JCSHD

COGNITIVE SCIENCES AND HUMAN DEVELOPMENT

Preliminary Analysis of Employee Needs Inventory Assessment (ENAI): Reliability and Validity

Othman M. R.[1], Ghazali N. M.[2], Abdullah S.[3*] and Mohd Razali I. S.[4]

[1,2,3,4]Universiti Malaysia Sarawak, 94300 Kota Samarahan, Sarawak, Malaysia

ABSTRACT

The aim of this study is to develop and assess the validity and reliability of Employee Needs Assessment Inventory (ENAI). Employee Needs Assessment Inventory (ENAI) aims to screen employees' problem and measured eight scale namely health, financial, family, spiritual, work, career, interpersonal relationship and work environment. The instrument is developed based on Ecological Theory by Bronfenbrenner (1979). The questionnaire is distributed to 1113 employees in selected public university in Malaysia. The reliability of the instrument is measured using internal consistence reliability (Cronbach Alpha). The construct validity is measured by Exploratory Factor Analysis (EFA). The result indicated ~~a~~ coefficient alpha is 0.96 for the 76 ENAI items. The coefficient alpha~~s~~ for the eight subscales were as follows: 0.89 for health, 0.79 for financial, 0.86 for family, 0.83 for spiritual, 0.88 for work, 0.85 for career, 0.90 for interpersonal relationship and 0.89 for work environment. The study founds the instrument is valid and reliable.

Keywords: Reliability; Validity; Assessment; Employee; Exploratory factor analysis

INTRODUCTION

Employees are the most important asset in an organization, and knowing their needs is essential in creating a healthy organizational culture (Gabčanová, 2011). Numerous researches have highlighted employees' job satisfaction as an important factor in determining the success of the organization (Chi, et. al, 2009; Choi, et. al, 2017; Gabčanová, 2011; Gregory, 2011; Liao, et. al, 2017; Van der Voordt, 2003; Van Dick, et. al, 2017). Employees would be satisfied with their organization if they were satisfied with their job. On the other hand, employees could dislike the organization but still be satisfied with their job, and vice versa. Thus, it is crucial for employers, as well as counsellors to have information regarding employees' needs.

ARTICLE INFO

E-mail address:
eyda_abd@yahoo.com (Suraida Abdullah)
*Corresponding author
https://doi.org/10.33736/jcshd.1752.2020
e-ISSN: 2550-1623

Manuscript received: 3 September 2020; Accepted: 24 October 2019; Date of publication: 31 March 2020.

However, most organizations lack the initiative to examine their employees' needs especially on personal issues include health, family and financial. Employee may suffer because of psychological, marital and family, substance use, medical, financial and legal problems (Dubreuil & Krause, 1983). In a survey by EAPA (1996), the most prevalence problems faced by employees identified were family issues, stress, depression, substance use, workplace and job conflict. Problems in one area may lead to problems in other areas. Emotional and absenteeism are associated with increases in absenteeism, sick leave, injuries on the job (Carr & Hellan, 1980; Johnson & O'neil, 1989; Roman, Blum & Bennett, 1987). The importance of taking this matter into consideration is reflected through the formation of Employee Assistance Program (EAP) in various organization today. EAP is a job-based programs operating within a work organization for the purposes of identifying trouble employee, motivating them to resolve their troubles, and providing access to counselling or treatment for those employees who need these services (Hartwell et al., 1996). Through prevention, identification, and resolution of employees' issues, EAP enhance employee and workplace effectiveness and is a vital tool for maintaining and improving employees' health and productivity, retaining valued individuals, and returning employees to work after illnesses or injuries (Office of Disability Employment Policy, 2009).

Various research acknowledge that personal problem and work problem can influence the job performance, job satisfaction and motivation, but there are rarely covered all of these multidimensional aspects and there is no conclusive research on instrument to measure these "employees' needs". Problems faced by an employee needed to be viewed holistically, as in personally-related, and work-related issues. This is the fundamental aspect of ecological counselling approach originally proposed by Bronfenbrenner which suggested a framework that seeks to understand the interconnections between humans and their multiple contexts, with a goal of creating and sustaining balanced, synergistic relationships between people and the environment (Coyne, et. al, 2004). Ecological approaches have been used in a variety of human service and social science fields, including conflict resolution and mediation, school psychology, social work, public health, and professional counselling (Rodgers, 2009).

The study aims to develop multidimensional scale to measure various aspects of employee problems in Malaysia context. Factor analysis was employed to determine construct validity based on data derived from sample. This multidimensional scale needs to be first evaluated before it can be administered. This could be done through pilot study. It is very important to check the validity, reliability and practicality of an instrument.

RESEARCH METHOD

Participants

The respondents of this study were 1113 employees of managerial level and support staff in one of the public universities in Malaysia. The questionnaire was made available via the online system and they were requested to answer all items by rating the

corresponding problems on "1 = Not Relevant to 5 = Very Critical". 48.9% of the 1113 employees were male, and 51.1% were females. Majority of the employees were Islam (82.5%) while the rest were Christian, Buddha and Other with 16.8%, 0.6% and 0.1% respectively. Their age ranging from 24 to 52 years. Completion of the questionnaire indicate the participants consent for taking part in study.

Research instrument

77 questions were generated from multiple resources on employees' problems. We generated items for an initial list of questions by reviewing the literature on employee and organization. The literature was collected from journal articles, book chapters and dissertation by scholars and researchers. Besides, we used this initial list to generate additional value dimensions and statement through survey of psychologist and focus-group discussions. We refer to doctors, academicians, financial advisors.

In this study, the ecological theory could provide a theoretical framework for the interaction between personal problem and work-related problem. As discussed by Cook (2012) there are three ecological perspectives, namely behaviour is contextual, interactional and meaningful. Context described as an interrelated condition in which something exist and occur. The interactional perspective applies to families, groups and larger organizations too. Behaviour is influenced by a range of human and nonhuman (physical) contexts. Whenever people engage with each other, each person becomes part of the immediate environment influencing the other. People responds to events as he or she perceives and understand them. Thus, the present study applied the ecological perspectives that conceived by Cook (2012).

The research instrument named ENAI is divided into two (2) scale which are Personal-related Problems (PRP), and Work-related Problems (WRP). These two scale are further divided into four (4) subscale each in which PRP is divided into health (23 items), family (10 items), financial (6 items), and spiritual (4 items) whereas WRP is divided into work (9 items), career (6 items), Interpersonal relationships (9 items) and work environment (10 items).

Health problem can be defined as having physical and/ or mental problem that can influence someone life. In this research instrument, health subscale includes items on pain and discomfort (e.g. migraine, headache, back pain), energy and fatigue, weight problem, sleep and rest and dependence on medication. Family issues are referring to problems that employee encountered with their family members which include familial support, communication and leisure time, and also illnesses among family members. The family subscale measures low satisfaction with familial support, communication and leisure time, and also illnesses among family members. The financial subscale contains questions on financial difficulties, and strains faced by the employee. Spiritual subscale is related to religious belief and divine relationship.

Work subscale addresses issues such as workload and their responsibilities in performing the task. Career subscale

involves the employee's career satisfaction and planning. Interpersonal relationship subscale explains the interaction between the employer and employee, and also between their colleagues in workplace. Work environment subscale t is related to the safety of the workplace, workspace layout and the level of comfort, noise, ventilation and lighting.

The instrument consisted of 77 items with response scales for each item ranging from one (1) as "Not Related" to five (5) "Very Critical". A five-point scale have been selected for this instrument with the presence of a mid-point that signifies the exclusion of strong preference in any direction, so that participants are less likely to choose random answers that could result in insignificant data (Fink, 1995; Dawes, 2008).

Data Collection and analysis

The questionnaire was provided via an online system, and participated employees were invited to answer the online questionnaire. Questionnaire via online can access large samples with ease. Large sample of respondents may participate in online survey, the virtual effortlessness with which researchers can give the link to participants (Evans and Mathur, 2005). Similarly, Couper (2000) and Weible and Wallace (1998) concur that online surveys provide a means to conduct research, even in populations considered either impractical or financially unfeasible to access. The implication for the study was that the large sample of 1 113 employees, in one of public university, could be accessed.

Analysis of data was implemented using IBM Statistical Package for the Social Sciences (SPSS version 21.0) where the first step involved analysing the reliability of each subscale, and then, analysing the overall reliability of the instrument. According to Sekaran (2000), if Cronbach's alpha value is less than 0.6, the subscale considered to have a poor reliability, if the value is in between 0.6 and 0.7, the subscale has acceptable reliability, and value above 0.8 indicates the subscale has good reliability. Therefore, the closer the Cronbach's alpha value to 1.0, the better the reliability of the subscale.

The construct validity of the domain structure was also assessed by calculating Pearson's Correlation Coefficients for the relationship between each of the facet (question) scores and each of the two domain scores which is personal and work-related problems. Lastly, exploratory factor analysis (EFA) was carried out. EFA is a technique used to explore the interrelationships among a set of variables. An independent EFA using the principal components analysis (PCA) with a rotation called Direct Oblimin was conducted on the questionnaire. Eigenvalue or variance extracted by the factor greater than 1 is used to determine

RESULT AND ANALYSIS

Dimensional Structure for personal-related problems (PRP)

The Kaiser-Meyer-Olkin (KMO) resulted in a measure of sampling adequacy of 0.948, and the Bartlett's test of sphericity ($X2(1953, N=1113) =333000.365$, $P<0.0001$) indicated the appropriateness to proceed with exploratory factor analysis. The principal

Table 1: Ten-factor pattern matrix showing the factor loadings of each of the variables

Item	Component									
	1	2	3	4	5	6	7	8	9	10
H21	.80									
H20	.79									
H10	.77									
H14	.68									
H22	.52									
H19	.42									
H23	.36									
H11	.33									
H16	.52									
FI4		.83								
FI5		.74								
FI1		.68								
FI6		.61								
FI3		.59								
FM5			.83							
FM4			.79							
FM3			.76							
FM2			.75							
FM1			.71							
FM8			.62							
H5				.799						
FI2				.74						
H4				.60						
SP4					.86					
SP2					.83					
SP1					.77					
SP3					.67					
H7						.73				
H6						.69				
FM9							.83			
FM7							.73			
FM10							.71			
FM6							.76			
H8								.83		
H9								.82		
H18									.77	
H13									.60	
H17									.58	
H12									.32	
H1										.74
H3										.45
H15										.44
H2										.32

component analysis with direct oblimin resulted in Table 1. Ten factors are formed (Table 1), however, as the factor analysis only indicates construct validity and not much on content validity, the four subscales initially hypothesized were further used. So, the four subscales are maintained for personal-related problem. The default setting is then changed as shown in Table 2, with the number of factors are specified to four. Only factor loadings more than 0.3 are counted towards any factors but still, meaningful interpretations have to be carefully done when double loadings occur.

Table 2: Four-factor pattern matrix showing the factor loadings of each of the variables

Item	Components			
	1	2	3	4
H1	.74			
H2	.32			
H3	.45			
H4	.60			
H5	.79			
H6	.69			
H7	.73			
H8	.83			
H9	.82			
H10	.77			
H11	.33			
H12	.32			
H13	.60			
H14	.68			
H15	.44			
H16	.52			
H17	.58			
H18	.77			
H19	.42			
H20	.79			
H21	.80			
H22	.52			
H23	.36			
FI1		.68		
FI2		.74		
FI3		.59		
FI4		.83		
FI5		.74		
FI6		.61		
FM1			.71	
FM2			.75	
FM3			.76	
FM4			.79	
FM5			.83	
FM6			.76	
FM7			.73	
FM8			.62	
FM9			.82	
FM10			.71	
SP1				.77
SP2				.83
SP3				.67
SP4				.86

Reliability for PRP

Personal-related problem (PRP) consists of four subscales namely health, financial, family and spiritual. Health subscale has 23 items, financial subscale has six items, family subscale has ten items and spiritual subscale has four items. Cronbach's Alpha values for the subscale are shown in Table 3. Cronbach's alpha for the first subscale (health) was α=0.89, for the second subscale (financial) was α=0.89, for the third subscale (family) was α=0.86 and the fourth subscale

Table 3: Values of Cronbach's Alpha if item deleted and Overall Cronbach's Alpha for the Personal-related Problem (PRP)

Personal-related Employee's Problem subscale	Item	Cronbach's Alpha if item deleted	Overall Cronbach's Alpha
1. Health	H1	.889	0.89
	H2	.885	
	H3	.886	
	H4	.900	
	H5	.895	
	H6	.889	
	H7	.890	
	H8	.895	
	H9	.894	
	H10	.888	
	H11	.890	
	H12	.885	
	H13	.884	
	H14	.887	
	H15	.885	
	H16	.886	
	H17	.884	
	H18	.890	
	H19	.884	
	H20	.887	
	H21	.884	
	H22	.886	
	H23	.889	
2. Financial	FI1	.74	.79
	FI2	.82	
	FI3	.78	
	FI4	.70	
	FI5	.72	
	FI6	.75	
3. Family	FM1	.84	.86
	FM2	.84	
	FM3	.83	
	FM4	.84	
	FM5	.84	
	FM6	.87	
	FM7	.84	
	FM8	.86	
	FM9	.84	
	FM10	.85	
4. Spiritual	SP1	.82	.83
	SP2	.78	
	SP3	.80	
	SP4	.74	

was α=0.83. Alpha scores greater than 0.6 were considered as acceptable and adequate internal consistency. The study findings indicated satisfactory alpha coefficients for each of the four subscales.

Construct validity for PRP

Pearson coefficient (r) was performed for between items construct and the result

Table 4: Pearson's correlations coefficient of PRP subscale

Subscale	Health	Financial	Family	Spiritual
Health	1			
Financial	0.503**	1		
Family	0.553**	0.539**	1	
Spiritual	0.421**	0.543**	0.510**	1

Note:1) **Correlation is significant at the 0.01 level (2-tailed)

showed in Table 4. High item-construct correlations particularly between health and family subscale (0.55) which may have implied that the good relationship among family members and good home environment indicated better health issues. Moderate correlations were identified between health and spiritual (0.42). Most studies have shown the religious involvement and spirituality are associated with better health outcomes even during terminal illness and less anxiety, depression and suicide. When the employees are in better health, they can give more attention for their family and can manage their financial wisely.

Overall, the r values confirmed the construct validity of the instrument.

Dimensional Structure

The Kaiser-Meyer-Olkin (KMO) resulted 0.945 for the measure of sampling adequacy of, and the Bartlett's test of sphericity ($\chi 2(630, N=1113) = 22949.694, P<0.0001$) indicated the appropriateness to proceed with exploratory factor analysis. A principal component analysis was conducted to explore the structure of the work-related factor without any prior suggestion on how many factors present or whether they are correlated. One item (W9) did not load substantially of any factor and was dropped from the analysis. Of the original 34 items for second scale, 33 were retained in the four subscales (Table 5).

Table 5 shows the four-factor pattern matrix factor analysis of items. Considering the factor loading more 0.3, all 36 items are maintained. So, all the items contribute to identify work problems faced by employees.

Reliability and Validity for work-related problems (WRP)

Work-related problem (WRP) consists of four subscales which are work issues, career, interpersonal relationship and work environment. Work issues subscale has eight items, career subscale has six items, interpersonal relationship subscale has nine items and work environment subscale has ten items. Table 8 shows the Cronbach's Alpha value. Cronbach's alpha for the first subscale (work issues) is $\alpha=0.88$, for the second subscale (career) is $\alpha=0.85$, for the third subscale (interpersonal relationship) is $\alpha=0.90$ and the fourth subscale (work environment) is $\alpha=0.89$. Alpha scores greater than 0.6 were considered as acceptable and adequate internal consistency. The study findings indicated satisfactory alpha coefficients for each of the four subscales.

Construct validity for WRP

Table 5: Four-factor pattern matrix showing the factor loadings of each of the variables

Items	Components			
	1	2	3	4
C3	.804			
C6	.733			
C5	.658			
C4	.605			
W4				.568
C1	.548			
IP8			.523	
W2				.414
W10		.357		
WE8		.823		
WE5		.754		
WE7		.753		
WE6		.737		
WE9		.736		
WE2		.718		
WE3		.717		
WE10		.602		
WE4		.496		
WE1		.434		
IP3			.790	
IP7			.789	
IP1			.752	
IP4			.664	
IP9			.662	
IP6			.634	
IP5			.555	
IP2			.383	
W8				.728
W9				
W3				.660
W7				.589
W1				.465
C2	.435			
W6				.429
W5				.371

Pearson coefficient (r) was performed between items construct in the total sample of participants (1113). The result demonstrated high item construct correlations particularly between work and career (0.69). Having positive and negative experiences working in specific careers may influence the career development we consider as options for ourselves. One aspect of Social Cognitive Career Theory addresses the fact that we are likely to consider continuing a particular task if we have had a positive experience doing it. In this way, we focus on areas in which we have had proven success and achieved positive self-esteem.

Moderate correlations were identified between career and work environment.

Table 6: Values of Cronbach's Alpha if item deleted and Overall Cronbach's Alpha for the Work-related Problem (WRP)

Work-related Employee's Problem subscale	Item	Cronbach's Alpha if item deleted	Overall Cronbach's Alpha
1. Work	W1	.86	.88
	W2	.86	
	W3	.86	
	W4	.86	
	W5	.86	
	W6	.86	
	W7	.87	
	W8	.87	
2. Career	C1	.82	.85
	C2	.85	
	C3	.84	
	C4	.82	
	C5	.80	
	C6	.80	
3. Interpersonal Relationship	IR1	.89	.90
	IR2	.89	
	IR3	.88	
	IR4	.88	
	IR5	.89	
	IR6	.89	
	IR7	.88	
	IR8	.90	
	IR9	.88	
4. Work environment	WE1	.90	.89
	WE2	.88	
	WE3	.88	
	WE4	.88	
	WE5	.87	
	WE6	.88	
	WE7	.88	
	WE8	.88	
	WE9	.88	
	WE10	.89	

Situational constrains constituted of factors such as noise, office furniture, ventilation and light, are the major work environment conditions that have negative impact on performance and may influence employee to consider for their new career. It is suggested that employers should take initiatives to improve the work environment to further motivate the employees. As employees are feel comfortable with the work environment, they will feel more motivated and their performance will increase and can reduce employees' problems.

Overall, the values confirm the construct validity of the instrument (Table 6). Low correlation range is from 0.1-0.3, moderate correlation from 0.3-0.5 and high is >0.5.

Table 7: Pearson's correlations coefficient of WRP subscale

Subscale	Work	Career	Interpersonal relationship	Work environment
Work	1			
Career	0.691**	1		
Interpersonal relationship	0.685**	0.612**	1	
Work environment	0.606**	0.495**	0.602**	1

Note:1) **Correlation is significant at the 0.01 level (2-tailed)

Table 8: All items on Personal-related problems and Work-related problems scale

Subscale	Items before the reliability and validity process	Items after the reliability and validity process
Personal-related problems (PRP)		
Health	H1, H2, H3, H4, H5, H6, H7, H8, H9. H10, H11, H12, H13, H14, H15, H16, H17, H18, H19, H20, H21, H22, H23	H1, H2, H3, H4, H5, H6, H7, H8, H9. H10, H11, H12, H13, H14, H15, H16, H17, H18, H19, H20, H21, H22, H23
Financial	FI1, FI2, FI3, FI4, FI5, FI6	FI1, FI2, FI3, FI4, FI5, FI6
Family	FM1, FM2, FM3, FM4, FM5, FM6, FM7, FM8, FM9, FM10	FM1, FM2, FM3, FM4, FM5, FM6, FM7, FM8, FM9, FM10
Spiritual	SP1, SP2, SP3, SP4	SP1, SP2, SP3, SP4
Work-related problems (WRP)		
Work	W1, W2, W3, W4, W5, W6, W7, W8, W9	W1, W2, W3, W4, W5, W6, W7, W8, deleted item
Career	C1, C2, C3, C4, C5, C6	C1, C2, C3, C4, C5, C6
Interpersonal relationships	IR1, IR2, IR3, IR4, IR5, IR6, IR7, IR8, IR9	IR1, IR2, IR3, IR4, IR5, IR6, IR7, IR8, IR9
Work environment	WE1, WE2, WE3, WE4, WE5, WE6, WE7, WE8, WE9, WE10	WE1, WE2, WE3, WE4, WE5, WE6, WE7, WE8, WE9, WE10
TOTAL ITEMS	77 items	76 items

Finally, Table 8 shows all the items on personal-related problems (PRP) and work-related problems (WRP) before and after undergo reliability and validity process. Out of 77 items, 76 items are retained.

DISCUSSION

Currently, the availability of research instrument to screen the personal and work-related problems faced by employees especially in Asian countries is still lacking. Therefore, this study developed and

evaluated the reliability and validity of this research instrument. According to Miller (2012) the of reliability and validity of a questionnaire is important so that researchers will be confident with the data they gained using the instrument.

Using the data from all 1 113 employees, the analysis examined the factor structure of ENAI through the use of an exploratory factor analysis. The exploratory factor analysis, using principal component analysis method with oblimin rotation and the criterion of eigenvalue greater than 1.00, produced a four subscale for first scale (personal-related problems) (X2(1953, N=1113) =333000.365, P<0.0001) and four subscales for second scale (work-related problems) (χ2(630, N= 1 113) =22949.694, P<0.0001).

Because the purpose of the exploratory factor analysis was to establish meaningful factors underlying the ENAI, we used the following two criteria to identify the preliminary factor structure: (a) retain items with a factor loading of .30 or above, and (b) retain factors that have a minimum of 3 items loaded on it. The results indicated 76 items with a factor loading equal to or greater than .30, corresponding to eight factors, each with four or more items.

Then, we computed coefficient alphas to determine the internal consistencies of the entire 76 items and for each of the eight subscale. The result indicated a coefficient alpha of 0.96 for the 76 items ENAI. The coefficient alphas for the eight subscale were as follows: .89 for health, 0.79 for financial, 0.86 for family, 0.83 for spiritual, 0.88 for work, 0.85 for career, 0.90 for interpersonal relationship and 0.89 for work environment.

CONCLUSION

The results of exploratory factor analysis examining the factor structure underlying the ENAI indicated an eight-scale encompassing 76 of the 77 items of the full-scale instrument. The eight scales were labelled health, financial, family, spiritual, work, career, interpersonal relationship and work environment. This finding has important implications for both counselling practitioners and researchers. Counselling practitioners should be aware towards employee issues for a great advancement in exploration of employees' issues, and in turn, the formation of effective prevention programs at workplace. This study implies that ENAI is a usable instrument to screen problems faced by employees.

It is suggested for future researchers to conduct confirmatory factor analysis to test the eight-scale developed using exploratory factor analysis and to investigate the concurrent and discriminant validity ENAI.

REFERENCES

Bronfenbrenner, U. (1979). *The Ecology of Human Development.* Cambridge, MA:Harvard University Press.

Carr, J. L., & Hellan, R. T., (1980). Improving Corporate Performance Through Employee Assistance Program. *Bussiness horizons, 23, 57*

Chi, C. G., & Gursoy, D. (2009). Employee satisfaction, customer satisfaction, and financial performance: An empirical

examination. *International Journal of Hospitality Management, 28*, 245-253.

Choi, S., & Whitford A. B. (2017). Employee satisfaction in agencies with merit-based pay: Differential effects for three measures. *International Public Management Journal, 20*(3), 422-466.

Conyne, R. & Cook, E. (Eds.). (2004). *Ecological counseling: An innovative approach to conceptualizing person-environment interaction.* Alexandria, VA: American Counselling Association.

Cook, E. P. (2012). *Understanding people in contect the Ecological Perspective in Counseling.* Alexandria, VA: American Counseling Association

Couper, M. P. 2000. Web-based surveys: A review of issues and approaches. *Public Opinion Quarterly*. 64(4): 464–494

Cronbach, L. J. (1951). Coefficient alpha and the internal structure of test. *Psychometrika, 16*, 297-334.

Dawes, J. (2008). "Do data characteristics change according to the number of scale points used?". *International Journal of Market Research, 50*(1), 61-77.

Dubreuil, E. & Krause, N. (1983). Employee assistance program: Industrial and clinical perspectives. *New directions for mental health services, 20, 85-94*

Employee Assistance Professionals Association (EAPA). (1996). *Employee Assistance Backgrounder*. Arlington, VA: EAPA

Evans, J. R. & Mathur, A. (2005). The value of online surveys. *Internet Research* 15(2): 195–219.

Fink, A. (1995) *How to ask survey questions*. Thousand Oaks, CA: Sage Publications.

Gabčanová, I. (2011). The employees – The most important asset in the organizations. *Human Resources Management & Ergonomics, 5*, 1-12.

Gregory, K. (2011). *The Importance of Employee Satisfaction*. Retrieved October 6, 2017 from http://www.neumann.edu/about/ publications/NeumannBusinessREview/ journal/Review2011/ Gregory.pdf

Hartwell, T. D., Steele, P., French, M. T., Potter, F. J., Rodman, N. F., & Zarkin, G. A. (1996). Aiding troubled employees: The prevalence, cost, and characteristics of employee assistance programs in the United States. *American Journal of Public Health*, 86(6), 804–808.

Hinton, P. R., Brownlow, C., McMurray, I., & Cozens, B. (2005). *SPSS explained*. London & NY: Routledge Taylor & Francis Group.

Johnson, A. T., & o'Neil, N, (1989). Employee assistance program and the troubled employee in the public sector workplace. *Review of Public Personnel Administration*, 9, 66-81

Liao S., Hu D., Chung Y., & Chen L. (2017). LMX and employee satisfaction: mediating effect of psychological capital. *Leadership & Organization Development Journal, 38*(3), 433-449.

Miller, M. (2012). "res 600: Graduate research methods: Reliability and validity," Western international university. Available at: http://michaeljmillerphd.com/res500_ lecturenotes /Reliability_and_Validity.pdf

Othman, Ghazali, Annuar, Ishak, & Thomas. (2003). *Enai: An instrument to identify employees' problems in organization*. In problem management related to psychology at workplace seminar. Universiti utara malaysia.

Office for Disability Employment Policy. (2009). *Employee Assistance Programs for a New Generation of Employees.* Retrieved October 6, 2017 from https://www.dol.gov/odep/documents/employeeassistance.pdf

Rodgers, B. E. (2009). *An Ecological Approach to Understanding the Stigma Associated with Receiving Mental Health Services: The Role of Social Proximity*. (Unpublished Ph.D thesis). Virginia Polytechnic Institute and State University, Blacksburg, VA.

Roman, P.M., Blum T. C., & Bennett, M. (1987). Educating organizational consumers about employee assistance programs. *Public Personnel Management*, 16, 299-312.

Sekaran, U. (2000). Research Methods for Business: A Skill Building Approach, John Wiley and Sons.

Van der Voordt, T. J. M. (2003). Productivity and employee satisfaction in flexible workplaces. *Journal of Corporate Real Estate*, *6*(2), 133-148.

Van Dick, R. & Monzani, L. (2017). *Does it matter whether i am a happy and committed worker? The role of identification, commitment and job satisfaction for employee behaviour, in an introduction to work and organizational psychology: An international perspective* (ed N. Chmiel), John Wiley & Sons, Ltd, Oxford, UK.

Weible, R. & Wallace, J. (1998). The impact of the internet on data collection. *Marketing Research*. 10(3): 19–23.