

Retention and attrition of experienced Malay male Architects in Malaysian architectural design consultant firms in the Klang Valley, Malaysia

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Abstract

The Malaysian construction industry suffers from a high rate of attrition within its professional consultant firms. Employees' job satisfaction is related to higher productivity and their continued employment in their current firms. Employment attrition hinders the firms from enhancing their competitiveness through organizational commitment and increased productivity. The Malays currently constitute the majority of the workforce in construction related professions including architecture. However, the attrition of female professional employees from the architecture consulting field drastically increases after the ages of 34 years. This implies that it is appropriate for architecture firms to focus on ways to retain and prevent the attrition of their experienced male Malay architects to other firms and thus enhance the firms' competitiveness. Past relevant researches mostly focused on female architects and on the work environment challenges that did not directly address the attrition and retention motivations. This exploratory qualitative interview research was done into the employment retention and attrition reasons of a purposive sample of ten experienced male professional Malay Architects in Malaysian architecture consulting firms in the Klang Valley. These reasons were uncovered through analysis of interview transcripts with the sample cohorts. Qualitative data coding generated employment retention and attrition meaning units based on the need categories in Alderfer's ERG motivation theory. The generated categories were existence needs (physiological, material security, convenience) relatedness needs (group belongingness, social needs, family obligations, friendship obligations, social obligations and social esteem), growth (self-esteem and self-actualization) and intrinsic motives (choice, progress, competence and meaningfulness). All respondents remained in the firm when the employment provided convenience and self-esteem to them and from a sense of group obligations for the firm. Yet they would seek employment elsewhere when the gratuities with the current employer cannot fulfill their physiological needs. They also leave when the employment does not fulfill self-esteem needs. Thus, a theme evident within the responses is that high order (growth) needs and mid-order (relatedness) needs retain male professional Malay Architects while the failure to meet low order (existence) needs and high order (growth) needs motivate their employment attrition. Further investigations are warranted due to the limitations of the sampling methodology. The findings nonetheless provide guidance for future research that can provide generalized findings.

Keywords: Architecture consulting firms, Attrition, Employment, Malaysia, Retention

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INTRODUCTION

Malaysia is undergoing a major economic transformation through various programmes such as the Construction Industry Transformation Programme (CITP) to become a high-income nation. Architecture is one of the professions listed as skilled, sought-after, and strategic yet its' supply does not meet the industry's needs (Loo et al, 2017). An architecture firm can be more competitive if it can retain its experienced talents. A high rate of employees' turnover also decreases the opportunities for the employees' talent to be strategically nurtured in the firm. Architectural firms are primarily small and sole proprietorships. The rest are medium sized (CIDB, 2015). These firms are unable to provide clear career progression paths and ideal work environments for employees. The CITP targets Malaysian construction related companies to export their services in the more competitive global market. This requires more experienced talented employees to enhance the firms' competitiveness through increased productivity. According to Aidenat and Kassim (2019) and Celik and Oral (2019), employees with high job satisfaction are more likely to have increased productivity and continue to retain their current employers.

Malays represent the majority ethnic group among the majority indigenous people (Bumiputra) in a multiethnic Malaysia. The past and current Malaysian government strive to maintain the interethnic peace by having policies that strive to ensure balanced economic representation among the various indigenous and 'non-indigenous' ethnic groups. The policies include affirmative interventions to increase the number of Malay/Bumiputra enrolment in universities. This has led to an increase in percentage of Malay/Bumiputra public university graduates such that they constitute the majority of higher educated entrants to the Malaysian employment market (65.4 percent in 2013). This implies that Malays/Bumiputras also constitute the larger proportion of local public university architecture graduates recognized by the Board of Architects Malaysia (Mukherjee et al, 2017, Board of Architects Malaysia, 2019). Malaysian women tend to exit the workforce in their late 20s to early 30s, usually due to family commitments. Women participation in the workforce peaked at around 74% among women aged 25-34 years, and continue to decline to around 33% participation among women aged 55-64 years. Once Malaysian women leave the industry, they do not typically return. No such attrition issues are reported for Malaysian males (Talent Corp, 2017). Thus, interventions of Malaysian consultant firms would be more effective if they tackled the attrition and retention issues of experienced Malay males. These issues motivated a dissertation research (Amar, 2018) that forms the basis of the paper about the employment retention and attrition reasons of experienced Malay male Architects in Malaysian architecture consulting firms.

PAST RESEARCH

The following section examines the past researches relevant to this paper's findings about the employment retention and attrition of professional Malay Architects in Malaysian architecture consulting firms in the Klang Valley, Malaysia. There are numerous past studies on employment retention and attrition reasons. Significant socio-cultural-economic changes in fast developing countries have happened due to increased prosperity, new technologies and work practices (Szirmai, 2015, Rigg, 2015). The need to maintain the changed socio-cultural and work practice contexts is the justification for past researches in the period between years 2013-2019 being reported here. The few researches relating to architects justify reviewing researches without the abovementioned chronological restrictions.

Retention Reasons

There are nine researches in the period between years 2013-2019 related to the employee retention factors whose findings can be categorised into job satisfaction and organisational commitments (See Table 1). The employees' feelings towards performing the job are measured as satisfaction whether in positive or negative perspectives which can give impacts to the employees' productivity and performance (Uzair et al, 2017). The job satisfaction lead to organisational commitment among the employees' loyalty towards job (Uzair et al, 2017; Aidenat and Kassim, 2019; Celik and Oral, 2019). The dimensions of job satisfaction in the private banking sector of India are ranked as career prospects, control, mentoring and guidance, employee engagement programs and co-operation (Nijhawan dan Nijhawan, 2014). Compensation, appraisal, training and career development are the most important factors that influenced job satisfaction to improve employees' loyalty towards their jobs

Table 1. Past Researches on Causes of Employment Attrition

Causes of Employment Retention	Past Researches
Job Satisfaction	<ul style="list-style-type: none"> Adeokun, 2015; Nijhawan dan Nijhawan, 2014; Xu et al, 2013; Uzair et al, 2017; Guillon and Cezanne, 2014; Linz et al, 2015, Aidenat and Kassim, 2019; Celik and Oral, 2019
Organizational Commitment	<ul style="list-style-type: none"> Uzair et al, 2017; Guillon and Cezanne, 2014; Linz et al, 2015; Panahi and Moezzi, 2016, Aidenat and Kassim, 2019; Celik and Oral, 2019

and organisations in Pakistan banking sector (Uzair et al, 2017). The organizational commitment is weakly correlated with 12 job satisfaction variables ($p < 0.01$) which are stockholder, supervisor, re-education, autonomy, promotion, co-workers, communication, authority, recognition, work conditions, financial reward and company policy among project managers in China construction industry (Xu et al, 2013). Long working hours, heavy workloads, lack of interest in construction industry, low financial

rewards and limited job prospects negatively influenced the Nigerian student retention in architectural university programmes (Adeokun, 2015).

The organisational commitment is not affected by job satisfaction but it is more about employees' feelings towards the organisation and the capability of organisation to satisfy the employees (Uzair et al, 2017), These feelings lead to positive behaviours among the employees (Al-Hawry and Alaimi, 2017). However, the organisational commitment has greater impacts on job loyalty and could be achieved through three dimensions of affective, continuance and normative commitments. Thus, employee loyalty could be defined as synonymous with organisational commitment. Identification, attachment, feelings of belonging, length of service, commitment, participation, psychological contract, trust and appraisal are the elements of job satisfaction and organizational commitment related to organisational performance (Guillon and Cezanne, 2014). Bonus, job security, promotion, supervisor praise, respect and friendly co-workers are positively associated with loyalty towards job among employees in six former socialist republics (Linz et al, 2015).

Attrition Reasons

There are thirteen past researches in the period between years 2013-2017 that are related to the employee attrition factors which the findings can be categorised into job dissatisfaction, organisational disloyalty and imbalanced work life (See Table 1). Locke (1976) seminal definition of job satisfaction is "...a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences". Thus, job dissatisfaction can be defined as a displeasing or negative emotional state resulting from the appraisal of one's job or job experiences. The elements related to the job dissatisfaction are limited career advancement (Zulbahari and Alias, 2013; Kannan and Vivekanandan, 2013; Shankar and Muneera, 2013), heavy workload (Singh et al, 2017; Latif and Saraih, 2016; Zulbairi and Alias, 2014; Kannan and Vivekanandan, 2013), stress (Zulbahari and Alias, 2013; Bhardwaj and Singh, 2017), alternative job offers Queiri et al, 2015; Zulbahari and Alias, 2013), lack of interest in the career (Abdullah et al, 2013), lack encouragement (Kannan and Vivekanandan, 2013; Jehanzeb et al, 2013), and wrong job placement (Singh et al, 2017). The poor working conditions of the construction industry is cited as an employment attrition reason (Queiri et al, 2015). Gender inequality (Kannan and Vivekanandan, 2013), lack of women role models in the industry, sexual harassment issue and intimidation by male workers has been reported to be major factors for attrition among women employees (Abdullah et al, 2013).

Organisational disloyalty may be defined as the negative behaviours of employees which are caused by unsatisfied feelings towards the organisation through various reasons and are

Table 2. Past Researches on Causes of Employment Attrition

Causes of Employment Attrition	Past Researches
Job Dissatisfaction	<ul style="list-style-type: none"> Satiani and Prakash, 2017; Singh et al, 2017; Lu et al, 2017;; Agarwal, 2015; Queiri et a, 2015; Zulbahari and Alias, 2013; Kannan and Vivekanandan, 2013; Shankar and Muneera, 2013; Abdullah et al, 2013; Sinniah and Kamil, 2017; Bhardwaj and Singh, 2017
Organizational Disloyalty [5-16]	<ul style="list-style-type: none"> Singh et al, 2017; Lu et al, 2017; Latiff and Saraih, 2016; Agarwal, 2015; Queiri et a, 2015; Zulbahari and Alias, 2013; Kannan and Vivekanandan, 2013; Shankar and Muneera, 2013; Abdullah et al, 2013; Sinniah and Kamil, 2017; Bhardwaj and Singh, 2017; Jehanzeb et al, 2013.
Imbalanced Work Life [5-13]	<ul style="list-style-type: none"> Singh et al, 2017; Lu et al, 2017; Latiff and Saraih, 2016; Agarwal, 2015; Queiri et al, 2015; Zulbahari and Alias, 2013; Kannan and Vivekanandan, 2013; Shankar and Muneera, 2013; Abdullah et al, 2013.

multidimensional (Allen and Meyer, 1991). The major antecedents of job disloyalty are conditions of work environment (Singh et al, 2017; Zulbahari and Alias, 2013; Kannan and Vivekanandan, 2013)], atmosphere (Singh et al, 2017), organisational politics (Latiff and Saraih, 2016), inconvenient location of the workplace (Lu et al, 2017; Zulbahari and Alias, 2013), unsatisfactory salary (Queiri et a, 2015; Kannan and Vivekanandan, 2013; Abdullah et al, 2013; Bhardwaj and Singh, 2017), low financial rewards and compensations (Satiani and Prakash, 2017; Shankar and Muneera, 2013) and

inadequate support and cooperation from superiors (Singh et al, 2017; Zulbahari and Alias, 2013; Kannan and Vivekanandan, 2013; Jehanzeb et al, 2013; Allen and Meyer, 1991). Other factors are appraisal systems (Kannan and Vivekanandan, 2013; Sinniah and Kamil, 2017), training (Abdullah et al, 2013; Sinniah and Kamil, 2017; Jehanzeb et al, 2013), benefits (Queiri et a, 2015; Zulbahari and Alias, 2013), and improper human resources policies (Singh et al, 2017) in the organisations.

Contemporary employees prioritize work-life balance which is related to effectively managing multiple responsibilities at work, at home, and in the other aspects of life, Thus, the work-life imbalance becomes a factor of employment attrition especially for women employees (Abdullah et al, 2013; Santhanalakshmi et al (2014). Imbalanced work life might be related to the job dissatisfaction and organisational disloyalty (Singh et al, 2017; Lu et al, 2017; Queiri et al, 2015, Shankar and Muneera, 2013). Long working hours (Singh et al, 2017; Latif and Saraih, 2016, Zulbahari and Alias, 2013; Kannan and Vivekanandan, 2013; Abdullah et al, 2013), work and family conflicts (Singh et al, 2017; Lu et al, 2017; Abdullah et al, 2013) or health related issues (Singh et al, 2017) are issues that affect work-life balance.

PAST RESEARCHES ABOUT ARCHITECTS' RETENTION AND ATTRITION

There are few researches on architects' employment and they focused mostly on women architects' work environment and challenges in architecture careers. The contemporary zeitgeist about gender equality and inclusiveness in the workplace may have driven the focus of researches on women architects' employment over the past three decades. The past researches used interviews (Caven, 2004; Fowler and Wilson, 2004; De Graft-Johnson, 2005; Caven and Raiden, 2010.), mixed methods (Dainty and Lingard, 2006,) survey questionnaires (Sang et al, 2009, 2007; Ayarkwa et al, 2012; Abdullah et al, 2013; Panahi and Moezzi, 2016) and panel data (Leuze and Rusconi, 2009). Caven (2004) interviews of women architects and Fowler and Wilson (2004) interviews of male and female produced findings regarding the female architects' work environment challenges. Dainty and Lingard (2006) combined the findings of an English qualitative research and an Australian mixed-method research on women career perspectives related to working practices and work-life balance respectively in the construction industry. Their samples were women construction professionals including architects. Sang et al (2007) surveyed women architects regarding their wellbeing in the work environment. Sang et al (2009) also surveyed architects on their wellbeing, work-life balance and turnover intentions relevant to their occupational environment. Research on male architects in England by Caven (2009) also focused on the work challenges. Caven and Raiden (2010) interviewed the work-balance issues of Chartered Architects in the East Midlands region of England. Leuze and Rusconi (2009) analysis of the panel data from a German national survey showed gender inequalities and family commitment challenges facing the professionals inclusive of architects. Navarro-Astor and Caven (2014) and Navarro-Astor (2011) interviewed only three architects out of 40 construction professionals in their study that focused on the work challenges as Spanish construction professionals. The findings of the past researches showed women work environment issues relating to gender inequality, career autonomy, long hours, changing work locations and job insecurities. Past researches with foci that included retention and attrition factors uses samples of male and female architects (Sang et al, 2009) and interior design firms' employees (Lin and Cheng, 2013). Ayarkwa et al (2012) surveyed a sample of Ghanaian construction working professionals that included architects and the responses to the questionnaires showed that the female respondents cited as gender-related issues and work load as significant barriers to employment retention. Caven's (2009) interviews of English males indicated that their concerns of work-life balance, work and career are similar but the focus of her study was not on their employment retention or attrition. It showed that showed the use of self-employment as a coping mechanism to the poor working environment and thus implying an attrition reason. Celik and Oral (2019) sampled engineers and architects in a questionnaire survey and found that job satisfaction mediates the relationship between personality traits and organizational commitment (that is synonymous with job retention).

There is only one relevant research on employment retention (Panahi and Moezzi, 2016) in the period between years 2013-2017 conducted on the Malaysian construction field. However, it did not study job loyalty but rather investigated the effect of conflicts between personal and organizational values on organisational commitment through a questionnaire survey of 428 professional project consultants (that included professional architects) in the Malaysian construction sector. It showed that a high level of value conflicts between personal and organizational values in the construction organizations negatively affected the employees' commitment ($p < 0.05$).

There is only one relevant attrition research (Abdullah et al, 2013) conducted in the Malaysian construction field. The sample consisted of either women who were studying to qualify for or worked

in various construction industry-related professions including architecture. The research found that the job dissatisfaction (few promotion opportunities, excessive travel, and lack of training, lack of interest in career field, dirty job conditions, sexual harassment and intimidation by male co-workers), organisational disloyalty (lack of female role model, lack of job security and lack of superior support) and imbalanced work life (long working hours and work that conflicted with family commitments) influenced job attrition factors of the women respondents.

Most past researches on architects' employment focused on working environment conditions that may not necessarily equate with employment retention or attrition. There are few researches on architects' employment retention and attrition reasons. None focused on male architects. Thus, there is a gap of knowledge regarding the male architects' employment retention and attrition reasons. There are socio-cultural changes due to the new industrial and socio-cultural developments (Ekaterina et al, 2019, Rigg, 2015, Szimai, (2015) that can affect the life demands of male Malays with a patriarchal and collective culture (Yeung et al, 2018; Hofstede, 2018). This justifies a research on the employment attrition and retention reasons of Malay male architects in Malaysian architecture consulting firms.

METHODOLOGY

An exploratory qualitative interview research is chosen to obtain rich and in-depth information about the respondents' retention and attrition factors (Creswell and Poth, 2017). This methodology was chosen because of the insufficient past research generalised findings on architects to guide a questionnaire construction so that the retention and attrition reason are comprehensively included. The field study was conducted in the Klang Valley which is the most economically developed region of Malaysia and thus representative of the construction-related economic activities in Malaysia. The purposive sample of ten respondents in the Klang Valley consisted of experienced male Malay Professional Architects employed in Malaysian architecture consulting firms. The respondents have eight years minimum working experience in construction industry. The criterion that qualifies a person to be interviewed is having eight years minimum working experience as an architect in the construction industry. The next criterion is the person having switched employers (architecture consultant firm to either another architecture consultant firm or a construction related organization) during his architecture career. Six respondents are middle management employees while the remainder are employed at the supervisory level. Seven respondents are involved in design and project management while others worked in either one. All are married except for respondents 4, 5, 6, 8 and 10.

The second author conducted face to face interviews with the respondents. The respondents were asked to explain their reasons in staying and leaving their employers that are Malaysian architecture consulting firms. The interviews were audio recorded and transcribed for analysis. Qualitative category coding is a qualitative content analysis technique whereby categories and meaning units are generated from the transcript analyses based upon either a chosen or/and emergent nomenclature framework. The needs classification of Alderfer's ERG motivational theory and intrinsic motivation serves as the analytical guide for the qualitative category coding. The first author reviewed the analysis to improve the robustness of the analysis.

FINDINGS

The following sections provide the results of the Qualitative Category coding of the interview transcripts. The categories of employment retention and attrition of the respondents are described.

Retention Reasons

The analysis results indicated that the retention categories are existence needs, relatedness needs, growth needs, and intrinsic motives highly affect the respondents' retention factors in the architecture firms. Table 1 provides the distribution of the employment retention categories and respective meaning units among the respondents.

Existence needs are the goals to obtain physiological needs (basic needs), material security (protection from threats) and convenience (comfort) (Table 2). All respondents mentioned about convenience as their retention factors and some cited physiological needs and material security.

For me, the reasons are the working culture and specialization of which part you want to practice...I forgot to quote (mention), the proximity of the office location is important. If we do not live around the neighborhood of the office, we will bring the stress of traffic jam

come into office...I will not have flexibility of time that I have today. The time is precious. For me, it's precious to see my children growing up which will be once in lifetime.

Respondent no. 2

Table 1: Distribution of employment retention categories and meaning units among the respondents

Category of Employment Retention	Meaning Unit	Respondents										No. of persons citing	
		1	2	3	4	5	6	7	8	9	10		
Existence Needs	• Physiological Need		X	X			X	X	X	X			6
	• Material Security		X	X			X	X			X		5
	• Convenience	X	X	X	X	X	X	X	X	X	X	X	10
Relatedness Needs	• Group Belongingness	X	X	X	X	X	X	X	X		X		9
	• Social Needs	X	X	X	X	X	X	X	X		X		9
	• Family Obligations	X	X	X			X	X	X	X			7
	• Friendship Obligations	X			X		X	X	X		X		6
	• Employment Group Obligations	X	X	X	X	X	X	X	X	X	X	X	10
	• Social Obligations	X											1
	• Social Esteem	X											6
Growth Needs	• Self Esteem	X	X	X	X	X	X	X	X	X	X	X	10
	• Self Actualization	X	X		X	X	X	X	X	X	X	X	9
Intrinsic Needs	• Choice	X	X	X		X	X	X			X		7
	• Progress		X		X	X			X	X	X		6
	• Competence	X		X			X		X		X		5
	• Meaningfulness	X	X	X	X	X	X	X	X				8

Table 2. Definition of Existence Needs Category and Meaning Units.

CATEGORY	MEANING UNIT
<p>EXISTENCE NEEDS Goals to obtain all various forms of physiological needs and material requirement. Satisfaction with existence needs give feeling of physically safe and convenience</p>	<ul style="list-style-type: none"> • PHYSIOLOGICAL NEED: The basic needs of physiology that are met from organizational outcomes such as adequate salary, breaks, and annual leaves. • MATERIAL SECURITY: The needs for protection from possession losses. These possessions include things such as security of employment and resources, bonuses, benefits, company policy. • CONVENIENCE: The needs for individual ease and comfort such as work environment, location, working culture, work preferences.

Relatedness needs are meaningful social relationships in action to satisfy group belongingness, social needs, family obligation, friendship obligation, employment group obligation, social obligation, and social esteem (Table 3). The respondents mentioned combinations of these meaning units while social obligation is only cited by the first interviewee. Employment group obligation to fulfilling responsibilities of fellow employees, subordinates and employer are cited by all respondents.

So, we respect each other opinions whether it came from technical persons. We must respect their contribution and listen to them from technical persons to management. For

example, technicians contribute the drawings, sometimes we the management did not know the problems they are facing. So, they brought it up in the meetings which help us in management not to repeat it and try to do it in another way. Respondent no. 4

Table 3. Definition of Relatedness Needs Category and Meaning Units.

CATEGORY	MEANING UNIT
<p>RELATEDNESS NEEDS: Needs for meaningful social relationships. Satisfaction of relatedness is achieved with the sense of belongingness by mutually sharing of thoughts and feelings. It increases an individual's social esteem while fulfilling the obligations.</p>	<ul style="list-style-type: none"> • GROUP BELONGINGNESS:: The needs for interpersonal relationships which lead to sense of group belongingness, friendship, acceptance, and support within the organization. • SOCIAL NEEDS: The needs for opportunity to interact and communicate with others such as interpersonal relationship, affiliation and supervision. • FAMILY OBLIGATION: The needs associated with fulfilling responsibilities for the family members. • FRIENDSHIP OBLIGATION: The needs associated with fulfilling responsibilities for friends. • EMPLOYMENT GROUP OBLIGATION: The needs associated with fulfilling responsibilities fellow employees, subordinates and employer. • SOCIAL OBLIGATION: The needs associated with fulfilling responsibilities required to fulfil other people's social needs (except family, friends and employment group). • SOCIAL ESTEEM: The needs associated with having esteem that a person receives from others which leads to social worth. The social worth includes public recognition, mutual respect with others and affection.

Growth needs are the desires of a person to have creative and productive effects of himself and his environment through self-esteem (esteem depends on internal cues) and self-actualization (opportunities for development) (Table 4). Self-esteem is cited by all respondents while only one respondent did not mention about self-actualization.

It is about how you want to be a businessman in architecture consultancy practice... So, by staying longer in this company will develop my 'personality' towards attracting projects.
Respondent no.. 10

Table 4. Definition of Growth Needs Category and Meaning Units.

CATEGORY	MEANING UNIT
<p>GROWTH NEEDS: Desires to have creative and productive effects for himself and his environment. Satisfaction from growth needs occurs when a person utilizes his fully capacities and develop new capabilities.</p>	<ul style="list-style-type: none"> • SELF ESTEEM: The needs associated with having personal esteem which depends on the internal cues which a person obtains from processing real capacity, achievement and independence. These includes autonomy, responsibility and a chance to be creative. • SELF-ACTUALIZATION: The needs associated with fulfilling one's potential through unique personal development and growth.

Intrinsic motives are individual's intention to enjoy an activity that gives positive emotions. These emotions are grouped in four meaning units namely choices, progress, competence and

meaningfulness (Table 5). Five respondents cited all these meaning units while others cited some of these meaning units. There were no meaning units that were cited by all the respondents. The distribution of the meaning units and categories of the respondents are shown in Table 5.

Table 5. Definition of Intrinsic Motives Category and Meaning Units.

CATEGORY	MEANING UNIT
INTRINSIC MOTIVES : Needs to engage in activities that are internally rewarding in the form of positive emotions such as enjoyment fun and self-satisfaction without the need for external rewards.	<ul style="list-style-type: none"> • CHOICE: The needs for positive emotions engaging in activities selected based personal preference. • PROGRESS: The needs for positive emotions arising engaging in activities with outcomes having development, advancement, and improvement... • COMPETENCE: The needs for positive emotions due to engaging in activities that require the ability and condition needed for the individual to perform. • MEANINGFULNESS: The needs for positive emotions due to engaging in activities that have great value and significance

Attrition Reasons

The analysis used the needs categories in Aldefer ERG theory to guide the categorical coding process. The attrition reason categories and meaning units are similar with those of the retention reasons and thus reflect the failure to meet the respondents' existence needs, relatedness needs, growth needs, and intrinsic motives. Table 6 provides the distribution of the employment attrition categories and respective meaning units among the respondents.

The failure to meet existence needs is cited as an attrition reason. The meaning units are related to the failure to meet physiological, material security and convenience needs. All respondents cited the failure to meet physiological needs as motivation to leave the employer. The respondents need money from their salaries to fulfil their physiological needs, and to ensure material security and convenience. The ever-reducing monetary value over time and increasing obligations such as medical and other living expenses causes the need for salary increases which the employer may not be able to meet. Hence, the respondents cited the 'job hopping' strategy of leaving the current employer for better paying employment. Irresponsible employer that threatened the security of the respondents also led to employment attrition. Respondent no. 6 left his previous employment because his employer paid the monthly salaries late and had also not made the retirement benefits payments he was entitled to the national Employee Provident Fund for two years. Employment that caused inconvenience leads to employees leaving. Respondent no.1 left his employment because the employer enforced a rigid working times that were inconvenient. Respondent no.4 left his employer because the weekly long trips to be with his family in another city became intolerable.

The next attrition reason is failure to meet their relatedness needs. The meaning units are related to the failure to meet group belongingness, social needs, family obligations, friendship obligations, employment group obligations. Employees want a sense of group belongingness, friendship, acceptance, and support within the organization. Respondent no.7 had unsupportive superiors that led to an absence of group belongingness to the firm. His superior also forced him to do unethical practices that were detrimental to society. He felt badly following these orders. It led him to leave the company because he had a lack of group obligations and social esteem, and could not keep to his social (societal) obligations. Divisive office politics in the previous employment environment drove respondent no. 1 to another employer. He also changed employer so that he could build up his new marital status. Respondent no.8 explained that he left the previous employment because his former colleagues had work perspectives that were different. He prefers to work with people who were

not workaholics and prioritised work-life balance. He felt a lack of obligation to support his former colleagues with their work. The relatedness need may entwine with growth needs. An ambitious architect must strive to build up a network of professional acquaintances and friends that is beneficial to his career future. Respondent no.9 narrated that he left his employer to join another firm because it offered him opportunities to broaden his network of international professionals, contractors and clients

Another reason is the previous company has few international staff members... I found that my network became stagnant after a while. I left because I saw that new firm can give me opportunities to broader my network... I don't know whether in the future I will have business ventures with companies from their countries. When that happens, I will know who to talk to. International networking is very important as they will share with me new knowledge that other local competitors will not know.

Respondent no. 9

Table 6: Distribution of employment attrition categories and meaning units among the respondents

Category of Employment Retention	Meaning Unit	Respondents										No. of persons citing	
		1	2	3	4	5	6	7	8	9	10		
Existence Needs	• Physiological Need	X	X	X	X	X	X	X	X	X	X	X	10
	• Material Security	X	X	X	X	X	X	X		X	X		9
	• Convenience	X	X	X	X			X	X	X	X		8
Relatedness Needs	• Group Belongingness	X		X				X	X	X	X		7
	• Social Needs	X		X					X	X		4	
	• Family Obligations	X		X				X				3	
	• Friendship Obligations	X						X	X			3	
	• Employment Group Obligations							X	X	X	X	4	
	• Social Obligations			X				X	X	X	X	4	
	• Social Esteem	X		X				X	X	X	X	6	
Growth Needs	• Self Esteem	X	X	X	X	X		X	X	X	X	9	
	• Self Actualization	X	X		X	X		X	X	X	X	8	
Intrinsic Needs	• Choice	X			X			X			X	4	
	• Progress			X	X		X	X	X	X		6	
	• Competence	X			X		X			X		4	
	• Meaningfulness	X	X	X		X				X	X	6	

The next attrition reason is the lack of growth needs fulfillment. This reason comprised of the inability to obtain self esteem and self-actualization. Respondent no.2 said that he chose employment with the new firm because it offered opportunities to improve himself by pursuing his professional interests and thus increasing his self-esteem and self-actualization. Respondent no. 8 has ambitions to set up a consultancy firm. Hence, he often moved from one firm to another to gain new experiences in projects. He timed his employment with the project durations. Hence, he was able to gain experience from the start and finish of every project.

The lack of intrinsic motives also causes employment attrition. This attrition category consists of deficiencies in choice, progress, competence and meaningfulness. Respondents no. 1, 4 and 10 left their employers due to either the employers not allowing them to do tasks of their preference or the new employers offering choices of tasks. Respondents no, 1, 5 and 8 liked to have a sense of career progression in their jobs and left their employers when they did not have so. Some firms specialized in

certain types of work and this curtails the work enjoyment from learning new things to progress. Respondent no.5 also obtained pleasure from knowing he is competent in a work task. He narrated that he switched to a new employer because he wanted to be competent at the tasks the new job entails. Lack of meaningfulness is also an attrition reason, Respondents no. 1 and 10 sees absence of chemistry with superiors as causing lack of meaningfulness and thus enjoyment in their jobs. Work that is not aligned with the interests or ethical value of the subordinate can cause employment attrition (respondents no. 3 and 7).

DISCUSSION

The Malay male architect respondents require balance of existence needs (convenience), relatedness needs (employment group obligation) and growth needs (self-esteem) to stay employed in Malaysian architecture consulting firms. Researches in developing countries found work enjoyment (Adekun, 2015; Nijhawan and Nijhawan, 2014; Linz et al, 2015), working environment (Xu et al, 2013; Guillon and Cezanne, 2014; Linz et al, 2015; Panahi and Moezzi, 2016) and flexibility of time (Adekun, 2015; Nijhawan and Nijhawan, 2014; Guillon and Cezanne, 2014) as employment retention factors. Our research found additional retention factors i.e. tolerable office-home commuting and need for work-life balance. However, the analysis of the attrition reasons suggests that the respondents would leave their employment if their existence needs (physiological needs) are not met. The respondents had left their previous employers for better salaries at other firms due to the perpetual increase in the costs of living, additional family obligations and inability of the previous employer to sustain salary increases. The existence needs that drive these employment attrition concur with past researches (Satiani and Prakash, 2017; Shankar and Muneera, 2013; Queiri et al, 2015; Kannan and Vivekanandan, 2013; Abdullah et al, 2013; Bhardwaj and Singh, 2017, Zulbahari and Alias, 2013)

Tolerable office-home commuting is a retention factor possibly because the respondents are working in the Klang Valley where traffic congestion is rife. Shorter commuting times were more convenient and less stressful. In addition, the respondents are generation-Y employees who seek to have work life balance (Queiri and Yusoff, 2015). Malaysian architects have to deal with high work burdens because the number of architects to serve the population in the Malaysia industry is far below than what is recommended by UNESCO for developed countries (Chin, 2016). Thus, the nature of Malaysian architecture work sometimes requires these architects to work overtime without extra payments. Yet, they were able to sustain work-life balance due to shorter commuting times and a tolerable amount of work load that do not take time away from their family and social obligations. Failure to alleviate the inconvenience of commuting can lead to employment attrition. These concur with attrition due to inconvenient work place locations in Lu et al, (2017) and Zulbahari and Alias (2013)

The respondents said that their reluctance to leave their employers is due to their obligations to their employers and subordinates to engage in the projects assigned from start to finish. This is probably due to the respondents being indoctrinated with professionalism that stresses on altruistic work-related commitment to their projects' stakeholders. Another reason is the obligations from intra-firm friendships. This finding concurs with Panahi and Moezzi (2016) research findings on professional project consultants in Malaysian construction industry and the research conducted among project managers in China construction industry (Xu et al, 2013), and Central Asia and Soviet republic employees (Linz et al, 2015). Our findings also concur with the critical literature review by Guillon and Cezanne (2014) on relationship of job loyalty and organisational performance. Their review of past studies indicated that commitment leads to employee retention. It also concurs with Caven and Diop (2012) about the English and French architects' intrinsic work rewards through the informal social relationships and networking despite poor work environments. The congruence of the findings relatedness driven attrition reason also apply to past research findings about attrition due to organisational politics (Latiff and Saraih, 2016), inadequate support and cooperation from superiors (Singh et al, 2017; Zulbahari and Alias, 2013; Kannan and Vivekanandan, 2013; Jehanzeb et al, 2013; Allen and Meyer, 1991), inconvenient work place locations in Lu et al, (2017) and Zulbahari and Alias (2013), and work atmosphere (Singh et al, 2017).

Growth needs category is cited by most respondents towards their retention. However, the only research (Linz et al, 2015) conducted on employee retention among professional project consultants in Malaysian construction industry did not mention about the growth needs. But, the research by Xu et al (2013) conducted on project managers in China construction industry found that fulfilling employees' growth needs is required to retain employees. The findings are supported by researches (Nijhawan and Nijhawan, 2014; Uzair et al, 2017; Linz et al, 2015) conducted in various industries and

countries. Self-actualisation as a job loyalty factor is supported by the findings of a research on teachers in Ghana rural schools (Adeokun, 2015). The findings regarding growth driven attrition reasons concur with those relating to wrong job placement (Singh et al, 2017) and limited career advancement (Zulbahari and Alias, 2013; Kannan and Vivekanandan, 2013; Shankar and Muneera, 2013)

The intrinsic motives imply that the respondents are focused on the purposes (sense of meaningfulness and progress) rather than activities (sense of choice and competence) itself. This might be due to the professional and specialised nature of architecture within a construction project. Hence, complete commitment to the design and management tasks is needed to fulfil the architectural firm contributions to the project outcome. This in turn provides the positive emotions associated with fulfilling one's professional obligations. The findings concur with the research (Linz et al, 2015) that found that loyalty (synonymous with retention) is strongly related to intrinsically worthwhile work accomplishments.

Comparisons between the findings and past researches findings show a high degree of concurrence at the macro scale. However, the different samples and organizations give differing nuances in the reasons. Most architecture consultant firms in Malaysia are small. Malays highly value respect for elders, religiousness, self-respect ('face'), tact, generosity, politeness, humility, compunction and relationships (Rashid and Ho, 2003). They also live in a multicultural environment that has cultural dimensions showing high power distance, medium masculinity, high collectivism, medium indulgence, low uncertainty avoidance and medium long term orientation (Hofstede, 2018). Research using different ethnicities, localities and methodologies may provide different findings albeit similar at the macro level.

The findings suggest that architectural firm employers can increase employment retention if architect employees can get work life balance, a sense of commitment to and professionalism in the work place, work satisfaction and professional growth from their workplace. Despite having these retention reasons, employees would still leave the employing firm if their physiological needs and self esteem needs are not met. This is a big challenge to employers as architecture is competitive and time-demanding.

Past relevant researches on architects' employment mostly focused on the work environment challenges of women architects. The work conditions may create either retention or attrition motivations among the female architects. There are similarities between the retention and attrition reasons of Malay male architects in this study with the work environment conditions reported in past researches with female or mixed gender samples. The work environment issues relating to career autonomy, long hours, changing work locations and job insecurities are congruent with intrinsic motives and the existence, relatedness and growth needs of the Malay male architect respondents. These issues may underlie a work-life balance challenge to meeting his family obligations. This is either because of or despite Malay men living in a patriarchal culture (Yeung, 2018). It may also reflect the educated Malay male awareness of the work-life balance challenges of urban living in the absence of the familial social support found in rural environments. This study's findings thus concur with Caverio (2009) suggestion that male and female architects have similar career, work and work-life balance issues.

All respondents remain in the firm when the employment provided convenience and self-esteem to them and out of a sense of group obligations for the firm. Yet they would seek employment elsewhere when the gratuities with the current employer cannot fulfill their physiological needs. They also leave when they do not fulfill self esteem needs. A theme is an underlying topic or matter found among all the respondents whether through their categories, meaning units, excerpts and transcripts. Thus, a theme found within the responses is *"high order (growth) needs and mid-order (relatedness) needs retain male professional Malay Architects while the failure to meet low order (existence) needs and high order (growth) needs motivate their employment attrition"*. The value of this study is that future researchers and employers have insights to guide their research and inquiries regarding the factors that retain or cause the attrition of male Malay professional architecture subordinates in Malaysian architecture consulting firms.

This study's findings have limitations because firstly the qualitative approach is unable to provide generalised findings. Secondly, theoretical saturation was not used to determine the purposive sample size. Hence, there may be aspects of employment retention and attrition that were not uncovered. Insights on the employment retention and attrition reasons of architects are limited to other groups of architects who are not male, Malay and Malaysian. Hence, future interview studies should use theoretical saturation to determine the sample size and have more inclusive samples. A

quantitative study is also needed to provide generalised findings about the Malay male architects' employment retention and attrition reasons.

CONCLUSIONS

The qualitative category coding analysis of the transcripts of interviews with ten experienced Malay male architects in Malaysian architectural design consultant firms in the Klang Valley uses the classification of needs as per Alderfer's ERG theory and intrinsic motivation to guide the analysis. The findings consists of retention and attrition reason categories and meaning units, These are existence needs (physiological, material security, convenience) relatedness needs (group belongingness, social needs, family obligations, friendship obligations, social obligations and social esteem), growth (self esteem and self actualization) and intrinsic motives (choice, progress, competence and meaningfulness). The findings concur in many respects with past relevant researches.

The distribution of the meaning units among the respondents suggests a theme within the responses. In addition, all respondents remain in the firm when the employment provided convenience and self-esteem to them and from of a sense of group obligations for the firm. Yet they would seek employment elsewhere when the gratuities with the current employer cannot fulfill their physiological needs. They also leave when they do not fulfil self-esteem needs. The theme is high order (growth) needs and mid-order (relatedness) needs retain male professional Malay Architects while the failure to meet low order (existence) needs and high order (growth) needs motivate their employment attrition.

The qualitative approach to collecting and analyzing the data incurs limitations to the findings. Future investigations to obtain generalized findings about Malay male architects' employment retention and attrition, and similar studies using samples different professions, ethnicities, localities and analytical bases are warranted.

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References

- Abdullah, N. Z., Arshad, R. A.; and Ariffin, M. H. (2013). Technical female graduates in the Malaysian construction industry: attrition issues. *International Surveying Research Journal*, 3(1): 33-43.
- Agarwal, R. N. (2015). Stress, job satisfaction and OB commitment's relation with attrition with special reference to Indian IT sector. *The 9th International Management Conference (IMAC9)*. November 5-6. Bucharest, Romania. Faculty of Management, Academy of Economic Studies. 720-731.
- Adeinat, I and Kassim, N. (2019) Extending the service profit chain: the mediating effect of employee productivity. *International Journal of Quality & Reliability Management*, 36(5), 797-814.
- Al-Hawary, S. I. S., and Alajmi, H. M. A. (2017). Organizational commitment of the employees of the Ports Security Affairs of the state of Kuwait: The impact of HR management practices. *International Journal of Academic Research in Economics and Managerial Sciences*, 6(1): 52-78.
- Allen, N. J., and Meyer, J. (1991). A three component conceptualization of organisational commitment. *Human Resource Management review*, 1(1): 61-89.
- Amar, I. S. M. (2018). Employment attrition and retention of Malay male architects in architectural design firms in the Klang Valley, Malaysia. Unpublished dissertation, Masters in Integrated Construction Project Management, Universiti Teknologi MARA, Shah Alam, Malaysia.
- Ayarkwa, J., Agyekum, K., and Acheampong, A. (2012). Ghanaian construction professionals' perception of challenges to female retention in the construction industry. *Journal of Construction Project Management and Innovation*, 2(2):360-376,
- Bhardwaj, S. and Singh, A. (2017). Factors affecting employee attrition among engineers and non-engineers in manufacturing industry. *Business & IT*, Vol. VII(2): 26-34.
- Board of Architects Malaysia (2019, April 28). List of architectural Programmes. Board of Architect Malaysia website <https://www.lam.gov.my/index.php/accreditation/list-of-recognised-programmes.html>
- Caven and Raiden (2010). Work-life balance among architects In Egbu, C. (editor) Proceeding of 26th ARCOM conference, September 6-8, Leeds, Association of Researchers in Construction Management, 533-542..
- Caven, V (2009). Designing a career: Man and architecture. In Dainty, A. (editor) Proceeding of 25th ARCOM conference, September 7-9, Nottingham, Association of Researchers in Construction Management, 617-626.
- Caven, V. (2006). Career building: women and non-standard employment in architecture. *Construction Management and Economics*, 24(5): 457-464.
- Caven, V (2004). Constructing a career: women architects at work. *Career Development International*, 9(5) : 518-531.
- Caven, V and Diop, M (2012). Architecture: a 'rewarding' career? An Anglo-French comparative study of intrinsic rewards in the architecture profession. *Construction Management and Economics*, 30(7): 513-523.
- Çelik, G.T. & Oral, E.L. (2019) Mediating effect of job satisfaction on the organizational commitment of civil engineers and architects, *International Journal of Construction Management* (online publication). DOI: 10.1080/15623599.2019.1602578

- Chin (2016, February 28), Nation builders wanted. *The Star*. Retrieved from <https://www.thestar.com.my/news/nation/2016/02/28/nation-builders-wanted-malysias-dream-of-becoming-a-highincome-nation-by-2020-could-crumble-if-we-d/> (2016, February 28)
- CIDB (2015). Construction Industry Transformation Programme 2016-2020. Kuala Lumpur: Construction Industry Development Board Malaysia. Retrieved from <http://www.citp.my/2017/wp-content/uploads/0.-CITP-eBook-complete.pdf> on 2 February 2017.
- Creswell, J.W. and Poth, C.N. (2017). *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*, 4th ed. Sage Publications: Thousand Oaks, CA.
- Dainty, A.R.J. and Lingard, H. (2006). Indirect discrimination in construction organizations and the impact on women's careers. *Journal of Management in Engineering*, 22(3): 108-118.
- De Graft-Johnson, A., Manley, S. and Greed, C. (2005). Diversity or the lack of it in the architectural profession. *Construction Management and Economics*, 18(2):1035-43.
- Fowler, B. and Wilson, F. (2004). Women architects and their discontents. *Sociology*, 38(1): 101-119.
- Guillon, O. and Cezanne, C. (2014). Employee loyalty and organizational performance: A critical survey. *Journal of Organizational Change Management*, 27(5): 839-850.
- Hofstede, G. (2018) Country comparisons: What about Malaysia. Hofstede Insights website. Retrieved at <https://www.hofstede-insights.com/country-comparison/malaysia/> on 29 December, 2018.
- Janssen, O. (2001). Fairness perceptions as a moderator in the curvilinear relationships between job demands, job performance and job satisfaction. *Academy of Management Journal*, 44(5): 1039-1050.
- Jehanzeb, K., Rasheed, A., and Rasheed, M. F. (2013). Organizational commitment and turnover intentions: impact of employee's training in private sector of Saudi Arabia. *International Journal of Business and Management*, 8(8): 79-90.
- Kannan, M. and Vivekanandan, K. (2013). Attrition factor analysis - with special reference to IT professionals in Chennai. *(IEEE) International Conference: Information Communication and Embedded Systems (ICICES)*. February 22-23. Chennai: Institute of Electrical and Electronics Engineers (IEEE). 517-523.
- Ketchand, A. A., and Strawser, J. R. (2001). Multiple dimensions of organisational commitment: implications for future accounting research. *Behavioural Research in Accounting*, 33(1): 221-51.
- Latif, F. D., & Saraih, U. N. (2016). Factors influencing employee turnover in private sector in Malaysia: a concept paper. *Australian Journal of Basic and Applied Sciences*, 10(7), 51-55.
- Leuze, Kathrin; Rusconi, Alessandra (2009) : Should I stay or should I go?. Gender differences in professional employment, WZB Discussion Paper, No. SP I 2009-501. <http://hdl.handle.net/10419/47649>
- Lin, C. and Cheng, Y. (2013). Research on the Recruitment and Retention of Competent Talent in Interior Design Companies, *International Journal of Arts and Commerce*, 2(6): 40-52.
- Linz, S., Good, L. K., and Busch, M. (2015). Promoting worker loyalty: an empirical analysis. *International Journal of Manpower*, 36(2): 169-191.
- Loo, C., Yong, D., Ooi, B.H., Yoong H.W., Teh L. X., Azelan, N.W.N., and Manikam, K. (2017) The critical occupational list report 2016/2017, Petaling Jaya: Talent Corp. Retrieved from https://www.talentcorp.com.my/clients/TalentCorp_2016_7A6571AE-D9D0-4175-B35D-99EC514F2D24/contentms/img/factfigures/TalentCorp_CriticalOccupationsList_Report_2016-2017.pdf on 2 February 2017.
- Lu, Y., Hu, X., Huang, X., Zhuang, X., Guo, P., Feng, L. et al (2017). The relationship between job satisfaction, work stress, work family, conflict, and turnover intention among physicians in Guangdong, China: A cross sectional study. *BMJ Open*, 7(5): 1-13.
- Mukhejee, H., Singh, J.S., Fernandez-Chung, R.M., Marimuthu, T. (2017). Higher education in Malaysia: Access, equity and quality. In Lee, HG (Ed.) *Education and globalization in South East Asia: Issues and challenges*, (pp83-110). ISEAS: Singapore.
- Navarro-Astor E., Caven V. (2014) The Professional Career of Spanish Architects: Obstacles and Facilitators. In: Llinares-Millán C. et al. (eds) *Construction and Building Research*. Springer, Dordrecht
- Navarro-Astor, E (2011) Work-family balance issues among construction professionals in Spain In: Egbu, C. and Lou, E.C.W. (Eds.) *Procs 27th Annual ARCOM Conference*, September 5-7, Leeds, UK, Association of Researchers in Construction Management, 177-186
- Nijhawan, S. P. and Nijhawan, D. P. (2014). New key to employee retention-intrinsic motivation: A study of private banking sector of India, *Journal of Indian Research*, 2(1): 90-95.
- Guillon, O and Cezanne, C (2014). Employee loyalty and organizational performance: A critical survey. *Journal of Organizational Change Management*. 27(5): 839-850
- O'Reilly, C. A., and Chatman, J. A. (1986). Organisational commitment and psychological attachment: The effects of compliance, identification, and internalization on prosocial behaviour. *Journal of Applied Psychology*, 71(3): 492-499..
- Panahi, B., and Moezzi, E. (2016). Value conflicts and organizational commitment of internal construction stakeholders. *Engineering, Construction and Architectural Management*, 24(4): 554-574.
- Queiri, A., Yusoff, W. F. W., and Dwaikat, N. (2015). Explaining generation-Y employees' turnover in Malaysian context. *Asian Social Sciences*, 11(10): 126-138.
- Rashid, M.Z.A. and Ho, J.A. (2003), Perceptions of Business Ethics in a Multicultural Community: The Case of Malaysia. *Journal of Business Ethics* 43(1-2): 75-87.
- Rigg, J. (2015) *Challenging South East Asian Development: The shadows of success*. Routledge: London.
- Sang, K.J.C., Ison, S. G., & Dainty, A.R.J. (2009). The job satisfaction of UK architects and relationships with work-life balance and turnover intentions. *Engineering, Construction and Architectural Management*, 16(3): 288-300
- Sang, K.J.C., Dainty, A.R.J., & Ison, S. (2007). Gender: A risk factor for occupational stress in the architectural profession? *Construction Management and Economics*, 25(12): 1305-1317
- Santhanalakshmi, K., Prabhakar, K., and Kumar, N. S. (2014). Analytical study of values of business process outsourcing employees to address issue of attrition and suggestion of work life balance intervention. *Asian Social Science*, 10(15), 63-75.
- Satiani B. and Prakash, S. (2017). Low career satisfaction and compensation disparities may contribute to vascular surgery assistant professor attrition. *Journal of Vascular Medical Surgery*, 5(1), 1-4.
- Shankar, B. R. and Muneera, A. (2013). Employee attrition behaviour causes and consequences. *Journal of Mathematical Archive*, 4(12): 290-293.

- Singh, S., Ganguli, S., and David, R. (2017) Women workforce attrition dynamics in Indian IT/ITES sector. *The Qualitative Report*, 22(5): 1211-1226.
- Sinniah, S. and Kamil, N. M. (2017). The influence of human resource practices on turnover intention: the case of a telecommunication company in Malaysia, *Malaysian Management Review*, 52(1): 45-61.
- Szimai, A. (2015) *Socio Economic Development*. Cambridge, U.K: Cambridge University Press
- Talent Corp (2017) *Visioning Malaysia's Future of Work: A Framework For Action*. Petaling Jaya, Malaysia: Talent Corp. https://www.talentcorp.com.my/clients/TalentCorp_2016_7A6571AE-D9D0-4175-B35D-99EC514F2D24/contentms/img/publication/TalentCorp_Visioning%20Malaysias%20Future%20of%20Work_2017.pdf
- Uzair, M., Razzaq, W., Sarfraz, M., and Nisar, Q. A. (2017). Impact of HR practices on employee loyalty and commitment: Mediating role of job satisfaction, *IJME* 9(2): 1067-1073.
- Xu, Y., Wang, D. and Liu, C. (2013). Factors affecting commitment and satisfaction of project managers in the construction industry. *(IEEE) International Conference: Management Science and Engineering (ICMSE)*, 2072-2077, Harbin: Institute of Electrical and Electronics Engineers (IEEE).
- Yeung, W. J., Desai, S. and Jones, G. W. (2018). Families in South East Asia and South Asia. *Annual Review of Sociology*, 44: 469-495.
- Zulbahari, N. H., and Alias, R. (2014). Malaysia's trend of employment turnover: study on generation Y. *Journal of Modern Marketing Research*, 3(11), 1-13.