wall, 1998a) Core job characteristic proposed, namely skill variety, task identity, task significance, autonomy and feedback from job guide researchers to strengthen the relationship. The study also refers to self-determination theory to support the making sense of the relationship between work design and competencies. The theory is best known as the micro philosophy of human motivation. The desire to fulfill human needs will increase human competencies. To complete the making sense of the relationship between work design and competencies, the researcher had refers hypothesized model by Rayburn S. W. (2014b) The model was improvised from self-determination theory. The model integrated work design and dimension from self-determination theory namely, competencies, knowledge character and autonomy. The proposed model was in line with Morgeson F. P. and Campion (2003b) theories.

Further details, to develop dimension for work design characteristic in the relationship, the researcher is referring to Hackman and Oldham (1976a); Morgeson F. P. and Campion (2003b), Hernaus and Mikuliés (2014) and indicator from Morgeson F. P. and Humphrey (2006a) There are four indicators of work design characteristic developed by Morgeson F. P. and Humphrey (2006a) namely; task characteristic, knowledge characteristic, social characteristic, and contextual characteristic. The dimension was an improvement from Herzberg's motivation-hygiene theory Lundberg *et al.* (2009a) and Hackman and Oldham (1976a). The task characteristic dimension indicator has been the prominent indicator used to investigate factor influencing work design characteristic (Hackman and Oldham, 1976a; Sharon and Wall, 1998a). Task characteristic explains the characteristic of the job given in terms of authority, variety, significant and much more. The dimension is also proposed in Morgeson and Humphrey (2008) and Morgeson F. P. and Campion (2003b) work design's model. Next dimension is knowledge characteristic. Besides task characteristic, knowledge characteristic is also one of the popular dimension various study such as Liang *et al.* (2014); Jian *et al.* (2015) and Wierzbicki (2016) proposed this dimension. This dimension is related to the skills and ability required by an individual to perform a certain job task. Morgeson F. P. and Humphrey (2006a) added that knowledge characteristic is a very important dimension to guide work design process in the organization. Social characteristic is the third dimension in Morgeson F. P. and Humphrey (2006a) dimension. Social characteristic reflects the interconnection of social support, does the job create an opportunity to/need to be advised by others or assistance to complete the job. Even though this indicator has been used to study well-being as an outcome in work design the researcher is not focusing on interaction outside the organization as one of the objectives. The natures of the working environment of academic librarians are not highly exposed toward huge scale of social community's interactions but limited to the university users only. The last indicator suggested is a contextual characteristic. This dimension measures the work design outcomes by looking from the physical demands, the condition of the workplace, facilities to support ergonomics and much more. Even though contextual characteristic is an important dimension, the researcher cannot acclimatize this dimension due to the different setting of the working environment. The targeted population for this study has a different working environment setting, geographical differences, and difference library facilities. Generalization of the working environment will create inaccurate results. The objective of this study is not intentionally looking for the different setting of the working environment but more toward the job scope of the librarian. Instead of using all work design characteristic proposed by Morgeson F. P. and Humphrey (2006a) the researcher is using only two work design characteristic which is task characteristic and knowledge characteristic. Selected dimension is suitable to use in this research.

On the other hand, to develop the indicator for competencies several models on competencies had been refer. Realizing there are no standard competencies for the librarian, the researcher had adapted few competencies framework by Robinson *et al.* (2015) , Khan A. (2015); Khan A. *et al.* (2015a), and Masrek *et al.* (2012a). A comprehensive competencies model proposed by Robinson *et al.* (2015) indicate three categories level of competencies for the librarian in the universities. The foundation of the model is university and library core competencies, followed by professional practice and individual competencies. 12 dimension of competencies proposed in the model, namely leadership, strategic planning, networking, evaluation, marketing, foundational of knowledge, the practice of the professional skills, scholarly work, teaching, personal skills, interpersonal skills, long life learning. Some of the dimensions are not specific to the core competencies of the academic librarian. Therefore, a further literature search is conducted to develop a comprehensive competencies dimension in the proposed conceptual framework. The competencies develop should represent the nature of the working environment in the library. Besides that, the competencies should not too specific to the certain division. Various competencies model from numerous library associations helps the researcher to consider the important dimension to be adapted in the conceptual framework. American Library Association (2018), proposed 19 categories of core competencies as a guideline for a librarian. The competencies developed to suit the specific need of the library such as competencies for law libraries, schools library, vision science librarians, and medical library. as mention before the proposed competencies should not be too specific, therefore the researcher used the proposed competencies as a guideline. In line with that, Library of Congress (2001) under the Federal Library and Information Center Committee (FLICC) has developed a set of competencies for federal librarians. Two sets of competencies proposed include 1) foundational

competencies and 2) functional competencies. The list of foundation competencies proposed is cognitive analysis, communication, emotional intelligence, leadership, professional knowledge, technology application. On the other hand, agency and organization knowledge, collection management, content organization and structure, knowledge management, library leadership and advocacy, library technology management is the proposed competencies for functional competencies. The proposed competencies by Library of Congress seem in line with the characteristic of the competencies that the researcher need. Some improvise made to make the dimension more realistic. Based from Khan A. (2015), Khan A. *et al.* (2015b), and Masrek *et al.* (2012a), seven indicators were identified to be used in this study namely, emotional intelligence, cognitive abilities, library leadership, collection management, technology management, research and reference service, content organization and structure. The chosen indicator generalized the nature of the working environment in the academic library. Khan A. *et al.* (2015b) believed that the chosen competencies are the basic requirement of competencies for academic librarian.

6.2. Making Sense of Work Design and Work Performance

In work design study, various researchers such as Shih *et al.* (2018), Hassan *et al.* (2017), Hasgal and Ahituv (2017) and Santoro *et al.* (2017) have predicted the relationship between work design and work performance. The previous model proposed by Rayburn S. W. (2014a), Hernaus and Mikulićs (2014) and Hernaus and Pološki (2014) proves that performance is one of the positive outcomes of work design. Not only that, the ideas are conceptualized from Hackman and Oldham (1976a) job design model and Two-Factor Theory (TFT). Even though this relationship has no novelty in this study, the researcher decided to not ignore this relationship due to several reasons. Work design study in library fields are very limited, the results based on the relationship may produce a different perspective on the work design study. Furthermore, the number of literature related to work design and librarianship is almost non-existence. Therefore it is very important to remain the relationship in the proposed conceptual framework. In the context of this study, the foundation of the relationship is developed based from Garg and Rastogi (2006a)'s job design model, Hernaus and Mikulićs (2014), Li and Voola (2005b) Model, and work design characteristic by Morgeson F. P. and Humphrey (2006a). By adapting Morgeson F. P. and Humphrey (2006a). work design model, task characteristic is proposed to predict task performance.

6.3. Making Sense of Relationship Between Competencies and Work Performance

The basic relationship of competencies and work performance is adapted from various studies including Contingency theory of action and job performance by Boyatzis R. E. (2008) Job Characteristics Model (JCM) by Hackman and Oldham (1976a); Koopmans *et al.* (2012b), as well as Masrek *et al.* (2012a). The overall making sense is developed based on Contingency Theory of Action by Boyatzis R. E. (1982) and Boyatzis R. (1999), Li and Voola (2005a); (Garg and Rastogi, 2006a); Rayburn S. W. (2014b). and Khan A. (2015) and Contingency Theory of Action by Boyatzis R. E. (1982) claim that individual competency increased individual work performance. There is three main dimensions proposed in the theory. According to Boyatzis R. (1999) the best fits concepts occur when organization environment (job design, cultural, and core competence), individual (values, philosophy, interest, and competencies) and job demand (function, roles, and task) are integrated. In the same side, Li and Voola (2005a) model explained well the relationship between organization culture (work design), competencies and organizational performance. At glance, the model developed at the organizational level of work performance. However, the model proved that organizational performance will also increase individual performance. In line with Boyatzis R. E. (1982) the model has tested the competencies as a mediator to predict organizational performance and individual performance. Equally important to mention, (Garg and Rastogi, 2006a) 's work design model has found that the proactive performance has predicted to increase work performance. The previous study such as Shoss *et al.* (2012) defined proactive performance as a set of competencies. The model proposed several proactive performances such as motivation, quick respond learning and developing the organization, innovation and creativity, and high-performance environment. Some of the proactive element proposed is competencies indicator suggested by Khan A. (2015). There are three categories of work performance outcome proposed by the model, namely, organizational outcome, individual or group performance, and social performance. The model strengthens Boyatzis R. (1999) and Li and Voola (2005b) the relationship between competencies and work performance.

Beside Contingency Theory of Action, Self-determination theory is predicted a good indicator to predict increased of work performance. Rayburn S. W. (2014b) claim that the fulfillment of three basic psychological needs in self-determination theory which is autonomy, competence, and relatedness promote well being. Therefore by improved the Self-determination theory and Job Characteristic proposed by Hackman and Oldham (1976a) proved that competencies increased work performance of the individual. The last making sense relationship to support the relationship between competencies and work performance is by competencies model developed by Khan A. (2015) and (Khan A. *et al.*, 2015a). As mention in the underpinning model for competencies, (Khan A. *et al.*, 2015a) proposed a set of current competencies to increased job satisfaction and organizational commitment. The researchers regroup job satisfaction and organizational commitment as job performance in the organization. The developed model clearly indicates the relationship between competencies and work performance.

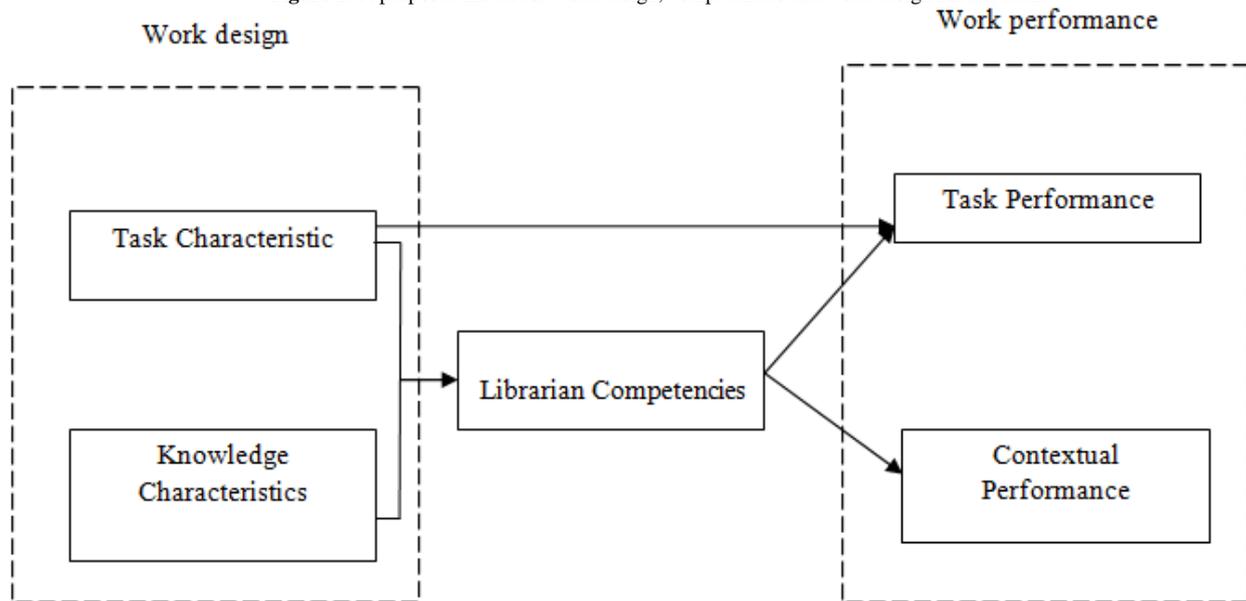
To develop dimension for work performance in the relationship, the researcher is referring to, Koopmans *et al.* (2012b), Koopmans *et al.* (2012b), Hernaus and Mikulićs (2014), Khan A. (2015), and Khan A. *et al.* (2015a) In the process of determining the most relevant dimension for this relationship, (Renn and Fedor, 2001) proposed two outcomes of performance namely, work quality and work quantity. Taken into consideration, the proposed dimension should be representing both indicators. On the other hand, Tett and Burnett (2003) argue that personality

trait should be a highlight in order to develop a comprehensive work performance dimension. However, personality traits are not part of the objective of this study.

The most comprehensive work performance mapping was conducted by [Koopmans et al. \(2012b\)](#); [Koopmans et al. \(2014b\)](#); [Koopmans et al. \(2012b\)](#), and [Koopmans et al. \(2011\)](#). 128 unique indicators were identified and based from the study task performance determined 36% of the work performance rating, even as the other three dimensions respectively determined 22% (contextual performance), 20% (adaptive performance) and 21% (counterproductive work behavior) of the rating ([Koopmans et al., 2014b](#)).

The selected indicator is in line with [Hernaus and Mikulićs \(2014\)](#)'s work performance model. The selected dimension was the best dimension for knowledge worker and the model has been cited from various experts such as [Santoro et al. \(2017\)](#); [Tufail et al. \(2016\)](#); and [Leon \(2015\)](#). Given this point, the researcher is focusing on two prominent outcomes as similarities of the previous researchers (e.g) [Hernaus and Mikulić \(2013\)](#); [Koopmans et al. \(2012a\)](#); [Li and Voola \(2005a\)](#). Figure 1 shows the complete dimension selected for work performance in the complete proposed conceptual framework.

Figure-1. A proposed model for work design, competencies and work design for librarian



7. Conclusion

This study highlight work design and competencies that determining work performance. Accordingly, not much literature on any platform discussed in details works design concepts and librarianship. Not only that, there is no theories or previous model presents the actual phenomena related to work performance, librarian competencies and work design. Hence, this study is the establishment of an empirically validated based framework on the determining of work performance by work design and librarians competencies. Previous study botched to provide comprehensive evidence to support the establishment of an empirically validated based framework that can be used in this study. The proposed conceptual framework for this study is adapted from various theories and model including by [Hackman and Oldham \(1976a\)](#) [Morgeson F. P. and Humphrey \(2006b\)](#); [Morgeson F. P. and Campion \(2003b\)](#), [Koopmans et al. \(2014b\)](#) and [Robinson et al. \(2015\)](#). Further details, the overall model is developed based on [Garg and Rastogi \(2006a\)](#). [Rayburn S. W. \(2014b\)](#); [Li and Voola \(2005a\)](#) and [Hernaus and Mikulićs \(2014\)](#). The finding from the preliminary study helps researchers improved the conceptual definitions of the original dimension in the framework. Besides that, this study provides sufficient evidence and trusted sources to strengthen the development of the framework. While the focus of the proposed conceptual framework has been on librarian work performance, it has included an equivalent relationship with a number of dimensions. In the context of this study, work performance dimension where divided into two which is task performance and contextual performance. Meanwhile, the dimension of competencies is consisting of the core competencies for the academic librarians. On the other hand, work design is further divided into two dimensions, namely task characteristic and knowledge characteristic.

Accordingly, the study reveals that competencies as a mediator have significantly related to work performance and work design. This study also discloses that two of work design dimension which is task characteristic and knowledge characteristic which have significant related with competencies. Work design dimension is a new dimension to be used to measure work performance of the librarian. Apart from this, the finding of this study also found that competencies are significantly predicting dimension of work performance which is task performance and contextual performance. Even though the relationship between task characteristic and task performance are not really a novelty in this study, the relationships are new to librarian's work performance study. Therefore, the relationship is still considered as a contribution to this study. The study supplements the existing literature on work performance by integrating work design and competencies into the framework. The literature on work design in library fields are very limited, therefore the validated framework will promote the concepts among librarians.

References

- American Library Association (2018). Core competencies. Available: <http://www.ala.org/educationcareers/careers/corecomp>
- Bailey, C., Yeoman, R., Madden, A., Thompson, M. and Kerridge, G. (2018). A review of the empirical literature on meaningful work: Progress and research agenda. *Human Resource Development Review*.
- Bakker, A. B. and Demerouti, E. (2014). *Job demands-resources theory*, in Peter Y. Chen and Cary L. Cooper (eds.), *Work and wellbeing: Wellbeing A complete reference guide*. John Wiley & Son Inc: United Kingdom.
- Bekenova, M. (2015). The impact of Merger process on the employee's individual working performance. *Business Science and Management*, 1(1): 8.
- Borman, W. C. and Motowidlo, S. J. (1997). Task performance and contextual performance. *The meaning for personnel selection research. Human Performance*, 10(2): 99-109.
- Boyatzis, R. (1999). 'Self directed change and learning', in Ronald R Sims and John G Veres (eds.), *Keys to employee success in coming decades*. Greenwood Publishing Group.
- Boyatzis, R. E. (1982). *The competent manager: A model for effective performance*. John Wiley & Sons.
- Boyatzis, R. E. (2008). Competencies in the 21st century. *Journal of Management Development*, (27): 1.
- Campion, M. A., Mumford, T. V., Morgeson, F. P. and Nahrgang, J. D. (2005a). Work redesign, eight obstacles and opportunities. *Human Resource Management*, 44(4): 367-90.
- Demerouti, E., Bakker, A. B., Nachreiner, F. and Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied psychology*, 86(3): 499.
- Díaz-Vilela, L. F., Rodríguez, N. D., Isla-Díaz, R., Díaz-Cabrera, D., Hernández-Fernaud, E. and Rosales-Sánchez, C. (2015). Relationships between contextual and task performance and interrater agreement, Are there any? *PLoS one*, 10(10): Available: <http://dx.doi.org/10.1371/journal.pone.0139898>
- Elmadağ, A. B. and Ellinger, A. E. (2018). Alleviating job stress to improve service employee work affect: the influence of rewarding. *Service Business*, 12(1): 121-41.
- Farooq, M. U., Ullah, A., Iqbal, M. and Hussain, A. (2016). Current and required competencies of university librarians in Pakistan. *Library Management*, 37((8/9)): 410-25. Available: <http://www.emeraldinsight.com/doi/abs/10.1108/LM-03-2016-0017>
- Garg, P. and Rastogi, R. (2006a). New model of job design, Motivating employees' performance. *Journal of Management Development*, 25(6): 572-87.
- Grant, A. M. (2007). Relational job design and the motivation to make a prosocial difference. *Academy of Management Review*, 32(2): 393-417.
- Griffin, Neal, A. and Neale, M. (2000a). The contribution of task performance and contextual performance to effectiveness, Investigating the role of situational constraints. *Applied Psychology*, 49(3): 517-33.
- Griffin, Neal, A. and Neale, M. (2000b). The contribution of task performance and contextual performance to effectiveness: Investigating the role of situational constraints. *Applied Psychology*, 49(3): 517-33.
- Griffin, Neal, A. and Parker, S. K. (2007). A new model of work role performance: Positive behavior in uncertain and interdependent contexts. *Academy of management journal*, 50(2): 327-47.
- Güntert, S. T. (2015a). The impact of work design, Autonomy support, And strategy on employee outcomes, A differentiated perspective on self-determination at work. *Motivation and Emotion*, 39(1): 74-87.
- Gyan-Baffour, G. (1999). The effects of employee participation and work design on firm performance A managerial perspective. *Management Research News*, 22(6): 1-12. Available: <http://www.emeraldinsight.com/doi/abs/10.1108/01409179910781689>
- Hackman, J. R. and Oldham, G. R. (1976a). Motivation through the design of work test of a theory. *Organizational behavior and human performance*, 16(2): 250-79.
- Hasgal, A. and Ahituv, N., 2017. "The development of knowledge workers in an organization characterized as complex adaptive systems (CAS)." In International Conference on Intellectual Capital and Knowledge Management and Organisational Learning." In *Academic Conferences International Limited*. pp. 97-103.
- Hassan, S., Mohamed, Z. A., Abdullah, S. N. S. and Zaini, N. N. (2017). Personality traits and its relationship with work performance for majority group of paddy farmers in Malaysia. *Australian Academy of Business and Economics Review*, 2(3): 234-43.
- Hernaus, T. and Mikulić, J. (2013). Work characteristics and work performance of knowledge workers: What goes hand in hand? *EFZG Working Paper Series/EFZG Serija članaka u nastajanju*, (9): 3-3.
- Hernaus, T. and Mikulić, J. (2014). Work characteristics and work performance of knowledge workers. *EuroMed Journal of Business*, 9(3): 268-92.
- Hernaus, T. and Vokic, N. P. (2014). Work design for different generational cohorts Determining common and idiosyncratic job characteristics. *Journal of Organizational Change Management*, 27(4): 615-41.
- Hernaus, T. and Pološki, N. V. (2014). Work design for different generational cohorts: Determining common and idiosyncratic job characteristics. *Journal of Organizational Change Management*, 27(4): 615-41.
- Jian, S., Xu, R. and Shengyue, H. (2015). The research of knowledge transfer influence factors in project cooperation network. *Research on Library Science*: 17: 19.
- Kahya, E. (2009). The effects of job performance on effectiveness. *International Journal of Industrial Ergonomics*, 39(1): 96-104.

- Khan, A. (2015). *The acquired and required competencies of Pakistani university librarians: Determining the job satisfaction, organizational commitment and training needs*, Unpublished. (University Technology MARA).
- Khan, A., Masrek, M. N. and Nadzar, F. M. (2015a). Analysis of competencies, job satisfaction and organizational commitment as indicators of job performance: A conceptual framework. *Education for Information*, 31(3): 125-41.
- Khan, A., Masrek, M. N. and Nadzar, F. M. (2015b). Analysis of competencies, job satisfaction and organizational commitment as indicators of job performance, A conceptual framework. *Education for Information*, 31(3): 125-41.
- Khan, S. A. and Bhatti, R. (2017). Digital competencies for developing and managing digital libraries, An investigation from university librarians in Pakistan. *The Electronic Library*, 35(3): Available: <https://doi.org/10.1108/EL-06-2016-0133>
- Koopmans, L., Bernaards, C. M., Hildebrandt, V. H., Vet, H. C. d. and Beek, A. J. V. D. (2014a). Measuring individual work performance: Identifying and selecting indicators. *Work*, 48(2): 229-38.
- Koopmans, L., Bernaards, C., Hildebrandt, V., Vet, H. C. d. and van, d. B., A. (2014b). Construct validity of the individual work performance questionnaire. *Journal of occupational and environmental medicine/American College of Occupational and Environmental Medicine*, 56(3): 331.
- Koopmans, L., Bernaards, C. M., Hildebrandt, V. H., Schaufeli, W. B., de Vet Henrica, C. and van der Beek, A. J. (2011). Conceptual frameworks of individual work performance a systematic review. *Journal of Occupational and Environmental Medicine*, 53(8): 856-66.
- Koopmans, L., Bernaards, C., Hildebrandt, V., Buuren, S. v., Beek, A. J. v. and Vet, H. C. W. d. (2012a). Development of an individual work performance questionnaire. *International Journal of Productivity and Performance Management*, 62(1): 6-28. Available: <http://www.emeraldinsight.com/doi/abs/10.1108/17410401311285273>
- Koopmans, L., Bernaards, C., Hildebrandt, V., van Buuren, S., van der Beek, A. J. and de Vet, H. C. (2012b). Development of an individual work performance questionnaire. *International journal of productivity and performance management*, 62(1): 6-28.
- Kost, D., Fieseler, C. and Wong, S. I. (2018). Finding meaning in a hopeless place? The construction of meaningfulness in digital microwork. *Computers in Human Behavior*, 82: 101-10.
- Leon, R. D. (2015). The future knowledge worker: An intercultural perspective. *Management Dynamics in the Knowledge Economy*, 3(4): 675.
- Li, J. H. and Voola, R., 2005a. "Organisational culture and organisational performance." In *The mediating effects of managerial competence.* In Paper presented at the Australia and New Zealand Academy of Management (ANZAM) Conference, Canberra ACT, Australia.
- Li, J. H. and Voola, R., 2005b. "Organisational culture and organisational performance: The mediating effects of managerial competence." In *In Australia and New Zealand Academy of Management (ANZAM) Conference.* Canberra ACT, Australia.
- Liang, H.-M., Kao, R.-H., Hung, Y.-S. and Chien, P.-Y., 2014. "Exploring the effects of knowledge characteristic and self-efficacy on employees' innovative behaviors: The moderating effect of environmental uncertainty." In *In Management of Engineering & Technology (PICMET), 2014 Portland International Conference on.* IEEE. pp. 815-21.
- Library of Congress (2001). 'Federal library and information center committee's competencies for federal librarians. 42: Available: https://www.loc.gov/flicc/publications/Lib_Compt/2011/2011Competencies.pdf
- Lundberg, C., Gudmundson, A. and Andersson, T. D. (2009a). Herzberg's two-factor theory of work motivation tested empirically on seasonal workers in hospitality and tourism. *Tourism Management*, (30): 6. Available: <http://dx.doi.org/10.1016/j.tourman.2008.12.003>
- Masrek, M. N., Saad, M. S. M., Johare, R., Rahim, H. and Masli, J. B., 2012a. "The competencies needed by para-professionals in library services, A case study of sarawak state libraries." In *In Paper presented at the The 18th International Business Information Management (IBIMA) Conference, Istanbul Turkey.*
- Morgeson and Humphrey (2008). 'Job and team design Toward a more integrative conceptualization of work design Emerald Group Publishing Limited. *Research in personnel and human resources management*: 39-91.
- Morgeson, F. P. and Campion, M. A. (2003a). *Work design*. In d. R. Borman & r. Klimoski (eds.) *handbook of psychology, industrial and organziational psychology*. 12 edn: Wiley: Hobiken, NJ.
- Morgeson, F. P. and Campion, M. A. (2003b). *Work design'*, in D R Borman and R Klimoski (eds.), *Handbook of psychology Industrial and organziational psychology*. 12 edn: Wiley: Hobiken, NJ.: 423-52.
- Morgeson, F. P. and Humphrey, S. E. (2006a). The work design questionnaire (wdq), Developing and validating a comprehensive measure for assessing job design and the nature of work. *Journal Of Applied Psychology*, 91(6): 1321-39.
- Morgeson, F. P. and Humphrey, S. E. (2006b). The Work Design Questionnaire (WDQ): Developing and validating a comprehensive measure for assessing job design and the nature of work. *Journal of Applied Psychology*, 91(6): 1321-39.
- Motowidlo, S. (2013). *Job performance*. In d. I. Borman & r. Klimoski (eds.), *comprehensive handbook of Psycholog*. Wiley: New York.
- Motowidlo, S. J., Borman, W. C. and Schmit, M. J. (1997). A theory of individual differences in task and contextual performance. *Human performance*, 10(2): 71-83.

- Panatik, S. A. B. (2012). Impact of work design on employee psychological strain among Malaysian technical workers. *Procedia. Social and Behavioral Sciences*, 40: 404-09. Available: <http://dx.doi.org/10.1016/j.sbspro.2012.03.207>
- Parker, S. K. (2014). Beyond motivation: Job and work design for development, health, ambidexterity, and more. In s. T. Fiske (ed.), annual review of Psychology. *Palo Alto, Annual Reviews*, 654: 661.
- Parker, S. K., Morgeson, F. P. and Johns, G. (2017). One hundred years of work design research: Looking back and looking forward. *Journal of applied psychology*, 102(3): 403.
- Pató, B. S. G. (2017). Formal options for job descriptions: theory meets practice. *Journal of Management Development*, 36(8): 1008-28.
- Perera, G. D. N., Khatibi, A., Navaratna, N. and Chinna, K. (2014). Job satisfaction and job performance among factory employees in apparel sector. *Asian Journal Of Management Sciences & Education*, 3(1): 96-104.
- Rayburn, S. W. (2014a). Improving service employee work affect, The transformative potential of work design. *Journal of Services Marketing*, 28(1): 71-81.
- Rayburn, S. W. (2014b). Improving service employee work affect: the transformative potential of work design. *Journal of Services Marketing*, 28(1): 71-81.
- Rayburn, S. W. and Gilliam, D. A. (2016). Using work design to motivate customer-oriented behaviors. *The Service Industries Journal*, 36((7-8)): 339-55.
- Renn, R. W. and Fedor, D. B. (2001). Development and field test of a feedback seeking, selfefficacy, and goal setting model of work performance. *Journal of Management Development*, 27: 563-83.
- Robinson, K. P., Runcie, R., Manassi, T. M. and Mckoy-Johnson, F. (2015). Establishing a competencies framework for a caribbean academic library, The case of the uwi library, mona campus. *Library Management*, 36((1/2)): 23-39. Available: <http://www.emeraldinsight.com/doi/abs/10.1108/LM-10-2014-0123>
- Roe, R. A. (1999). Work performance, A multiple regulation perspective. *International Review Of Industrial And Organizational Psychology*, 14: 231-336.
- Santoro, G., Vrontis, D., Thrassou, A. and Dezi, L. (2017). The internet of things: building a knowledge management system for open innovation and knowledge management capacity. *Technological Forecasting and Social Change*.
- Sharon, P. and Wall, T. (1998a). *Job and work design, Organizing work to promote well-being and effectiveness*. SAGE Publication: Oaks, California.
- Shih, D.-H., Lu, C.-M., Lee, C.-H., Parng, Y.-J., Wu, K.-J. and Tseng, M.-L. (2018). A strategic knowledge management approach to circular agribusiness. *Sustainability*, 10(7): 2389.
- Shoss, M. K., Witt, L. A. and Vera, D. (2012). When does adaptive performance lead to higher task performance? *Journal of organizational behavior*, 33(7): 910-24.
- Shupe, E. I., Wambaugh, S. K. and Bramble, R. J. (2015). Role-related stress experienced by academic librarians. *The Journal of Academic Librarianship*, 41(3): 264-69. Available: <http://dx.doi.org/10.1016/j.acalib.2015.03.016>
- Sims, H. P., Szilagyi, A. D. and Keller, R. T. (1976). The measurement of job characteristics. *Academy of Management journal*, 19(2): 195-212.
- Singh, S. S., S. (2016). 'What is a task performance in psychology. Available: <https://www.quora.com/What-is-a-task-performance-in-psycholog>
- Tett, R. P. and Burnett, D. D. (2003). A personality trait-based interactionist model of job performance. *Journal of Applied Psychology*, 88(3): 500.
- Tufail, M. S., Muneer, S. and Ishtiaq, M. (2016). Job characteristics with task and contextual performance, Moderating role of procedural justice for front line managers. *Journal of Social Sciences*.
- Wall, T. D., Jackson, P. R. and Mullarkey, S. (1995). Further evidence on some new measures of job control, cognitive demand and production responsibility. *Journal of organizational behavior*, 16(5): 431-55.
- Wierzbicki, A. A. P. (2016). 'Knowledge justification. *Knowledge Science (CRC Press)*: 109-38.
- Zawawi, A. A. and Nasurdin, A. M. (2017). The impact of task characteristics on the performance of nursing teams. *International Journal of Nursing Sciences*, 4(3): 285-90.